Diversity and convergence in platforms for change: Building social capability for land management

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Abstract

A feature of the recent policy shift towards sustainability is a growing recognition of the diversity and interdependency of stakeholders in land management. The Victorian government has adopted approaches that seek to actively engage the diverse stakeholders in the land management process. Such approaches require recognition of mutuality and convergence amongst participants. However, the basis for integration that existed within the productivist post-war era no longer provides the foundation for collaboration today. This thesis explores how projects bring together diverse stakeholders to form a post-productivist platform for change. It does so by combining action research and narrative analysis in a case study of a project that aimed to develop social capability in rural Victoria, Australia.

What emerged from the analysis of the case study project is that convergence was always partial and contested, as it occurred around competing project narratives. Hence it was not inclusive or comprehensive. Furthermore, convergence was the result of processes of assimilation, marginalisation and exclusion. Yet, co-operative, participatory approaches often advocate consensus and coherence as an ultimate outcome of the change process, assuming that convergence is inherently positive and desirable. In this thesis I posit that there is a need to reconceptualise diversity and challenge the modernist theoretical frameworks that underpin much of the current co-operative approaches to change. Rather than conceive of change as a process that aims to transcend diversity and difference, where these are considered threats, errors or anomalies, it is important to recognise diversity as an inescapable opportunity for differentiation and innovation.

The capacity of co-operative approaches to deal with diversity can be improved by addressing two aspects of methodologies for change: the site of integration around which an approach is designed, and a process to enhance reflexivity.

The thesis explores a number of sites of integration around which a post-productivist platform for change may be constructed: a community, a problem or issue, a practice, a material substrate
or object, and landscape. Two design criteria for co-operative approaches emerge from this analysis. Firstly, the selected site of integration must challenge and expand the prevailing configuration of communities of practice in the land management context. Secondly, the site of integration must be understood in a constructivist way that simultaneously constructs and problematises convergence, in order to create a space for difference to be expressed and embraced.

Co-operative approaches can further improve the way in which they deal with diversity by improving the reflexive performance of projects and organisations. In order to provide a space for different views and practices to be included in a post-productivist platform for change, it is critical that reflective practice explores differences and ambiguities. Furthermore, it is important to develop tools and methods for reflective practice that not only attend to the way in which meanings are constructed, but also to the way in which practices and structures affect a platform for change.

A research approach that combines action research with narrative analysis holds promise as a methodology to achieve this. However, the research findings suggest that the narrative action research approach should be implemented in a way that offers opportunities for identity enhancement, and involves not only identification and critique of prevailing narratives, but the construction of new narratives that integrate the critique.

Finally, I argue that social researchers have a specific role to play in the narrative action research process. They have skills and strategies that allow them to challenge everyday practice. However, the analysis of my participation in the project has highlighted that it is important for a social researcher to operate at the boundaries of a platform, rather than entirely from within, as is advocated by many action researchers.
Declaration

This is to certify that
(i) the thesis comprises only my original work towards the PhD except where indicated in the Preface
(ii) due acknowledgement has been made in the text to all other material used
(iii) the thesis is less than 100,000 words in length, exclusive of tables, maps, bibliographies and appendices.

Lucia Hillegonda Gerarda José Boxelaar
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**Acronyms**

ARV  Advantage Rural Victoria
CCBI  Community Capacity Building Initiative
CFA  Country Fire Authority
CMA  Catchment Management Authority
CSIRO  Commonwealth Scientific and Industrial Research Organisation
(D)NRE  (Department of) Natural Resources and Environment
DPI  Department of Primary Industries
DSC  Developing Social Capability
DSE  Department of Sustainability and Environment
DVC  Department for Victorian Communities
EBMP  Environmental Best Management Practices
EPA  Environment Protection Authority
GHI  Growing Horizons Initiative
ILFR  Institute of Land and Food Resources
KASA  Knowledge, Attitudes, Skills and Aspirations
MRAP  Monash Regional Australia Project
ORID  Objective, Reflective, Interpretive, Decisional
ORL  Our Rural Landscape
OST  Open Space Technology
PAR  Participatory Action Research
RAAKS  Rapid Appraisal of Agricultural Knowledge Systems
SEEC  Social, Economic and Environmental Conditions
SETI  Science Engineering and Technology Initiative
SSM  Soft Systems Methodologies
SMART  Specific, Measurable, Accountable, Realistic, Time-bound
STI  Science and Technology Initiative
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1.1 Introduction

I will begin this thesis with a brief description of how and why I have come to write it. This is an unusual starting point for a thesis produced within the Institute of Land and Food Resources (ILFR) at the University of Melbourne, which predominantly operates within a modernist framework. However, it is necessary if we understand the context of change as one that is post-modern or post-traditional (Giddens, 1994), where knowledge claims are contested and contingent upon the specific settings in which they are produced. The following therefore aims to provide some insight into the setting in which I produce this thesis, and as this is constitutive of this thesis it is deliberately part of the introduction and not prior to the thesis in the form of a preface.

Since quite a young age I have been interested in the social sciences, and in particular in anthropology. Consequently, once I settled in Australia I enrolled in an Arts degree and studied subjects such as anthropology, sociology and politics. Following my honours year it was my intention to do a PhD. However, the joys and challenges of family life distracted me for a number of years. During this period of my life I was employed by the Country Fire Authority (CFA) where I worked initially as a research assistant on a project that investigated the effectiveness of a community based approach to risk communication. I subsequently gained more permanent employment as a co-ordinator of a community development program and as a researcher of community responses to the threat of wildfire. At the CFA we often discussed and explored why and how people in the community would become involved in our programs. More formal work in that area was largely done with reference to demographic and risk profiles developed with the aid of geographic information systems.
In my undergraduate studies I had focused on theories of identity, and I often felt that I was able to make sense of processes of community engagement with reference to some of these theories. I had a hunch that identity theory had a lot to offer in terms of explaining why people become involved and change their practices and that such theory might challenge some of the assumptions underpinning the approach that relied on demographic and risk profiles.

Towards the end of the year 2000 I noticed an advertisement in a newspaper that sought expressions of interest from people willing to conduct PhD research into processes of change and learning in the dairy industry. The advertisement caught my eye because the PhD position potentially provided the opportunity to pursue my interest in the rural community development process and allowed me to build on my background in anthropology and cultural studies. Although I grew up in a rural town in the Netherlands in a dairy-dominated landscape, my understanding of agriculture when I began this thesis was insignificant compared to most people I have interacted with since then. However, what I lacked in an agricultural or dairy background, I made up for with my understanding of change processes derived from anthropology and cultural studies. I was successful in obtaining a scholarship from what was then the Dairy Research and Development Corporation (now Dairy Australia).

In my undergraduate degree I had learned about conceptualisations of identity which challenged the Enlightenment view of identity as an essential property of individuals. Authors have argued that identity is negotiated and constructed through social interaction; ‘... it is not "just there", it must always be established' (Jenkins, 1996:4). In this sense identity is performed, contested and constructed between people, in social interaction. As I started my PhD I was interested in exploring the way in which people perform, contest and construct identities within a particular context in order to learn more about ways in which capacity building approaches can facilitate convergence in a context that is increasingly diverse and differentiated. I discussed my interest in identity with my supervisors, who agreed that this would provide an appropriate starting point for my PhD.

In terms of identity performance it is worth noting that I am funded by Dairy Australia, a research and development organisation that is financed by dairy farmers and aims to develop '... an internationally competitive, innovative and sustainable dairy industry' (Dairy Australia, 2003:5). I therefore perform my identity as a social researcher bearing in mind the expectations of this organisation. At the same time, however, I consider some of the policy and extension staff at the Department of Primary Industries (DPI - the organisation I worked with during this
study) as people whose ideals I share and whose opinions I value. I therefore always imagine them as another audience for this thesis. I am also located within ILFR at the university, where I am a social scientist in a predominantly biophysical faculty. Furthermore, while this thesis is deliberately multi-disciplinary, my background in anthropology and cultural studies continues to inform the way in which I perform my identity as a social researcher and hence the way in which this thesis is constructed.

This brief description serves to provide the reader with some insight into the orientation of this thesis. As discussed, this beginning differs from most theses produced within the modernist framework according to which most agricultural scientists continue to operate. The modernist approach is based on the assumption that increasing our knowledge about the social and natural worlds will enhance our control over it and ensure progress and development (Giddens, 1994:58). However, as Beck argued convincingly a decade ago, we have entered into a stage that he refers to as 'reflexive modernization', in which we are confronted with the effects of modernisation which could turn into self-destruction (1994:2-5). These effects, he argues, cannot be dealt with within the context of industrial society and its measures. Instead, the environmental problem reflects a 'profound institutional crisis of industrial society itself' (ibid.:8).

Beck and Giddens question the role of conventional science in dealing with these effects in trying to establish certainty and control. Giddens (1994:59) provides the example of global warming to make his point. He argues that many experts consider that global warming is occurring, yet this view is simultaneously challenged by other experts. Resolution of this ambiguity is not possible. As Giddens argues, we can only say with certainty that we cannot be certain that global warming is not occurring. This kind of ambiguity is evident also in the natural resource management context in Australia; for example, in the debates between irrigators and environmentalists about whether or not to increase environmental flows in the Murray River. A recent newspaper article highlighted the way in which environmentalists used arguments by one group of scientists to argue that the river was dying, against irrigators, who in turn were backed by another body of research that suggested that some scientists had exaggerated the claims of the river's decline and that to increase the flows would lead to significant job losses and the death of small towns (Paxinos, 2004). The reliance on science in these situations takes stakeholders down a path of intractability, as society today is characterised by fundamental and inescapable ambiguities and a concomitant lack of certainty that are the domain of policy and politics as much as, or even more so than of science (Röling and Jiggins,
1998:283, Röling, 2002:27). Any claims of certainty (including those of science) become assertions of formulaic truth bound up with power so that they are protected from the inherent contingency that characterises the world today (Beck, 1994:100-104). Such assertions need to be challenged and the contingencies made explicit and explored. What is required according to Beck is a de-monopolisation of expertise (ibid.:29). He argues that the era of reflexive modernisation requires a rationality reform that '… disrupts and destroys [science's] false and fragile clarities and pseudo-certainties …' (ibid.:33). However, rather than do away with science altogether, he argues that by placing doubt and ambiguity at the core of the scientific process, it becomes possible again, albeit in a different way, '… a couple of sizes smaller, more tentative, personal, colourful and open to social learning' (ibid.:33). The end of certainty that characterises the post-modern world demands a reflexive approach to research that questions the privileged vantage point of the researcher. The notion of an objective and absolute truth that underpins the modernist approach to research is no longer tenable.

In recognition of the inherent ambiguity and heterogeneity of contemporary society, many social scientists in recent decades have argued against the notion of seeking to describe objectively a visible, knowable universe in terms of a privileged discourse. Instead they emphasise the dialogical nature of inquiry that bridges the dichotomy between the researcher and the researched and emphasises the multiplicity and fragmentation of the diverse discourses that characterise the post-modern world. There has been a trend within the social sciences for writers to make explicit the way in which they frame their inquiry and to include the multiple voices of the researched as well as the researcher (eg. Clifford and Marcus, 1986, Lindlof and Grubb-Swetnam, 1996, Kondo, 1990, Clandinin, 2000).

I have chosen to open this introductory chapter with a narrative that makes explicit from the outset that I perform my identity as a social researcher and construct this thesis while being simultaneously located within a multiplicity of communities of meaning that are not necessarily consistent. This explains why despite the more reflexive opening of this thesis, subsequent chapters are constructed in a more conventional fashion - manifesting the dilemma I have experienced about the genre in which I tell this story and the resultant hybrid form this thesis takes. Some narrative theorists argue that to meet the demands of reflexivity it is necessary to abandon the formal approach and place the researcher as narrator central to the thesis, very much in the way in which I have opened this chapter (eg. Clandinin, 2000). Their accounts can be characterised as more personal, tentative and colourful as was advocated by Beck (1994:33). However, I would argue that narrative theorists have come to this position through a journey
from formal inquiry to narrative inquiry and therefore their position as narrative inquirers is constituted through formal inquiry. They can only position themselves as narrative inquirers by validating and justifying this position in juxtaposition to, but nevertheless with explicit reference to, formalistic and academic discourse. Formalistic inquiry is then constitutive of their narrative inquiry, despite their attempts to escape it.

Moreover, I believe that social researchers like me, who work with practitioners focusing on the practice of change management, need to remain focused on the practical implications and the usefulness of our work. I agree with proponents of reflexivity who argue that it is important to foreground and problematise scientists' representations for the reasons outlined above and attempt to do so where I deem this appropriate. However, it is important that I do not regress into what is referred to as 'political impotence', where my work is perceived as having no message about anything other than myself (Pickering, 1992:19). If I chose to present this account in such a reflexive fashion, then it would not be recognisable to and validated by most of my imagined audience. It would hold no meaning for that audience. In this sense I agree wholeheartedly with Fook (1996b:137) who states that:

… it is fashionable now to decry the imposition of certainty and unity, but I can only say … that I believe that [the research] task would have been impossible without it … the work as it stands holds meaning for me, and as I have been told, for some practitioners and students.

As a researcher funded through Dairy Australia, located within the predominantly positivist scientific community at ILFR, my thesis needs to be validated through a more formal approach. Nevertheless, in this chapter as well as in my discussion of the theory and methodology in Chapter 2 I employ a narrative style. Similarly, in Chapter 7 in which I discuss the reflexive performance of the case study project and my contribution to it, I again employ the narrative style in which I become the more explicit narrator. However, the discussion of the case study in Chapters 3, 4, 5 and 6 manifests a more conventional style.

The characterisation of the world in which we live as post-modern or post-traditional informs this thesis not only in the way in which it is constructed, but also at a more substantial level. The implication of Beck's and Giddens' accounts is that we must find ways of dealing with the ambiguities in order to mitigate the negative effects of modernisation. According to Beck (1994:28), as well as many authors in the social learning school of rural resource management (eg. Leeuwis and Pyburn, 2002, Cerf et al., 2000, Röling and Wagemakers, 1998, Bawden et al., 2000), the answer lies in 'intersystemic mediating institutions', that de-monopolise expertise
and open up the decision making process to include not just specialists, but a broader group of people with a stake in the specific issue to negotiate their way through the ambiguities. In this light, talk is of a democratisation of science (Funtowicz and Ravetz (1994) in Röling and Wagemakers, 1998:12). Röling and Wagemakers suggest that:

> … a widely shared process of learning and informed public debate about goals, and not just means, seems the only acceptable way to deal with high uncertainty when the stakes are high and the consequences of getting it wrong are potentially catastrophic (1998:12-13).

As discussed in greater detail below, in this thesis I explore how such collaborative processes are constructed.

The remainder of this chapter discusses the rural change context and the imperatives for change that are manifest within it (Section 1.2); the emerging approaches to rural development and land management that are based on the concept of social capital and associated ideas of community capacity and social capability (Section 1.3); platforms for change (Section 1.4); the problem statement and research approach that underpin this research (Section 1.5); and finally, I provide an outline of the remainder of the thesis (Section 1.6).

**1.2 The rural change context and the post-productivist imperative**

Farmers have experienced unprecedented levels of change in recent years. Recent governments have pursued economic rationalist policies that have increased Australian farmers’ exposure to market forces, which in turn has led to an ever increasing price squeeze for most agricultural products that has coincided with a declining financial return as a proportion of total sales (Hubert et al., 2000:16). At the same time, agricultural policy revolves around sustainable development, which is defined in the influential Brundtland Report produced by the World Commission on Environment and Development in 1987 as:

> development that meets the needs of the present without compromising the ability of future generations to meet their own needs (in Ilbery and Bowler, 1998:79).

While the definition of sustainable development is contested, the need for sustainable development in broad terms has gained widespread acceptance within agricultural agencies in Australia, including not only government agencies, but also industry organisations such as
Dairy Australia. In the Victorian policy context the imperatives of sustainable development are referred to as the 'triple bottom line agenda' (Adams and Wiseman, 2003:12), where the aim is to integrate the economic, environmental and social objectives of policy. However, there are significant tensions and contradictions between these three objectives as economic, social and environmental sustainability are often mutually exclusive. As Röling (2002:27) argues, achieving more of one may reduce the likelihood of achieving the other.

The shift from a production focused agriculture to an emphasis on sustainable development and the triple bottom line agenda has challenged farmers' autonomy. Farmers have had to become members of a growing number of communities of meaning (cf. Dessewffy, 1998) in which sustainable use of resources is negotiated, and where rural identities are contested and constructed. They face uncertainties operating within an arena they share with global economic interests, broader national interests, conservationists and indigenous interests (Halpin and Martin, 1999). Lane et al. argue that:

'Rurality' in Australia is now a space inhabited by diverse communities pursuing diverse practices; the rural landscape is a mosaic not a monoculture (2004:110).

Moreover, patterns of change no longer follow solid national or large scale trends but must be characterised as diffuse and differentiated (Murdoch et al., 2003:74).

Various (mainly British) rural geographers refer to the above trends in term of a shift from productivism to post-productivism (eg. Halfacree, forthcoming, Halfacree, 1997, Ilbery and Bowler, 1998, Murdoch et al., 2003). Ilbery and Bowler (1998) argue that productivism is characterised by an emphasis on raising farm output through intensification, concentration and specialisation. As a result of the pressures to move towards a more sustainable form of agriculture, there has been a shift from productivism to post-productivism, where agriculture is retreating from concentration to dispersion, from intensification to extensification, and from specialisation to diversification (ibid.:70-78).

The term post-productivism is also used to indicate the way in which agriculture in rural society has lost its hegemonic position and is associated with an acknowledgement of a widening stakeholder base in agriculture (Wilson, 2001:78-82). A critical point, especially in relation to my research, is the diversification of the agricultural policy community that increasingly includes actors that had previously been excluded from the policy-making process. For example, 'green' ideas have made their way into the agricultural policy making process (ibid.:82).
Furthermore, the post-productivist era has seen both a retreat of the state from agriculture as well as new forms of rural governance (ibid.:81) that include an emphasis on regional capacity building (Murdoch et al., 2003).

The idea that we are witnessing a transition towards post-productivism is challenged by authors who argue that the evidence supporting this shift is thin (Evans et al., 2002, Walford, 2003). Walford (2003:493-501) suggests that supposedly post-productivist forms of agriculture are implemented with the same emphasis on financial gain and productivity as before. Furthermore, he concludes from his study of farms in south east England that the processes of concentration, intensification and specialisation persist and he therefore challenges the idea that productivism is in decline.

However, a point that Walford overlooks is that authors argue that productivism and post-productivism exist concurrently (Ilbery and Bowler, 1998:57, Wilson, 2001:94). In fact, Halfacree (1997:16) suggests that a form of super-productivism is evident within the agribusiness sector and its increasing emphasis on genetic modification and biotechnology. The point is that productivist demands now compete with other imperatives, and it is precisely this differentiation of the countryside that defines post-productivism:

… the hierarchy of activities that has long dominated rural space has been challenged by alternative demands on rural land and other resources. What counts as legitimate use of land-based resources can no longer be automatically assumed by reference to past practice and consequently activities in a range of sectors have been politicized (Murdoch et al., 2003:8).

In this thesis I use the term post-productivism in a way that is consistent with descriptions that highlight the diversity of rurality (eg. Halfacree, 1997, Murdoch et al., 2003). From a policy and land management perspective it makes sense to view the agricultural change context in post-productivist terms, as that reflects the embeddedness of agriculture and land management within broader processes and drivers of change, such as those that derive from the triple bottom line agenda. In fact, the shift towards sustainability requires a post-productivist orientation to rural and agricultural policy development that explicitly recognises that stakeholders in agriculture include agricultural as well as non-agricultural interests. As Halfacree argues:

… post-productivism may signal a search for a new way of understanding and structuring the countryside. A space in the imagination is opening, whereby non-agricultural interests and actors are given an opening to strive to create rurality in their image (1997:72).
So while Walford is right in asserting that productivism is alive and well, I believe that the concept of post-productivism is useful in explaining and framing the imperatives of sustainability as they are manifest within the broader Australian policy context and within land management and rural capacity building initiatives. It is in this sense that I use the concept to frame my inquiry.

1.3 Building social capability

The post-productivist transition has caused a great deal of introspection amongst rural geographers and the way in which they construct rurality (eg. Cloke and Little, 1997, Philo, 1997). However, post-productivism does not just herald a change in the identities of farmers and scientists; it also challenges agricultural and natural resource management agencies and the ways in which they interact with the rural community (Boxelaar et al., 2003, Maarleveld, 2000).

The change and innovation context of the productivist era can be characterised by relative cohesion and stability as agriculture occupied a central hegemonic position within rural society (Wilson, 2001:79). During this post-war period agricultural agencies in Australia framed their priorities largely within a science and technology focused approach that was supported by agricultural extension, which aimed to facilitate on-farm adoption of innovative technologies and approaches to farming. Technology development and information provision were considered the key to innovation and change (Vanclay and Lawrence, 1995).

However, the shift towards sustainable development has brought to the fore the limitations of science and the transfer of technology model of change and has highlighted the social dimensions of the change process. It has been argued that the inherent ambiguities and diversity of the natural resource management context need to be addressed by bringing together the diverse yet interdependent stakeholders to negotiate the sustainable use of natural resources (Röling, 2002:27). Increasingly, natural resource management agencies have to come to terms with changing responsibilities from servicing the farming industry to reconciling a diversity of interests around environmental, economic and social outcomes (Mullen et al., 2000:644). In Victoria this was reflected in the integration of government departments dealing with environmental, social and economic aspects of development. The Department of Natural Resources and Environment (DNRE) was established and incorporated previously separate Departments of Conservation and Natural Resources, Agriculture, and Energy and Minerals.
While the recent Labor government dismantled DNRE and instead constructed three separate departments, namely the Department of Primary Industries (DPI), the Department for Victorian Communities (DVC) and the Department of Sustainability and Environment (DSE), it nevertheless is more strongly committed to the notion of developing collaborative arrangements to work in partnership with civil society and private sector organisations to manage complex policy challenges. It seeks to actively engage citizens, communities and other stakeholders to achieve policy goals associated with the triple bottom line agenda (Adams and Wiseman, 2003:12). This policy orientation is often discussed with reference to the literature on social capital. Hess and Adams (2002:68) argue that there has been a retreat from economic rationalism as social and human capital discourse entered the Victorian public administration arena. They argue that the goals and instruments of public administration are changing as a result of this shift.

Social capital is defined in many different ways, but the most common aspects associated with it include the networks, norms and trust that exists within a community as a resource for development (Bourdieu, 1986, Cocklin et al., 2001, Coleman, 1988, Field, 2003, Flora et al., 2000, Gooey and Howden, forthcoming, Productivity Commission, 2003, Putnam, 1995, Putnam, 2000, Stone, 2001, Stone and Hughes, 2002, Whittaker and Banwell, 2002, Woolcock, 1998). Associated terms such as community capacity and social capability refer to activities that aim to build social capital or collaborative arrangements. The idea is that by enhancing the networks and trust within a community, it is better able to mobilise existing skills and work collaboratively to resolve social, economic and environmental issues (Whittaker and Banwell, 2002:22). The report that provided the basis for the project that is the case study for this research similarly defined social capability as the ability of a social collectivity to act to manage change. It is seen as the ‘… capacity which inheres in social relationships of any kind or the capacity of a wider society …’ (Cocklin et al., 2001:5).

Overall the term social capital and associated concepts such as community capacity and social capability have become very prominent as organising principles in the Australian policy context. For example, the Productivity Commission recently released a report on social capital (Productivity Commission, 2003) and DPI has also reviewed the social capital literature (Gooey and Howden, forthcoming). The new federal Labor leader Mark Latham (2000) has framed his policy platform in social capital discourse and social capital was even the focus of a recent broadsheet editorial (The Sunday Age 2004).
Within DNRE a number of initiatives that built on the ideas associated with social capital and community capacity building were established in 2000 and 2001. These included the Community Capacity Building Initiative (CCBI) and the Developing Social Capability (DSC) project that is the case study for this research. These projects in various ways aimed to engage a diversity of stakeholders in the rural development process.

A significant amount of research has been conducted into such co-operative rural development processes. Drawing from multiple disciplines including community development and organisational studies, researchers in this area have made a substantial contribution to our understanding of participative approaches. They emphasise social learning, networking, interplay between stakeholders, alignment of norms and values, and integration between actors and practices as important factors in effectively facilitating change (e.g. Bawden et al., 2000, Bawden, 1990, Cerf et al., 2000, Engel and Salomon, 1997, Flora et al., 2000, Leeuwis and Pyburn, 2002, Paine, 1997, Röling and Wagemakers, 1998). However, at times it is assumed that participation *per se* leads to positive and inclusive change outcomes (e.g. Ashmos et al., 2002). Yet Lane et al. (2004:106) point to critics who have demonstrated that participative approaches can be dominated by powerful local elites, or can become hostage to local conservatism that allows for only incremental changes to the *status quo*, and at times can even increase intolerance toward minority groups. While participation undoubtedly has the potential to facilitate positive change, there is nothing *inherently* positive about it. In fact, engaging participants in a project is hard work, resource intensive and very time consuming. Serving the interests of all those involved is a challenge for any participatory project.

Community capacity building approaches are mostly based upon ideals of self-help and bottom-up community development that seek to empower people to manage their lives. Hess and Adams (2002) believe that the advent of the discourse of social capital takes policy development down a constructivist path that allows a diversity of participants to contribute to the policy development process. However, the concept of social capital has quite a diverse lineage. It has been discussed by a variety of authors from different ideological positions. Bourdieu developed the concept to describe the benefits that individuals obtain from being involved in groups (Whittaker and Banwell, 2002:252). His focus on social capital is informed by his broader interest in social class and forms of inequality and he draws heavily on ideas derived from Marxist sociology (Field, 2003:15). Bourdieu argues that through social capital individuals or
groups enhance their access to other forms of capital, such as cultural capital and economic capital (Bourdieu, 1986:249). He defines social capital as:

… the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition - or in other words, to membership in a group… (Bourdieu, 1986:248)

Coleman approaches the concept from a different perspective, namely rational choice theory, which draws from both sociology and economics. His perspective is based on the belief that human behaviour results from individuals pursuing their own interests. Coleman developed the concept of social capital as a means of explaining why people co-operate when that is not immediately in their own self-interest (Field, 2003:20-21). According to Coleman:

… relationships are shown to constitute capital resources by helping to establish obligations and expectations between actors, building the trustworthiness of the social environment, opening channels for information, and setting norms that endorse particular forms of behaviour while imposing sanctions on would-be-free-riders (ibid.:24).

It was Robert Putnam who popularised the concept with his account of the decline of social capital in the USA since the 1940s, entitled Bowling Alone (Putnam, 2000). The issue was subsequently taken up by American politicians of the day. Putnam defined social capital as:

… features of social organization, such as networks, norms and social trust that facilitate co-ordination and co-operation for mutual benefit (1995:66)

Putnam links social capital explicitly with collective action, as he considers social capital as something that benefits groups and communities and improves the efficiency of a society (Field, 2003:31, Putnam, 1995, Whittaker and Banwell, 2002:253).

Despite the various disciplinary approaches to the concept, Castle (2002) argues that ultimately the term capital has economic and productivist connotations. He argues that the concept of social capital is drawn directly from the discipline of economics, even though its content is provided by the social sciences, including anthropology and sociology. Castle suggests that the social capital concept allows economic analysts to account for communities and groups in a way that is consistent with social theory (ibid.:332). In fact, the popularity of this concept may derive from the way in which it captures and assimilates the 'social' within modernist, rationalist discourse. It is not surprising that the policy literature is often concerned with measuring social

A number of authors are sceptical of the new approaches based on ideas about social capital, community capacity and social capability. They argue that these approaches are tools of advanced liberal governments that seek to consolidate their power base. They contend that these approaches allow the state to intervene in and control community development indirectly, from a distance (eg. Dean, 1996, Herbert-Cheshire, 2000, Higgins and Lockie, 2002, Rose, 1996). Others have pointed out negative forms of social capital where group solidarity leads to exclusion and hostility towards others, or to conflict (Field, 2003:73, Flora, 1998:487, Lane et al., 2004, Woolcock, 1998:158). Field (2003:135) therefore warns that when governments aim to build social capital, they need to be careful not to destroy existing relationships or contribute to networks and relationships that have negative rather than positive consequences. Overall, while the term is often used by policy officers and extension staff to frame ideals of community participation and empowerment, the concept of social capital is tenable to a range of social and economic perspectives (Whittaker and Banwell, 2002:255).

Furthermore, Liepins (2000:23-24) argues that while 'community' is central to the emerging writings and approaches on sustainability and governance, only very limited attention is paid to the complexity of the term. Yet, the implications of post-productivism for our understanding of community and convergence are significant. Post-productivism demands explicit recognition of diversity and difference, which renders community unstable, contingent and contested. While arguably the rural community may once have been relatively stable and coherent, post-productivism subverts continued claims of coherence and integration. Murdoch sums up the argument made by other authors very well:

… any integration of communities into economic and political structures must be predicated on the realisation that rural communities are no longer only 'rural'; they are made up of many differing forms of social life … Moreover, fluid social relations are replacing the stable structures that had seemed coterminous with life in rural areas (Murdoch et al., 2003:70)

The implications of this for the current emphasis on co-operative approaches are yet to be worked out. Liepins (2000:28) argues that:
… a debate is needed between the conservative image of ‘community’ in rural settings, which has so often been associated with dominant power relations and hegemonic discourses about rurality and acceptability, and a more challenging image of ‘community’ as a social and cultural space which might nurture alternative political possibilities.

Flora et al. (1997:628) similarly argue that effective social capital is dependent on the legitimacy and acceptance of diversity. Moreover, they refer to Coleman to argue that with the decline of primordial forms of social organisation such as geographic communities and kinship groups, it is important to conceive of social capital as 'constructed social organization' in which people's behaviour is embedded (Flora et al., 1997:625-626). In making the distinction between primordial forms of social organisation and constructed social organisation, Coleman aims to capture the complexity of social organisation and the way in which social organisation is no longer a self-sustaining 'organic' process, but one that is complex and constructed (Coleman, 1991:2-3). This thesis aims to contribute to an understanding of how social organization is constructed and how diversity is dealt with in the context of a co-operative approach to land management.

A final criticism of co-operative approaches to rural development and sustainability is the way in which they are often couched in terms of agencies’ relationships with an external environment. This manifests the continued dominance of linear change management thinking. Yet, natural resource management issues create interdependencies between agencies and other stakeholders (Aarts and van Woerkum, 1999) that challenge such linear approaches. Lane et al. (2004) therefore argue that what is required is not a devolution of decision making to local communities, but the development of governance arrangements that integrate diverse and competing local, national and international interests. Woolcock stresses the importance of conceiving of social capital at different levels of society and the state, and suggests that what is required is a model that encompasses both these domains (1998:167). The challenge is to develop processes that allow for the co-production of knowledge and the reconciliation of the different and competing knowledge frames within the negotiation process that includes experts, policy-makers, as well as industry and community stakeholders.

The question is how to build the relationships or arrangements that can facilitate convergence of such diverse stakeholders across levels of social, political and economic integration? Various authors have pointed out the mismatch between the scale of environmental issues on the one
hand and administrative and economic institutions on the other (eg. Campbell, 1998:233, Murdoch and Pratt, 1997:61, Röling and Jiggins, 1998:296). Many of our agricultural and natural resource management agencies continue to serve primarily productivist goals (Röling and Jiggins, 1998:296). According to Engel (1997:10) and Woodhill and Röling (1998:47), the institutions that we have inherited promote linear and one-dimensional, rational ways of thinking that do not create a space for the multiple rationalities that feature within the current complex context of change. They question the ability of the prevailing configuration of networks and management structures to deal with the challenges of sustainable development and are even more concerned with the increasing reliance on market forces to shape our future. Overall, it is argued that the institutions and structures that prevailed in the productivist era struggle to facilitate integration within the post-productivist change context. The increasing interdependence of a diversity of stakeholders requires a major restructuring of networks and a re-negotiation of alliances (Engel, 1997:10, Groot et al., 2002, Proost and Roling, 2000:344).

In this thesis I argue that social capability building in the post-productivist setting needs to be about creating platforms for collective action that are able to bring together a range of stakeholders. It is not about building capacity within external communities in a way that reinforces the dichotomy between government and other stakeholders, but about constructing a post-productivist platform that includes agricultural and non-agricultural interests and government as well as non-government stakeholders across various levels of social and economic integration. In the following section I discuss the way in which various authors have advocated and conceptualised platforms for change. Following that I outline the research questions that underpin my exploration of platforms for change in this thesis.

1.4 Post-productivist platforms for change

Given the above, some authors from the University of Wageningen have argued that it is necessary to establish platforms for resource use negotiation, which provide institutional arrangements or management structures that are able to bring together a diversity of stakeholders across multiple levels of decision making in order to address resource management issues (Röling and Jiggins, 1998, Röling, 2002, Steins and Edwards, 1999). Steins and Edwards define a platform as:
… a negotiation and/or decision making body (voluntary or statutory) comprising different stakeholders who perceive the same resource management problem, realize their interdependence in solving it, and come together to agree on action strategies for solving the problem (1999:244).

A platform provides an interface between different stakeholders where their different practices, cultures and languages interact (Groot et al., 2002:204). It provides a structure or social configuration that deals explicitly with the implications of post-productivism.

According to Röling (2002) platforms should acknowledge the multiple perspectives and rationalities of the diverse participants within it. For a platform to be effective, particular attention needs to be paid to the ability of the different stakeholders to influence the decision making process (Steins and Edwards, 1999:249). Furthermore, the success of a platform is dependent on the ability to encourage a wide range of stakeholders to identify themselves as participants within it (Groot et al., 2002:201). In other words, effectiveness depends on the extent to which diverse stakeholders recognise the platform as legitimate and relevant for dealing with the issues at stake. The legitimacy and mandate for the platform need to be established (Röling, 2002:41).

Aarts and van Woerkum (2002:421-422) argue that any collaborative problem solving approach requires what they refer to as 'reframing' on the part of participants, so that they can work together effectively. This involves participants learning to understand each other's paradigms, mindsets and world views underpinning participation in the collaborative process. Aarts and van Woerkum emphasise that such reframing is not something that can be considered as a pre-condition to collaboration, but is central to the collaborative problem solving process itself. Consequently, they suggest that a central question for any collaborative approach is how and why relationships develop and how this relates to the process of negotiation (ibid.:433).

I intend to emphasise the emergent nature of a platform that Aarts and van Woerkum allude to and focus on the way in which a platform is continuously constructed and contested during the social capability building process. As argued, post-productivism demands such a constructivist understanding of convergence.

In Röling's work and Steins earlier discussions platforms are defined as something with which the change management program begins. However, in her later work Steins acknowledges the contingencies that shape collective action processes, as she defines a platform as the:
… effect of the interplay and trials of strength between and amongst different stakes in the resource and the way social and material resources are mobilised (2002:419, emphasis added)

She further argues that platforms are:

… ordered networks of heterogeneous materials that are constantly being shaped and reshaped as new human and non-human entities enter the arena (ibid.:413).

In this thesis I use the term 'platform' to refer to the coherence and integration that is aimed for in the process of capacity building while acknowledging the inherent contingent and contested nature of it. A platform then is emergent from interaction, rather than something that is established prior to the capacity building process.

However, unlike proponents of frame analysis (Aarts and van Woerkum, 2002, Aarts et al., 2003, Lewicki et al., 2003, Schön and Rein, 1994), I argue that the emerging coherence and integration that constitute a platform are not just the result of a discursive process concerned primarily with language and cognition. Rather, I use the term platform in the way that Liepins (2000) refers to 'community', that is, as constructed and contested through discourse (meanings), performance and action (practices) as well as structures (space).

Overall, a platform is the site at which social capital is temporarily 'materialised' through discourse, structure and practice in order to deal with a particular issue. Unlike many accounts on social capital, this conceptualisation of platforms reflects the fluidity and contingency of the post-modern world and the way in which:

[the interaction between differing groups in rural communities undermines any notion that the community [or platform] has a structural coherence over and above the various relationships that run through and around it (Murdoch et al., 2003:56).

The notion of platform then provides a conceptual basis to operationalise the idea of social capital, recognising the contingencies and ambiguities of the post-modern world. However, as Steins argues, we need a greater understanding of the contingencies that shape platforms for collective action (2002:412). Moreover, despite the emphasis on difference and diversity, platforms for change can nevertheless only be effective if there is some sense of integration and recognition of mutual dependency. Without this collaboration is simply impossible (Aarts and van Woerkum, 2002:421). Yet, the basis for integration that existed within the productivist post-war era no longer provides the foundation for collaboration. This research aims to explore the
way in which convergence to establish a platform for change in a post-productivist setting can be understood. In the following section I outline the research questions, the objectives of the research and the approach taken to achieve these objectives.

1.5 Research questions and approach

The research questions that guide the exploration of diversity and convergence within emerging post-productivist platforms for change are:

- How do projects bring together diverse stakeholders to form a post-productivist platform for change?

- What are the implications of this research for co-operative approaches to land management?

In addressing these research questions, the research aims to:

- contribute to emerging theories of platforms for change and co-operative approaches to change management

- identify ways to improve co-operative approaches to change management.

This research was based on a case study of the Developing Social Capability (DSC) project implemented by DNRE (and later DPI). This project was selected because it promised to employ an innovative approach to change management that aimed to involve a diversity of stakeholders in the natural resource management process to an extent not seen before within DNRE.

While the purpose of this project turned out to be an ongoing source of significant ambiguity (a point that is discussed in greater detail in subsequent chapters) I engaged with it initially because it was a response to the rapidly changing environment and the complexities of change that required the development of social capability to manage issues collectively. The project was described in terms of its aim to facilitate collaboration between a broad range of people involved in agriculture and the environment, including extension officers, research scientists,
catchment management authorities, special interest groups, business and financial institutions, local government, land managers and other community stakeholders. It could be argued that this project represented an attempt to construct a post-productivist platform for change.

One of the significant issues that emerged during the course of the DSC project was the need for organisational alignment and change in order to succeed. As discussed in the following chapters, the project became increasingly inward focused as it progressed. As a result a significant part of this thesis focuses on organisational aspects of the process of platform building.

I participated in the DSC project team throughout the implementation of the project. I became involved towards the end of the project development phase in March 2001, several months prior to the establishment of the project team. I participated in the project (except for a three month period where I travelled overseas) until its conclusion in June 2003. During that time I attended most meetings and a large number of events organised by the project. My participation in the project was based on the principles of action research (Foote-Whyte, 1991b, Reason and Bradbury, 2001). Action research was developed in response to traditional academic research that distances the researcher from the researched and privileges the accounts of theorists over other knowledge claims. Action researchers aim to bridge this gap through participation in the research setting, which facilitates a much stronger connection between the work of researchers and practitioners and facilitates dialogue and interplay to produce research outcomes. Action research is consistent with the principles that underpin the case study of this project, but also contributes to a deconstruction of the dichotomy between the researcher and the researched in a way that meets some of the imperatives of reflexive modernisation discussed earlier.

As an action researcher I participated actively in the research setting and contributed to the development of the project where I was able to on the basis of my research findings. My research meets the key criterion of action research as the link with practice is not serendipitous to the research process but an integral part of it. However, my research was not guided by questions derived from the case study context as is characteristic of action research. Instead my participation with the case study project was negotiated when the research questions had already been developed, at least in broad terms. Furthermore, as discussed in the next chapter, the nature of PhD research means that your work necessarily transcends the research setting. I reflect on some of the dilemmas that arise from conducting action research within a PhD project in Chapters 2 and 7.
Furthermore, despite the emphasis on action research, I nevertheless reject the way in which some action researchers privilege practice over theory. In Chapter 2 I discuss how I incorporated the methods of narrative analysis within the overall action research strategy in order to integrate both theory and practice within action research.

### 1.6 Outline of the thesis

In this chapter I have sketched the impetus for this research, outlining the rural change context, the emphasis on sustainable development and the implications of the imperatives of post-productivism for the construction of platforms for collective action. I have indicated that in this thesis I explore how convergence emerges amongst a diversity of stakeholders to construct a post-productivist platform for change. The in-depth analysis of the DSC project provides interesting insights into the change process, which has significant implications for the design of co-operative approaches to rural development.

The remainder of this thesis is as follows:

- In Chapter 2 I discuss how I approached the study of diversity and convergence in platforms for change through a combination of action research, constructivist grounded theory and narrative analysis within a case study of the DSC project. Using the narrative form I discuss how the research process evolved, describing my research practice and the theory that is constitutive of this practice.

- In Chapter 3 I discuss the project development phase of the DSC project and highlight the way in which the tools and instruments of public administration affected the construction of an inclusive and post-productivist platform for change.

- In Chapter 4 I discuss the way in which the project team further developed the project during what was referred to as the first stage of implementation, when the team developed its social capability building approach for implementation in a subsequent pilot phase. During this stage the project continued to be plagued by significant ambiguities and the project team struggled to construct a meaningful project identity around which convergence within a platform could be facilitated.
• In Chapter 5 I discuss the three pilot projects that trialled the participatory action research approach developed by the DSC project team. This chapter describes how the pilot projects remained trapped within prevailing regimes of practice and meaning schemes and struggled to construct a post-productivist platform for change that was inclusive of a diversity of stakeholders.

• In Chapter 6 I discuss the findings in greater detail in order to explore how integration and cohesion amongst the diversity of stakeholders in a post-productivist platform for change can be facilitated in a way that better accommodates difference and diversity. I do this by examining the different sites of integration around which aspects of the project and other approaches are constructed.

• In Chapter 7 I explore how the reflexive performance within platforms for change can be improved in order to accommodate diversity and difference. I examine the reflexive performance of the project and the contribution I made to this.

• On the basis of the preceding chapters I state my conclusions and outline a number of recommendations with regard to the research questions in Chapter 8. I also discuss the implications and significance of these findings for Dairy Australia and other agencies involved in land management.
2

Researching diversity and convergence: Theory and practice

2.1 Introduction

In the previous chapter I outlined the rationale for this research and the research questions that provide the focus for it. In this chapter I discuss the way in which I approached the study of diversity and convergence in platforms for change, by describing the research process narratively, discussing how it evolved, the choices I made and the dilemmas I faced as I conducted this research. In doing so, I describe the practice of research and the theory that is constitutive of this practice.

The outline for this chapter is as follows:

- In Section 2.2 I discuss why it is important to describe the research process narratively.

- In Section 2.3 I discuss how the Developing Social Capability (DSC) project became the case study for this research.

- In Section 2.4 I describe the case study for this research in greater detail.

- In Section 2.5 I describe how and why I implemented an action research approach within the case study.

- In Section 2.6 I discuss how I worked collaboratively with the DSC project team.
In Section 2.7 I describe why I considered Weick's (1995) notion of sensemaking and Somers and Gibson's (1994) discussion of narrative identity relevant to this research.

In Section 2.8 I discuss how the concept of 'narrative' and the subsequent narrative research approach earned its way into my analysis (cf. Charmaz, 2000:511).

In Section 2.9 I discuss the rationale for conducting single case study research and using the narrative approach.

Overall, this chapter describes the way in which my research was conducted by combining the principles of action research, constructivist grounded theory and narrative analysis within a case study of the DSC project.

### 2.2 Research practice

A PhD thesis normally outlines the methodology and methods upon which the research is based in order to convince the reader that the research process was conducted with rigour and that the outcomes are valid. Valid and rigorous research practice is often considered to comprise instrumental problem solving according to scientifically derived, objective techniques or methods. Schön describes the paradigm that underpins this model of practice as one of 'technical rationality' (1991:21). It is based on a positivist epistemology of practice, where scientific knowledge is considered to be the only form of knowledge that leads to progress and human well-being (ibid.:31).

Brown and Duguid (1994:165-167) argue that formal descriptions of practice that describe it in terms of the application of science and technology are abstracted from actual practice in a way that obscures the intricacies of specific situations. In fact, Schön (1991:20) argues that the technical rationality model of practice leaves us at a loss to explain and describe the way in which practitioners invariably deal with the uncertainties and complexities of practice. In the case of research, it is a point of endless discussion amongst PhD students that the research process is far more complex and messy than most accounts of methodology and methods imply. It is reassuring and refreshing then to read comments such as this one:
The traditional model of the research process is an idealized model, when confronted with reality, the process is characterized by complexity and intractability … there is no such thing as flawless research. This is not the picture of reality presented to students. Students trying to learn how to do research are constantly faced with gaps between the rational model of many of their texts and teachers and the realities of how research actually is conducted (Gummeson, 2000:111).

In the face of significant limitations of the model of technical rationality Schön advocates a search for an epistemology of practice that recognises the artistic and intuitive processes and tacit knowledge that also constitute professional practice. Schön refers to this as knowing in action (1991:54). The technical rationality model of practice conceives of knowledge and expertise as prior to action, whereby we ignore this knowing in action and do not recognise it as a legitimate form of professional knowledge (ibid.:60).

The technical rationality model of practice demands that I present my research approach here in terms of the techniques and methods that I used in a non-narrative format - an account devoid of agency, plot or process - that focuses under sub-headings on case study research, action research and narrative analysis in a way that makes the research seem like a relatively straightforward application of technique and method.

However, the model of technical rationality is entirely inconsistent with the theoretical constructs that underpin this thesis, as well as the constructivist action research approach I have taken. Given this approach, reflection in action constitutes the organising principle for this research. Schön describes reflection in action as follows:

In a practitioner's reflective conversation with a situation that he treats as unique and uncertain, he functions as an agent/experiment. Through his transaction with the situation, he shapes it and makes himself a part of it (ibid.:163).

Therefore:

… inquirers encounter a problematic situation whose reality they must construct. As they frame the problem of the situation, they determine the features to which they will attend … In the ensuing inquiry, action on the situation is integral with deciding, and problem solving is a part of the larger experiment in problem setting (ibid.:165)

An important implication of an action research approach defined by this notion of reflection in action is that the way in which I make sense of my case study must include my contribution to it (ibid.:163). The action research approach requires that as a researcher I am reflexive, which means that I reflect on and explicitly recognise my role in the research process. Such reflexivity
aims to problematise and open up for inquiry my representation of the world (cf. Fook, 1996a:196, Pickering, 1992:20). Accordingly, I discuss my research approach in this chapter in terms of a narrative that describes how the research process unfolded over time, providing a 'thick description' of the journey that was the research process, rather than the abstracted 'map' that obscures the agency and '… the concrete circumstances of actual practice…' (Brown and Duguid, 1994:167). In providing this 'thick description' of the research process, my learning and the thesis is more profoundly and explicitly grounded and embedded in the conditions in which it was constructed (cf. ibid.:175).

Moreover, in Chapter 1 I discussed how science and research are inextricably embedded in the broader social and political process, something acknowledged by philosophers and sociologists of science, who highlight that science is constitutively social, political and cultural (Pickering, 1992:1). In the political domain people are held accountable to the broader constituency, not just their peers. Yet the validity of research is judged primarily by peers, according to self-referential principles of scientific research. If we recognise the social, political and cultural embeddedness of science then accountability must also be framed with reference to the broader context and constituency. According to Traweek (1992), who challenges the technical rationality model from a critical theory perspective and considers science as a discursive practice through which relations of power are enacted, performed and reproduced, this means that:

…the mythological abstract, absent, omniscient narrator must be replaced by other kinds of narrators and narratives, especially by stories about us finding sense in the mess of everyday … life, but also how I happened to be in such places; who let me in there and why, and what was made of my work, and what was made of me … In short, it means I situate textually the production of my own knowledge … (ibid.:435).

In the remainder of this chapter I therefore describe narratively the research process through which this thesis is constructed. In Chapter 7 I further reflect on my role in the research process in light of the discussion of the case study in the following three chapters.

### 2.3 Getting started

I started this PhD research in January 2001, and as mentioned in Chapter 1, over the course of the first few meetings with my two supervisors we agreed that the process of identity construction could be worth exploring in order to learn more about convergence within participatory change management programs. Three potential case studies were proposed upon
which my research could be based. These included two Dairy Australia programs, InCalf and Countdown Downunder, as well as the Department of Natural Resources and Environment (DNRE)'s DSC project. All of these implemented a participatory approach to facilitate change. My principal supervisor was involved in all three of these projects and therefore access was relatively easy.

From the very beginning of my candidature I attended meetings of two of the projects (Countdown Downunder and the DSC project) with my supervisor to get an idea of what they were about and what my involvement with them could look like. I was simultaneously developing a research proposal that included the literature review and the research approach that would underpin my research. The busy schedule that resulted meant that a meeting with InCalf never eventuated, and early on I decided that if I was to undertake the intensive action research approach described below, it was feasible to focus only on two case studies, Countdown Downunder and the DSC project. Countdown Downunder is a program implemented by Dairy Australia that aims to address mastitis problems in the dairy industry. The program encourages farmers to adopt best practice for mastitis control by facilitating quality interaction between advisers and farmers. The DSC project is discussed in greater detail below; at this point suffice to say that it ultimately aimed to develop social capability in rural Victoria by means of a participatory action research methodology.

As mentioned, both projects operated within a participatory framework; however, while the DSC project aimed to involve participants in problem definition, the exploration of options to address the issues, action planning and implementation, the Countdown Downunder methodology restricted participation to action planning and implementation. Furthermore, the projects differed in scope. Countdown Downunder focused on a single issue that is clearly defined, while the focus for the DSC project was very broad as it provided scope for a multiplicity of issues to emerge from engagement with stakeholders. At this stage in my PhD the aim was to compare these two case studies.

For more than a year these two projects provided the focus for my research. However, my involvement across two projects did not allow me to explore them with the depth that I felt the analysis of convergence required. While the Countdown Downunder project provided very interesting insights into practice interplay (cf. Paine, 1997), the features of the DSC project that were of particular interest were the organisational aspects, its post-productivist emphasis and how these affected convergence around a platform. Time constraints prevented me from
focusing adequately on either of these. I found myself actively participating in two projects, and just that aspect of my research seemed to be taking up all my time. A choice had to be made between the two projects. Both had welcomed my involvement so access was not an issue; however, the innovative aspirations and the emergent nature of the DSC project, as well as the possibility of participating in this project from the beginning of implementation to the end, were deciding factors in choosing it as the focus for my research.

2.4 The Developing Social Capability (DSC) project

In writing up a case study, authors often begin with a description of the case in order to allow the reader to make sense of the subsequent analysis. However, what the DSC project was about and what it aimed for was ambiguous and contested, and therefore it is difficult to provide a brief and singular account of the project by way of introduction that is prior to the analysis of it. In fact, to describe the project in such a way is inconsistent with the constructivist position that rejects the notion of the case as an objective reality that exists outside and prior to the research process. I therefore provide only a brief description of the broader organisational context within which the project was developed and implemented (Section 2.4.1), the project aims and the stages in which it was developed (Section 2.4.2), as well as some of the significant events and developments that impacted on the project and my research (Section 2.4.3).

2.4.1 The organisational context

The DSC project was developed and implemented by DNRE in Victoria, Australia. This organisation undertook scientific research, policy formulation, natural resource management projects, community development projects and land management related services. As mentioned in Chapter 1, the organisation comprised three previously separate Victorian state government departments, namely the Department of Agriculture, the Department of Conservation and Natural Resources and the Department of Energy and Minerals. The combined organisation worked towards environmental, social and economic objectives.

The increased emphasis on sustainability and the integrated approach it required represented a significant cultural shift for staff within the organisation. The extension methods and practices within organisations like DNRE have evolved from a productivity basis and these emphasise science and technology as the drivers of innovation and change (Vanclay and Lawrence, 1995).
With the shift in focus from productivity to sustainable development, DNRE's role shifted from information and technology transfer towards facilitating negotiated outcomes between diverse stakeholders. The organisation was increasingly required to address and reconcile the diverse and competing interests of a broad range of stakeholders to achieve economic, social and environmental outcomes (cf. Mullen et al., 2000:644). Staff within DNRE recognised that this required participative projects that aimed to engage the diversity of stakeholders in natural resource management issues in order to enhance the capacity to manage and respond to change. One of the projects that were subsequently developed was the DSC project.

2.4.2 Project stages

As mentioned in Chapter 1 and as is discussed in great detail in the following three chapters, the approach and purpose of the DSC project was ambiguous and contested. Formal project documentation indicates that the key objective of the project was ‘… to enhance the capability of people in the food and agriculture sector to manage change’. In order to do that the project would implement a participatory action research methodology to involve a broad range of stakeholders in the identification of issues and the development and implementation of solutions.

The project's development and implementation comprised three stages and this thesis is framed around three core chapters that discuss these phases in detail (see Chapters 3, 4 and 5):

2.4.2.1 The project development phase (1999-July 2001)

In this phase the project was designed and developed into a project proposal ready for delivery by the DSC project team. This phase concluded with the delivery of a comprehensive literature review on social capability building in rural Victoria, conducted by the Monash Regional Australia Project (MRAP) (Cocklin et al., 2001). The report, which was commissioned by the steering group for project development, suggests that DNRE’s strategy ought to comprise a pilot project that trials a methodology to develop social capability. Furthermore, it suggests that DNRE needed to enhance the institutional capability to facilitate the development of social capability. Hence the report proposes that the project involve staff in participatory action research to explore social capability further (ibid.). Project implementation therefore comprised a further two stages, the process development phase and the pilot implementation phase.
2.4.2.2 The process development phase (August 2001 - June 2002)

In the process development phase the DSC project team was established to implement a participatory action research approach to develop a methodology to build social capability. A number of activities were conducted in this phase in order to achieve this, including interviews with stakeholders in the food and agriculture sectors; focus groups with service providers, land managers and other community stakeholders; and workshops and meetings with potential partners for the pilot phase of the project.

The project also invited prominent scholars from the United States who work in the area of capacity building and rural development to visit the project and meet with people from many parts of the organisation. This served to promote and reinforce the validity and credibility of co-operative approaches to natural resource management in DNRE.

2.4.2.3 The implementation of pilot projects (July 2002 - June 2003)

The DSC project team negotiated partnerships with three existing extension programs in which it trialled its methodology to build social capability:

- The first pilot project involved DNRE's Topcrop program that works with the grains industry to increase farm sustainability. The pilot project was designed to apply the DSC approach to address the issue of stubble burning in Victorian cropping areas that has caused controversy for a number of years.

- The second pilot project involved DNRE's Environmental Best Management Practices (EBMP) project, which aims to improve environmental management practices on farms. The aim of this pilot project was to explore ways to improve the capacity of people within catchments to take collective action.

- The third pilot project was negotiated with staff from the fisheries group of the FarmBis program, which provides funding for primary producers to participate in training programs. The aim of this pilot was to increase participation of indigenous people in training and education services related to aquaculture.
Apart from the three pilot projects, the team also instigated the development of a Learning Centre intended to facilitate organisational learning on co-operative approaches across the organisation. To achieve this, members of the project team worked in partnership with other groups in the organisation. While the development of a Learning Centre was relevant in terms of organisational platform building, I had no involvement with it and work to develop it did not occur until two years into the project and was done to a significant extent beyond the boundaries of the project. Because the Learning Centre was not the main focus of the project I decided it was outside the scope of this research to explore it in great depth. Overall then the thesis focuses on project development (Chapter 3), process development (Chapter 4) and the pilot implementation phase (Chapter 5).

2.4.3 Significant events

During the course of the project there were a number of events and developments that affected the project significantly. One such event was the change in the departmental structure of the Victorian government. DNRE was disbanded seven months prior to the conclusion of the project. Subsequently the work done within DNRE was divided amongst three new departments, the Department of Primary Industries (DPI), the Department of Sustainability and Environment (DSE), and the Department for Victorian Communities (DVC). When this occurred, the DSC project was located in DPI.

DNRE had been involved in a number of politically salient controversies that damaged the government, and Adams & Wiseman (2003:21) argue that existing responses to issues of sustainability were considered to be inadequate by the new Victorian Labor government. Nevertheless, while it may have been politically expedient to disband DNRE and establish separate departments responsible for agriculture and other primary industries (DPI), sustainability (DSE) and the community (DVC), this split is puzzling in light of the overall shift towards integrated government and the triple bottom line agenda, according to which it makes more sense to maintain a department such as DNRE that integrates social, environmental and economic activities. In the new structure, agricultural policy development occurs in isolation from the two departments that are heralded as the main vehicles to drive the current government's triple bottom line policy agenda - DSE and DVC (ibid.:21). Staff members of DPI have suggested that since the split there has been a tendency to re-focus on productivity outcomes. While this may be the case and while this may be welcomed by some rural industry
stakeholders, it seems that DPI and agricultural interests have actually been marginalised within
the new structure, as DPI is peripheral to the overall structure, the triple bottom line driven
policy direction and the whole-of-government approach that currently prevails in Victoria. The
new structure of government is not lining up with the overall policy direction it is taking,
particularly where agriculture is concerned.

This departmental restructuring seven months prior to the conclusion of the project made it
difficult to integrate its achievements and learning within a broader organisational framework
and to ensure continuity of its activities beyond the life of the project. Much of the broader
organisational setting was uncertain and unsettled at this time. The restructure led to significant
staff changes, whereby projects and people involved with the DSC project became dispersed
over two different departments, DPI and DSE. As I discuss in Chapter 5, this significantly
affected the three projects involved in the pilot phase of the DSC project. Almost all staff
involved in the pilots changed positions or left the organisation. This did not allow for
significant continuity of activities associated with the DSC project beyond its conclusion.

While these structural changes impacted on the course of the project and are interesting in light
of the way in which a post-productivist platform for change is constructed by government in a
broad sense, they are beyond the scope of this thesis to explore in great depth. Two other
developments within the project also impacted on the direction of my research.

One of these developments concerns the increasingly inward focus of the project. During the
implementation phase, the DSC project became increasingly centred on organisational change
processes, and profiled itself less as a project concerned with social capability building in the
broader agriculture and food sector, and more as a facilitator of organisational change within
extension programs. Related to this is the fact that the project did not actively engage other
stakeholders such as internal DNRE stakeholders and broader community and industry
stakeholders until the pilot phase of the project. This phase was significantly delayed and did
not eventuate until a year and a half into my involvement with the project.

These events and developments were unanticipated and in terms of my research resulted in a
greater emphasis on the organisational aspects and issues of governance and public
administration that impact on platform construction and stakeholder participation in land
management processes, instead of a focus on collective action and social learning within a
broader community setting, which was my original intention. Nevertheless, these events and
developments provided interesting insights into the process of platform construction and stakeholder participation.

On the whole, the DSC project provided an interesting case study of platform building in the land management context. My approach to this case study was informed by the principles of action research, which I discuss in detail in the next section. Accordingly I participated actively as a member of the DSC project team. I first became involved in the project towards the end of stage one, and apart from a three month interruption due to a study tour, my involvement continued for the remainder of the project.

2.5 Action research

Action research defines a lot of the work that is done in the emerging social research group at the Institute of Land and Food Resources (ILFR). The action research approach aims to integrate research, program development, policy development, extension and farming practice as the research group works with rather than for people and agencies in order to facilitate practical outcomes, rather than just theory development (cf. Gummeson, 2000, Reason and Bradbury, 2001, Foote-Whyte et al., 1991).

Action research is defined in many different ways and a number of terms have emerged to distinguish some forms from others, such as 'action science', 'participatory action research', 'co-operative research', and 'appreciative inquiry' (Lincoln, 2001:124). While there are significant differences between these methods, they share aspirations to close the gap between theory and practice, and the researcher and the researched.

Action research is a response to traditional academic research that emphasises the development of theory, yet seems unconcerned or unable to affect practical outcomes or change (Greenwood and Levin, 2000:85). While mainstream researchers generally do assume that good science leads to the adoption of findings, their primary concern is not with the way in which their discoveries are used in practice. Action researchers have challenged this by arguing for the development of research strategies that strengthen the link between research and action (Foote-Whyte, 1991a:8). Even though there are many examples where mainstream science has led to action and change, action research differs from these in the way in which action is not serendipitous to the research process, but built in as a structural component (ibid.:9).
Most action research approaches are characterised by community or stakeholder participation. Action researchers facilitate participation and empowerment by bringing stakeholders together to negotiate and develop mutual understanding and consensus about what to do (Maguire, 2001:59). The degree and kind of participation varies widely among action researchers. Participation ranges from participation in the process of verifying research findings only, through to consultative participation managed by the scientist, as well as approaches where participants and stakeholders drive and own the research process (Flora et al., 2000:10). It is the latter approach where the link between research and action is the strongest. According to proponents of participatory action research, practice change is most likely when participants are engaged in the process of diagnosis of a situation, research design, discovery and implementation of findings (ibid.:9). Therefore many action researchers emphasise the way in which researchers and practitioners become co-researchers.

By emphasising participation by the researched, action researchers reject the aim of some of their colleagues to maintain a distance between the researcher and the researched in order to ensure neutrality and objectivity of the research. According to action researchers, conventional research approaches ignore local and practice based knowledge. Therefore they cannot develop a full understanding and also fail to facilitate the social transformations researchers want to stimulate (Fals Borda, 2001:28-29).

The principles of action research appealed to me. I subscribed to the principles of participation as I had been involved in community based approaches to wildfire management prior to commencing this PhD and the approach was also consistent with the aims of the DSC project. However, while I agreed in principle, I found it very difficult to reconcile myself with some aspects of action research. When I started reading more about it I found that many proponents of action research move from the conventional research approach that privileges theory, towards a position where practice is privileged. As stated by Chambers et al. (1989):

Instead of starting with the knowledge, problems, analysis and priorities of scientists, it [the research process] starts with the knowledge, problems, analysis and priorities of farmers and farm families (in Black, 2000:494).

Sometimes this leads to extreme positions. For example Gustavsen (2001) suggests that a practice-driven action research approach means that the researcher's focus should be limited to those dimensions of social organisation that determine our capacity for action. Consequently,
Gustavsen has a very narrow view of the role of a researcher, arguing that researchers should have no access to participants outside meetings and conferences, nor should they be involved in analysis after such meetings and events. He sees the researcher as a partner in a group process where he/she does not gain any special knowledge and does not judge others. As Gustavsen says, the outcome of such a process '… is a work agenda, not an analysis' (ibid.:21).

I struggled with such definitions of action research. It did not allow me to make sense of my role in the research process. At the time I reflected on this as follows:

I am often unsure what role to play. The role of conventional researcher is not available to me within an action research approach, yet others within the research setting often expect me to play that part. Unlike conventional researchers, my action research project is not hypothesis driven, yet other participants in the projects of which I am a part, expect me to have clear questions and hypotheses and regularly ask me about those. Moreover, while the role of conventional researcher is not one I can play, as a PhD student, other roles suggested in the literature, such as that of facilitator of projects are similarly unavailable because I am not a hired consultant … Uncertainty prevails as I construct my identity as an action researcher within the research setting (Journal, October 2001).

The way in which action research is defined by authors such as Gustavsen erased the space from which I could perform my identity as a social researcher in the DSC project. Without a background in agriculture or extension, I felt the legitimacy of my presence in the DSC project was dependent on my credibility as a social researcher with an understanding of social change processes. Furthermore, I had research questions that had emerged from my practice as a co-ordinator of a community development program that I was unwilling to abandon at this point; in fact, they had been the reason for enrolling in the PhD program!

Moreover, with a background in post-structuralism and postcolonial studies, I contend that this privileging of practice over theory is problematic. As theory and practice are constitutive of each other, theory is not something that just emerges from a particular research activity or practice, it is immanent in it (cf. Wacquant, 1992:34-35).

Furthermore, a singular emphasis on local knowledge and practice does not allow action researchers to make sense of the broader processes, structures and power relations that connect people's experiences across practices (Gaventa and Cornwall, 2001, Harvey, 1991:116-117). As Spivak (1990:12-15) argues, while we must recognise the limitations of theory, we should nevertheless use the theories developed within social science strategically to intervene in our practice, and to question what we do. We need to acknowledge and question different ways of
knowing, by looking at the ways in which theory challenges our practice and vice versa \textit{(ibid.:15)}. Neither the traditional academic approach that privileged theory, nor those action research approaches that privilege practice, represent the kind of inclusiveness that facilitates an exploration of multiple ways of knowing. The challenge for action researchers is to integrate theory in a meaningful way that aims to produce practical outcomes and change \textit{(Beilin and Boxelaar, 2001)}.

The role of a social researcher can be that of 'sensegiver' in the way that \textit{Weick (1995:10)} suggests. He argues that researchers are skilled in representing meanings in different forms. We have at our disposal a number of different strategies, skills and tools that allow us to develop interruptions in everyday practices \textit{(ibid.:105)}. While it is important not to privilege the researcher, we should nevertheless recognise the specific and particular skills and knowledge that he/she brings to the action research process. The role of a researcher then is not to come up with an 'objective' or 'superior' account within a particular context, but rather to highlight and provide alternative and competitive accounts that facilitate dialogue within the field. The main task for a researcher in this process is not just to describe events, but to question and highlight where, why and by whom particular accounts are produced \textit{(Czarniawska, 1998:17-30)}. The researcher's contribution to the action research process then lies in the ability to take '… us out of our old selves by the power of strangeness, to aid us in becoming new beings' \textit{(Rorty (1992) quoted in Czarniawska, 1998:71)}.

It is important to acknowledge that researchers have a role to play that transcends the specific research setting. In the context of PhD research it is impossible to conduct action research in a way that is entirely consistent with the principles of collaboration outlined by many proponents of it. PhD thesis writing is by necessity a solitary process that requires a level of analysis that is independent from and '…outside the immediate context of practice…' \textit{(Schön, 1991:309)}. PhD research is by definition extractive research, rather than non-extractive \textit{(cf. Flora \textit{et al.}, 2000:10)}.

There are kinds of research that can be conducted outside the context of practice, which nevertheless facilitate collaboration with practitioners and enhance the reflective practice within projects \textit{(eg. Argyris, 1999, Putnam, 1999, Schein, 2001, Schön, 1991)}. Schön \textit{(1991:309)} refers to such approaches as reflective research.
One such approach is frame analysis, which aims to highlight and raise awareness of the tacit ways in which practitioners frame the issues they are dealing with and their role in the interaction in order to generate change (Rudolph et al., 2001, Schön, 1991, Schön and Rein, 1994). Frames are referred to as the '… underlying structures of belief, perception, and appreciation…' (Schön and Rein, 1994:23). Through frame analysis researchers explore how reality is constructed, what interpretations of reality are considered valid in particular situations and how different parties in a controversy may work with different interpretations of the same facts (ibid.:5). Schön and Rein (1994:22) argue that such frame analysis can be particularly useful in dealing with intractable policy controversies that cannot be resolved by an appeal to facts or rational argument, because '… the parties' conflicting frames determine what counts as fact and what arguments are taken to be relevant and compelling'.

As argued in Chapter 1, many of the land management and natural resource management issues are intractable controversies that require negotiation and reconciliation as well as science and information to be resolved and involve parties that frame issues differently (Lewicki et al., 2003). In order to address these issues, it is argued that considerable reframing is required by the stakeholders involved (Aarts, 1998:131, Aarts and van Woerkum, 2002:424, Aarts et al., 2003:245). In this process people realise that they see the world in a particular way that reflects their specific background. This realisation allows for the emergence of a broader perspective, which is referred to as a 'common frame' (Aarts et al., 2003:245) and this provides the basis for the development of solutions.

Frame analysis is used to enhance the reflexive capacity within a given situation and can be conducted as part of an action research strategy, as it allows the researcher to work with practitioners or stakeholders to identify and reflect on the different and competing frames that exist in a situation, which in turn may generate different behaviour and change (Rudolph et al., 2001).

A second reflective research approach that aims to achieve this is the action science approach. Action science concerns itself with research into the way in which practitioners use and construct theories about their practice (Argyris, 1999:67-89, Friedman, 2001, Putnam, 1999, Schön, 1991:319). Action science is a form of action research:
According to action science there need be no division of labour between those who produce knowledge (i.e., scientists) and those who use it (i.e., practitioners). The role of the researcher is to create conditions under which practitioners … can build and test ‘theories of practice’ … for the purpose of learning. Thus the goal of action science is research in practice, not research on practice (Friedman, 2001:160, emphasis original).

Proponents of action science have argued that people create different meanings when they espouse their views from when they act them out. Moreover, they are often unaware of these differences (Argyris, 1999:67). Argyris (ibid.:70-71) contests the view that this difference between espoused theory and actual behaviour is an ‘error’ that needs to be corrected. Instead he believes that the difference can be explained with reference to the ‘theories in use’ that can be inferred from observed behaviour. Argyris (ibid.:81-88) suggests that we make explicit the theories in use so that we can explain, predict and change a situation. The action science process helps individuals become aware of their theories in use and the way in which these lead to counterproductive behaviour. It also aims to help individuals learn new theories of action that are both espoused theories as well as theories in use.

These kind of reflective research approaches provided a space that would allow me to perform my identity as a researcher while working collaboratively with practitioners and contributing directly to the DSC project. Furthermore, both frame analysis and action science allow for an exploration of convergence and divergence within a context of change, and therefore are immediately relevant to the research questions that frame this research.

To sum up this section on action research, I would like to distinguish between two streams of collaborative research that comprise action research:

- those that conceive of the researcher and practitioners as co-researchers, who work with the research problems that emerge from this interaction and address these collaboratively within the ‘immediate context of practice’ (Schön, 1991:309)

- those that are similarly based on collaboration between the researcher and practitioners and aim to improve practice, yet operate also beyond the immediate context of practice and recognise the specific skills and knowledge of the researcher and the role he/she can play to facilitate reflection in the research setting.

In my research, both of these approaches are evident. Firstly my research interests into capacity building methodologies converged with those of the DSC project team and we worked as co-
researchers within the context of the project. However, the demands of the PhD process mean that my research transcended the context of the DSC project. As I discuss in the following sections, I attempted to deal with these implications by constructing my research very loosely around the principles of reflective research. In Section 2.6 I discuss the collaborative approach, and in Section 2.7 the way in which my practice transcended the context of the DSC project. In Chapter 7 I reflect further on the issues I experienced implementing this approach and the effectiveness of it.

### 2.6 Working with the DSC project team

As discussed in the previous chapter, my research questions focus on the way in which projects such as the DSC project bring together a diversity of stakeholders to form a post-productivist platform for change. To a significant extent this focus converged with the DSC project's interest in developing a methodology to build social capability in the agriculture and food sector. As I participated as a member of the team, the team and I became co-researchers into capacity building methodologies. I contributed my reflections and insights continuously to the project as part of ongoing discussions.

This was possible because I was quickly accepted as a member of the project team. There were a number of reasons for this, beginning with the fact that I negotiated my participation in the project with the team leader prior to the recruitment of the project team. When team members came on board, my participation was a *fait accompli* that was readily accepted. Furthermore, as it turned out I was quite well-connected with internal DNRE stakeholders. Even though the organisation employed several thousand people, the few people I knew within it became part of the broader network that was significant to the project. My involvement in the project was possibly perceived to support or strengthen existing networks of the team with the rest of the organisation.

My acceptance as a member of the team was reinforced in one of the first interactions I had with it. During the induction course that marked the establishment of the project team the external consultants, who organised and facilitated it, excluded me from team building activities. In response, the team manager made an announcement to the group that he considered me to be a member of the team and therefore I should participate in team building activities. From that point on it was clear to everyone - including myself - that my participation in the project was to
be like that of other team members. I was invited to all relevant project activities during the life of the project including its day to day activities and also a number of professional development workshops. While I never took full responsibility for project activities like other team members, I did take on tasks such as report writing, interview and focus group question development, analysis of data and note taking at meetings. While this was very time consuming and did not always directly contribute to my work, it reinforced the team's acceptance of me as a DSC team member. The acceptance of my work as an integral part of the project was evident in the way team members took it upon themselves to take notes or tape meetings that I could not attend. It was also evident in the way in which team members often took responsibility for my tape recorder, ensuring that the tapes were turned around at the right time, or that the tape was turned off when we interrupted meetings.

Team members were supportive of my involvement because they believed it benefited the project. In the interviews I conducted with team members they identified a number of ways in which they considered my involvement to contribute to the project. It was argued that because I was an outsider and someone with a different perspective I enhanced the reflective practice of the project team:

I think you play a really important role, one because you’re not part of the DNRE circuit so therefore you’ll ask questions about things, ask us to clarify things, ask ‘why’ questions at times. I think your research, your social research, your PhD will be of tremendous value as far as how we work effectively as a team, how we operate a project … You’ve obviously contributed an enormous amount in terms of theory and social theory… I think your physical presence, the fact that you’re there, that we know that … we are subjects of your research; I think that adds another level of rigor to what we do. Not that I have ever felt that I am accountable to you or intimidated by you or whatever, but the fact is that we know that we are being observed and studied and I think that adds another level of seriousness to what we’re doing or value to what we’re doing (Team member, second round interviews July 2002).

Team members also argued that while I was an outsider I was nevertheless embedded within the project, and therefore my ‘outsider’ view was considered more relevant and legitimate than that of a true outsider:

… the fact that you can become part of the team … rather than being an observer of the team from afar or a person who comes in and brings ideas with that, without having any basis for those or knowing the full background. So having you working within the team is great … (Team member, second round interviews, July 2002).

Hence, the effectiveness of my contribution to the project team was precariously balanced on being simultaneously both outsider and insider. In this capacity I worked together and
collaborated with team members on day to day activities and tasks. A third aspect of my role in the project that was considered beneficial for its development was the practical contribution I made:

I reckon it's been things like helping us with [interview and focus group] questions. That was just to me a real break through point … if we’d sat down and done those without you I think we’d have come up with such a … broad set of questions … we would have gone back to our old paradigm and put technical type of things … I reckon that has just been invaluable to us, it's given us a lot more rigor … (Team member, second round interviews, July 2002).

Finally, through my participation the team was connected with other university researchers:

It means that we have a door open and access to the institute; we have a door open with a supervisor who … has a vested interest in his student and therefore the project that his student is working on and prepared to contribute. That not only builds knowledge and enhances what we’re doing but it also establishes relationships that are enduring and go beyond this project, going beyond his student and so it adds value and it's something that has been missing in this area of work pretty much for a long while and within our organisation in particular (Team member, second round interviews, July 2002).

The above quotes highlight the mutuality that characterised the relationship that was developed through the action research process. I contributed to the project throughout its lifespan, which in turn contributed to my research. The collaboration between the DSC team and I can be characterised as 'practice interplay' (Paine, 1997:166), which is defined as the process where practitioners of different practices work together and make sense of their activities together, constantly refining their problem definitions and aligning their activities to develop new shared practices. In Chapter 7 I critically reflect on how this collaboration or 'practice interplay' evolved and contributed to the DSC project.

The team's acceptance of me as one team member amongst others facilitated the action research process, but it also served to close some doors. For instance, well into the project I felt compelled as a member of the team to negotiate my relationships with other DNRE stakeholders through that role. While nothing was said explicitly, I felt that I would compromise my position within the team if I did not negotiate access to others inside the organisation through the project hierarchy. As a consultant or outsider I would have felt free to seek access to anyone in the organisation, regardless of their position. I would be able to approach them as a researcher from the University of Melbourne, rather than as a member of a team. What this meant was that my analysis has a strong focus on what happened within the team and the broader context is
constructed from my experience within the project team. The implications of this are further discussed in Chapter 7.

The extent of my participation within the team also limited the effectiveness of the second round interviews. In the first round interviews team members were willing to discuss a whole range of issues with me quite openly. However, I felt that when I conducted the second round of interviews at the end of the process development phase, team members were less willing to divulge information they were unwilling to share within the team, of which I now was considered to be a part.

Despite some of these issues, I believe that the co-operation and mutuality that emerged between the project team and I contributed to both the project, as well as my research. It is this relationship of mutuality and the reflection in action that was facilitated, that define my research as action research. The relationship with the team was very different than would have been the case had I chosen a more conventional approach.

Nevertheless, ultimately my aim was to write a PhD thesis and therefore my goal diverged from that of the rest of the DSC team. While I did share the team's concern with developing a capacity building methodology, they did not share my concern to write a thesis. This thesis is my story, based on my reflections. The discourse through which it is constructed and the conclusions that I come to are quite different from those presented in the project's final report (Department of Primary Industries, forthcoming). While team members are interested in my findings, as evidenced by their prompt reply and enthusiasm to read a draft of it, this thesis is nevertheless peripheral to their work - especially as it is delivered a year after the conclusion of the project. While I shared the research interests of the team, I ultimately did not work entirely from within the DSC project in the way in which action researchers propose. Towards the conclusion of the project, the DSC team members were seeking closure and were looking beyond the life of the project to construct their futures. Team members were less inclined to share with me my analysis of the ambiguities that continued to prevail in the project, as this did not allow them the closure they needed at the time. My horizon for closure on the project was well beyond that of the team, and this is reflected in the different stories that we tell.

The account of our collaborative research effort is the project's final report (Department of Primary Industries, forthcoming), to which all team members contributed, including myself. However, like most other reports of this kind, it constructs a narrative of the project that is
coherent and glosses over ambiguities. It serves to enhance the identities of project team members (cf. Weick, 1995:20) and focuses on the achievements of the project in a way that lacks the kind of critical reflection that I aim to provide in this thesis.

As a social researcher, writing my PhD, I cannot afford to ignore the ambiguities and my performance will be measured by insights gained from critical reflection on the project. Furthermore, I can only write this thesis by placing myself outside the team.

2.7 Sensemaking and narrative identity

As discussed, my research practice extended beyond the immediate context of the DSC project. While I participated in the DSC project team I also conducted a literature review and developed a research proposal. In doing so I came across the ideas on sensemaking developed by Weick (1995) and narrative identity by Somers and Gibson (1994:1994), which I found particularly interesting in relation to my research questions.

Weick's notion of sensemaking highlights how people construct themselves and are constructed by the world around them. According to Weick (1995:27), sensemaking is a retrospective process, where we make sense of a lapsed experience or action to which many possible meanings could be attached by selecting meanings, imposing coherence and framing things in a way that is congruent with our sense of self. He stresses the word 'making' in sensemaking, arguing that people do not live in and respond to an external environment but enact, or produce the environment as they make sense of it. In other words, sensemaking is about interpretation and understanding (sense), as well as action and enactment (making), and it keeps action and cognition together.

Weick suggests that sensemaking is grounded in identity construction as it occurs in order to maintain a consistent and positive self-conception. People will make sense of an ambiguous situation in a way that maintains and enhances their sense of self. Furthermore, it is important to note here that sensemaking and identity construction always occur within a particular temporal, spatial and relational setting (Somers and Gibson, 1994:70) and that identity construction is therefore multiple and discontinuous. Therefore it is a process that is always ongoing (Weick, 1995:44) and therefore incomplete. Consequently, coherence is always sought, but it is never achieved.
A focus on sensemaking and identity construction would allow me to examine the process whereby convergence between participants in platforms for change is negotiated. Identity is a versatile concept (Albert et al., 2000:13). Identity construction involves a simultaneous process of establishing similarity or sameness on the one hand, and difference or distinctiveness on the other (Albert et al., 2000, Jenkins, 1996:3-4). Through the construction of sameness and similarity people engage with each other, while difference allows for agency and change. There is no identity without both similarity (identification) and difference (differentiation). A focus on the process of identity construction therefore allows for an analysis of the integrating factors within a particular context, without losing sight of diversity, complexity, multiplicity and fragmentation. Furthermore, as identity situates participants, groups and projects as well as the organisation and explains their connections, it allows for an integrated exploration across levels of analysis and for an exploration of the relationships and convergence between individuals and larger collectives; between participants, the project, the organisation and the broader context.

According to Calhoun (1994) and Somers and Gibson (1994), modern social theory conceptualised this relationship in terms of a sharp split between the individual and the collective, where the individual, or ‘self’, is constructed outside or prior to this relationship with society, as the individual is perceived as a free and autonomous agent (Calhoun, 1994:2, Somers and Gibson, 1994:49). Since the Enlightenment the cornerstone of Western thought has been the rational, unified, autonomous subject, who is in control of his/her environment (Hawthorn, 1987:56). The Enlightenment project aimed to free the individual from the constraints of the past, traditions and the collective (Somers and Gibson, 1994:49). The modern social actor, according to Somers and Gibson, became a ‘… fixed and universal self driven to maintain separation and autonomy from others’ (ibid.:50). Within this perspective, a clear boundary is constructed between ‘self’ and ‘society’ (Hawthorn, 1987:56), where the ‘self’ is fixed and coherent and becomes an abstraction that is essentialist, a-historical and a-temporal (Somers and Gibson, 1994:40).

While traditional Marxist and feminist perspectives challenged the universality of the concept of ‘man’ defined by Western thought, these emancipatory perspectives continued to subscribe to the Enlightenment ideal of a ‘true’, un-alienated and unified self, thereby maintaining the essentialist distinction between ‘self’ and ‘society’ (Harvey, 1991:53).
Social constructionists have challenged this traditional distinction between the individual and society. They have emphasised the way in which the collective determines the individual, as they see subjectivity as the product of the social processes in which it is embedded. In fact, at times they have reversed the Enlightenment order entirely, challenging the notion of agency, as the individual is conceptualised completely in terms of the hold that culture, or society has on it (Crotty, 1998:58). Constructionists have challenged ‘essentialist’ notions of modern social theory; they have questioned the notion that individual identities are based on some ‘essence’ that is autonomous, coherent, fixed, singular, harmonious, and real (Calhoun, 1994:13).

However, reversing the order is problematic. As Calhoun argues:

> There is some risk … that simply showing a process of construction fails to grapple with the real, present-day political and other reasons why essentialist identities continue to be invoked and often deeply felt (ibid.:14).

For many people these identities and categories are a social reality according to which they structure their lives (Waldenstrom, 1994). In fact, when groups of people come together they often like to define themselves as coherent and unified, and therefore they construct and subscribe to some essentialist identity. Weick argues that in an uncertain and ambiguous situation our sensemaking occurs in order reduce uncertainty, to ensure self-enhancement, self-efficacy and the need for self-consistency (Weick, 1995:20). It is this need that drives the sensemaking process:

> Sensemaking processes derive from … the need within individuals to have a sense of identity - that is, a general orientation to situations that maintain esteem and consistency of one's self-conceptions (Ring & Van de Ven (1989) in Weick, 1995:22)

Furthermore, through political processes the ‘essentialist’ identities that are constructed through the sensemaking process are often made ‘real’ as they are institutionalised through for instance the formation of political interest groups (Sarup, 1996:42-43). Overall, we cannot avoid thinking and structuring our lives in an essentialist manner. As Calhoun argues, we should recognise this, and add to this essentialist reason a constructionist perspective, which allows us to understand how our 'essentialist' identities and categories are constructed within and among subjects (Calhoun, 1994:19-20). In other words, it is important to understand how people make sense of the world around them by selecting meanings, imposing coherence and framing things in order to maintain a consistent, positive sense of self. At the same time it is important to question what is included and excluded in this process and why.
Through an exploration of narrative identity it is possible to explore how our identities and categories are constructed and what is included in this process and why. ‘Sensemaking’, ‘narrative’ and ‘identity’ are concepts that are often linked in contemporary literature on identity. Weick argues that what is necessary in sensemaking is a good story:

If accuracy is nice but not necessary in sensemaking, then what is necessary? The answer is, something that preserves the plausibility and coherence, something that is reasonable and memorable, something that embodies past experience and expectations, something that resonates with other people, something that can be constructed retrospectively but also can be used prospectively, something that captures both feeling and thought, something that allows for embellishment to fit current oddities, something that is fun to construct (1995:60-61).

Authors argue that it is through the narrative that elements that are constitutive of identity are organised and identities are constructed: ‘… if you ask someone about their identity, a story soon appears’ (Sarup, 1996:15). Similarly, Nerman (1982) (in Waldenstrom, 1994:7) argues that through narration the world is ordered and given a reality, within which actors place themselves, and from this process identity emerges.

The concept of narrative identity then allows us to analyse the ‘essentialist’ identities we construct as we live our lives, in a way that simultaneously challenges their claimed or perceived universality, singularity and stability (Somers and Gibson, 1994:65). A narrative identity approach emphasises the relationality of identity, highlighting how identities are constructed within particular social contexts, stressing the spatial, temporal and historical dimensions of identity (ibid.).

Somers and Gibson argue that a narrative approach to identity is not just a research or analysis strategy. They link identity with the concept of ontological narrativity which is based on the premise that narrativity and relationality are conditions of social being. According to Somers and Gibson ontological narratives define who we are:

[People construct identities (however multiple and changing) by locating themselves or being located within a repertoire of emplotted stories; … people make sense of what has happened and is happening to them by attempting to assemble or in some way to integrate these happenings within one or more narratives; and … people are guided to act in certain ways, and not others, on the basis of the projections, expectations, and memories derived from a multiplicity but ultimately limited repertoire of available social, public, and cultural narratives (1994:38-39).]

The concept of narrativity that is discussed by Somers and Gibson differs from traditional notions of narrative as a representational form. Rather, they argue that narrativity is a concept of
social epistemology and ontology. In this way they fully accept the implications of the argument that through telling our stories, we not only represent our identity, but simultaneously construct it (ibid.:38). The narrative process is transformative (Sarup, 1996:15).

The narrative approach deconstructs the boundary between the individual and the collective by arguing that narratives are constructed interpersonally within the social ‘relational settings’, which are defined as patterns of relationships among institutions, public narrativ es and social practices (Somers and Gibson, 1994:70). These relational settings are sites where the present meets the past, and where individuals, groups, practices, the effects of the international markets, cultural formations, global and local politics, community issues, as well as demographic factors intersect (ibid.:71). The concept of narrative connects the individual with society. This conceptualisation of narrativity retains agency; however, as Somers and Gibson argue, this does not mean that actors:

… are free to fabricate narratives at will; rather, they must 'choose' from a repertoire of available representations and stories. Which kinds of narratives will socially predominate is contested politically and will depend in large part on the distribution of power' (ibid.:73).

This concept of narrativity challenges any decontextualised positivist approach that is based on a boundary between the individual and society, as its basic premise is that to understand, or make sense of anything about actors, it is necessary to understand the temporal, spatial and relational dimensions of the social network of which they are a part. In fact, as discussed, narratives only exist in the social or interpersonal (ibid.:61). Nevertheless, while on the one hand they aim to deconstruct the boundary between ‘self’ and ‘society’, Somers and Gibson do distinguish between ontological narratives, which are referred to as ‘… the stories that social actors use to make sense of – or indeed, in order to act in – their lives' (ibid.:61) and ‘public’ narratives, which they say are the narratives that emerge from inter-subjective networks or institutions, either local or grand (ibid.:62). It is important to stress here that while narratives are structured and coherent and distinguish ‘self’ and ‘society’, individuals may subscribe to and construct a plurality of narratives. Hence, it is through the concept of narrative identity that we can study the ‘essential’ and coherent identities often invoked when people describe who they are and what their values and beliefs are, without assigning essential, single and coherent identities to individuals. This perspective retains the notion of individual agency, without losing sight of the fact that identity narratives emerge between people.
A final point to be made here is that the narrative identity perspective highlights the way in which action and sensemaking are simultaneous and incomplete processes:

Ontological narratives are used to define who we are; this in turn is a precondition for knowing what to do. This “doing” will in turn produce new narratives and hence new actions; the relationship between narrative and ontology is processual and mutually constitutive. Both are conditions for the other; neither are a priori (ibid.:61).

Identity is not a category or permanent state of being, rather it is a process (Sarup, 1996:xvi), or a lived project that is never complete or settled (Calhoun, 1994:27).

Overall, the concept of narrative identity introduces a temporal, spatial and relational dimension to identity. Furthermore, within a narrative approach to identity the individual is connected with society in a way that does not constitute the agent as entirely passive, nor is the agent constituted in a way that controls the environment. A focus on narrative identity facilitates examination of the ways in which identity narratives intersect with individuals, groups and practices in a multiplicity of ways that are relational, cross-cutting, temporal, historical and contested. Through such a focus, it is possible to examine where convergence and divergence occur within a particular context. Furthermore, through an analysis of the sensemaking process through which narratives of identity are constructed within relational settings, the ‘essentialist’ categories that we use in daily life are not adopted uncritically, or ignored; rather, they are understood in terms of the social context and power relations in which they emerge.

2.8 Theory in practice

I thought the ideas discussed above were relevant for my research. However, I found very little in the literature on narrative analysis that I believed would ‘work’ with the kind of data that I would have access to, most of which was not in narrative form. Through my participation in the DSC project I was collecting project documentation, notes of meetings, transcripts and notes of interviews, focus groups, workshops and (email) conversations. Apart from only a handful of data sources, I was not collecting stories or narratives that would facilitate analysis of narratives in the way it is proposed in some of the literature (eg. Bryman, 2001, Czarniawska, 1998, Mishler, 1999, Waldenstrom, 1994). I also felt that to use the narrative as a metaphor and apply principles of literary criticism in order to analyse an organisational setting (in the way in which Czarniawska (1997) analyses an organisation as drama) was too esoteric for the action research setting in which I was operating.
On the whole I was uncertain about the way in which I could integrate this focus on narratives within the overall action research approach. While I had incorporated all these ideas in my literature review, I abandoned them, believing they were not appropriate in the context of my action research, practice based setting.

I approached the data that I had in a way that was consistent with Charmaz's (2000) constructivist approach to grounded theory. Grounded theory was first developed by Glaser and Strauss (1967) as an inductive research approach that derives theory from data through an iterative systematic process of data gathering and analysis (Bryman, 2001:390). It challenged the prevailing deductive approach that analyses data according to preconceived standardised codes that reflect the theoretical framework of the researcher (ibid.:391). The main strength of Glaser and Strauss's work is its challenge of those who viewed qualitative research as a mere precursor to the supposedly more rigorous quantitative methods and the belief that qualitative methods are impressionistic, unsystematic and therefore unable to contribute to theory (Charmaz, 2000:511). Their work provided guidelines for systematic qualitative data analysis that explicitly aims to generate theory (ibid.:512-513).

However, grounded theory is based on positivist assumptions of '…an objective, external reality, a neutral observer who discovers data, reductionist inquiry of manageable research problems, and objectivist rendering of data…' (ibid.:510). In fact, grounded theorists encourage researchers to '… suspend their awareness of relevant theories or concepts until a quite late stage in the process' (Bryman, 2001:394). From a constructivist perspective, the most untenable aspect of grounded theory is the proposition that theorists can operate as a theory neutral and unbiased, objective researcher. Charmaz (2000) rejects these positivist leanings of grounded theory and offers an alternative constructivist approach.

My research approach was informed by Charmaz's constructivist approach that critiques positivist grounded theory, but embraces its emphasis on simultaneous data collection and analysis; the comparative methods that involve a constant comparison of phenomena being coded under a category in order to allow for theory to emerge about that category; and the process by which the researcher develops memos that explore the codes and the conceptual and theoretical elaborations that emerge from these. Most importantly Charmaz (ibid.:511) suggests that grounded theorists cannot 'dress their data' into preconceived concepts; rather, any concept must 'earn its way into the analysis'.
I began my research with a broadly defined interest in exploring processes of identity construction in the context of the DSC project in order to identify where the participants converged. I used NVivo software to analyse the transcripts and notes of meetings, interviews, focus group discussions and other project activities. This software package was developed by advocates of grounded theory.

I began my analysis by doing the kind of open coding suggested by grounded theorists and captured emerging conceptualisations in memos. In this process, one of the significant codes I developed was that which I called 'sensemaking frames'. What I coded here were a number of different constructions of the project around which team members converged, but I felt significant discomfort with the word 'frames' that I had attached to this code, and had it there only in the absence of a more suitable term. I felt that these 'sensemaking whatevers' were certainly not frames, but something much more specific, dynamic and temporary.

Then I realised that what I had identified were in fact project narratives that people located themselves within as they performed their identities in the project. 'Narrative' was a more appropriate term for the code that had emerged in my data. The word frame refers to a structure that organises and governs activity. It implies closure and coherence. The dictionary refers to frame as a 'basic rigid supporting structure' or an 'established order or system' (Moore, 1993:419). According to Aarts et al. the concept 'frame' '… is used for understanding the 'rules' which govern our appreciation of what is going on around us and enables us to differentiate between different sorts of "reality"…' (2003:245, emphasis added). In their paper they describe the way in which stakeholders involved in system-innovations in the Dutch countryside frame the planning process. They distinguish between two ways that planning is framed: Planning as controlling the future, on the one hand, and planning as searching for direction by experimentation on the other. While Aarts et al. (ibid.) come to the conclusion that frames are used in a flexible way, that multiple frames exist in a situation and that they exhibit a 'flexible and multifaceted character', their notion of frame is nevertheless constructed as prior to action, as it 'governs' and 'forms the basis' (ibid.:245) for action.

Conceptually 'narrative' is a more dynamic term than 'frame'. The narrative deals with the emergent, the contested and the social dynamic. A narrative approach allows for an analysis of the way in which people place themselves within the narratives, while the word frame implies something that is *a priori* or independent from the actors. A narrative is lived, when a frame is
not. While frame analysts focus on beliefs and values that mediate identity construction and behaviour (cf. Aarts et al., 2003, Gray, 2003), the narrative approach analyses the sensemaking process that links action with identity (Somers and Gibson, 1994:40), as it allows for descriptions of intentions, values and beliefs but also of people as social actors (Waldenstrom, 1994:6), which emphasises the social dimension, but also the domain of action through which identity emerges. What this means is that while frames are referred to in general terms (eg. Gray, 2003:20) and therefore transcend specific settings, the narrative locates identity construction in the specific relational setting in which it emerges, as a story is located within a specific situation at a particular time and involves specific social actors.

Liepins (2000) argues that community (and I would argue convergence more generally) must be understood as a combination of the meanings through which it is constructed (discourse), the practices through which it is performed and contested (action), as well as the structures and space ‘… through which a material and metaphorical embodiment of "community" can be read …’ (ibid.:32). Unlike the approach advocated by frame or discourse analysts, the narrative approach attends to all three of these 'terrains' (ibid.:33) through which convergence is constructed.

What emerged from my data was what I decided to refer to as 'narratives' about the project, which are discussed in greater detail in subsequent chapters. I analysed these narratives in terms of the discourse through which they were constructed and the way in which they were structured. A coherent and complete narrative contains three basic elements: an original state of affairs (the beginning), an action or event (the middle) and a subsequent state of affairs (the end) (Czarniawska, 1998:2, Roe, 1994). However, a text is only a narrative when it contains a plot. It is the plot that brings coherence to the narrative as it is through the plot that problems are resolved or the ambiguities reconciled. Furthermore, it is the plot around which characters and events revolve and it is the plot that makes the narrative meaningful. The beginning and ending of a narrative provide the context for the plot, dictate the boundaries of action and identify the lead characters. It is important to note here that the plot is not inherent to the events and actions, but rather is put there (White (1973) quoted in Czarniawska, 1998:2). As Weick argued, as people make sense of an event, or narrate an event, they retrospectively select meaning to attach to it in a way that is congruent with their identity in the particular context (1995:20-21). The aim of the analysis then is to trace the story-telling practices within a setting in order to highlight why and how certain stories are told or invoked (Bojé, 1998).
An examination of the narratives that emerged within the DSC project revealed the discourse through which the project was constructed; the extent to which the narratives provided a space or structure for a diversity of participants to participate in the land management process; and it allowed for analysis of how people enacted the project (their practices) (cf. Liepins, 2000). In other words, the narrative analysis revealed how different stakeholders were included to form a platform for change within the context of the DSC project and who was included and excluded in the process.

Even though I analysed the structure of the narratives and acknowledge that narrators aspire to coherence of their narratives, I recognise that narratives do not necessarily exist in that form within a particular context. What evolved in my research was not an analysis of narratives that were necessarily explicit and coherent within the DSC project. Instead, my analysis was of conversations, meetings, documentation, interviews and focus groups, where I found stories that were sometimes explicitly told, but more often invoked and inferred through fragments of conversation (cf. Carrithers, 1995:268). Most of these narratives were like what Bojé (2001) refers to as ante-narratives that reflect the ongoing, incomplete, multiple and discontinuous nature of storytelling and identity construction. My analysis then is of stories in context, rather than stories as objects, in that they are not considered as measures, indicators or representations of the project, but analysed in terms of the way they are constitutive of it (ibid.:1-2).

In light of this it is important to note that as I analysed the narratives that operated in the context of the DSC project, I did not make a distinction between narratives on the one hand and paradigmatic or canonical thought on the other. This distinction is sometimes made as authors argue that the former is a pre-modern, and the latter a modern way of knowing (Carrithers, 1995:266, Czarniawska, 1997:18). However, what is referred to as paradigmatic thought actually operates as a narrative:

… it renders understanding only by connecting (however unstably) parts to a constructed configuration or a social network (however incoherent or unrealizable) composed of symbolic, institutional, and material practices (Somers and Gibson, 1994:59).

Hence I explored both as narratives that people enact and re-construct as they locate themselves within them like characters in a plot.
Overall, my research approach combined principles of constructivist grounded theory and narrative analysis. In fact, within the context of an overall constructivist grounded theory approach, the narrative approach earned its way into the analysis (cf. Charmaz, 2000:511).

The narrative approach also enhanced the research in another way. Apart from facilitating analysis of convergence and diversity within the context of the DSC project, the narrative approach allowed for dialogue between project team members and me in a way that attempted to bridge the gap between theory and practice. As a researcher I highlighted to the project team where, why and by whom the various and competing project narratives were told and also conveyed how they were constructed with reference to different theories of capability building and change. This aimed to enhance the reflexive capacity within the team and strengthen the connection between my research and the work of the project team. This approach was consistent with the principles of action research.

It is important to note here that I was able to facilitate such dialogue only towards the final stages of the project when my analysis started to take shape. As mentioned earlier, the team at this point was looking for closure, and my account of the ambiguities within the project did not enhance this objective. Therefore the impact of this dialogue was minimal. Nevertheless, as I argue in Chapter 7, the combination of action research with narrative analysis holds promise as a method to significantly enhance the reflexive capacity of projects.

2.9 The value of case study research

Before I conclude this chapter it is important to discuss the case study approach selected for this research in greater depth. If we accept that science is embedded in the social, political and cultural spheres, then it is important to investigate the constructed nature of reality, to implement a constructivist approach that allows researchers to explore why people in certain settings adhere to and behave according to certain ideas over others and to look for the multiple and competing ways in which people construct their ‘truths’ and ‘realities’. Case study research, particularly if combined with the narrative approach outlined earlier, allows for such explorations.

Moreover, if convergence is understood in terms of a process of narrative identity construction that is located and negotiated at the interpersonal and social level, then my analysis cannot take
the individual as the unit of analysis. Instead what is required is a holistic approach that allows for an exploration of how the 'whole' is constructed between people, their practice and the broader relational setting. Qualitative case study research facilitates such a holistic approach; it lends itself to systemic analysis as it allows the researcher to explore the emergent properties of a system or case, rather than examine a large number of cases in terms of a predetermined set of variables that form part of the experimental design of the researcher (Mishler, 1999:10-11).

While my aim was to study how the 'whole' is constructed, it is important to note that I nevertheless do not conceive of the case as a clearly bounded entity with essential qualities and attributes that need to be discovered and described (cf. Ragin, 1992:8-10). Instead I consider the case to be a construction that is discontinuous, contested and contingent upon the specific relational setting (cf. Abbott, 1992:65). This constructivist approach then allows me to explore convergence without losing sight of diversity and difference within the research setting. Therefore, contrary to the quantitative approaches that focus on categories and attributes that are assumed to constitute the case, my research derives these attributes and categories from the research process itself, and recognises their contingent and contested meanings.

This kind of research leads to in-depth understanding rather than causal explanations (Gummeson, 2000:86). The 'thick description' (Stake, 2000:439) facilitates a very rich construction of a situation that allows the reader to construct their knowledge about the case. Sometimes it is argued that a single case study is appropriate when there is a need to learn more about the particular case (Gummeson, 2000:84). In fact, the emphasis on generalisations across a large number of cases is challenged, as it is argued that this leads researchers to gloss over the particularities, differentiation and inconsistencies that exist within a case (Stake, 2000:444). Quantitative studies that include a large number of cases are based on assumptions about the similarities between the cases and often do not explore the differences and discontinuities between and within them. Increasingly, theorists advocate for the development of local theory that privileges particularity, difference and particularisation over generalisation (Gummeson, 2000:96, Mishler, 1999:11, Walton, 1992:123). However, as argued above, while it is important to focus on the particular and to provide space for local theory, it is critical not to lose sight of broader processes and structures that connect the multiplicity of experiences of diverse people in specific situations and to use and develop theories that allow us to make sense of these and address them. Spivak (1990:12-15,) proposes that we employ an interruption structure, where we use and develop theory, but abandon its totalising and universalising tendencies and instead
search for ways in which our broader theoretical, cultural and political narratives interrupt and are interrupted and constituted by local discourse and practice.

To argue that a single case study allows theory development only about the particular case then ignores the contextual embeddedness and the broader social and cultural narratives through which the case is constructed as a case of something. To explore the DSC project and question how it is constructed as a case of platform building that includes a diversity of stakeholders in land management, involves the construction of a new narrative about, or critique of platform construction and social capability building. This involves making explicit where the case study intervenes in and is intervened by the broader social, cultural and theoretical narratives through which it is constructed and this contributes to theory development. According to Walton (1992:135) theory building within a case study then is facilitated by asking the simple question: A case of what?

Overall, case study research involves a qualitative inquiry that explores and questions the theories and narratives through which the case is constructed and justified (cf. Walton, 1992) and this facilitates learning and theory development that transcends the particular case study. This ability to generalise or learn beyond the boundaries of the single case is dependent on the 'thick' description that constitutes the case, on the comprehensiveness of the description of the case. Such a comprehensive description allows others to develop an in-depth understanding of the structures and processes of the case, rather than a superficial understanding of a cause-and-effect relationship (Gummeson, 2000:89).

To do this well requires in-depth inquiry that is enhanced by triangulation. Triangulation involves the use of multiple methods and sources of data in order to ensure rigour, breadth, depth, complexity and richness of an inquiry (Denzin and Lincoln, 2000:5). Triangulation allows the multiple, contested and contingent meanings constructed in a particular setting to come into view. As Denzin and Lincoln argue, 'triangulation is the display of multiple, refracted realities simultaneously' (ibid.:6).

In my research triangulation was achieved by gathering information from a variety of sources in a number of different ways. One source of data that I used for this research was formal project documentation that included funding submissions, the project brief, the work-plan diagram, tender documentation, interim and final reports of the DSC project and pilot projects, as well as position descriptions. Analysis of this data provided insight into the ways in which the project
was constructed and formalised within the organisation. I also attended and participated in most of the meetings (28) organised by the DSC project team. These meetings were usually conducted over one or two days. I took extensive notes and taped the meetings so that I could transcribe particularly interesting moments in these meetings. I have also collected a vast volume of emails, of which I analysed those relating to critical events and insightful reflective moments within the team. The notes of the meetings and team emails were an important source of data; however, they allowed me to explore only how meaning was constructed collectively and publicly within the team. Two rounds of in-depth semi-structured interviews with all DSC team members (16) and pilot project team members (11) allowed me to explore how the collective and formalised meanings were constructed and contested by the individuals involved in the DSC project. Notes of reflective conversations with people inside and outside the team (including my supervisors) were recorded in my learning log or as separate documents (7), and provided additional constructions of the project. To add to all this information, I also analysed data collected by the project team itself, including notes of workshops (14), transcripts of focus group discussions (10), and transcripts or notes of interviews (28) conducted by the pilot projects. Finally, I have an extensive learning log in which I documented at the time my reflections on the case study project, my participation in it and the research process itself.

The extensive nature of my data meant that I often had a number of different accounts relating to the same situation. I had my notes and transcripts of meetings and events, the 'official' notes of the team, email conversations that followed as well as my reflections recorded in my learning log and those of team members, project partners and other people outside the project (through interviews, emails and notes of conversations).

Triangulation was also achieved through regular informal discussion of my emerging analysis with team members. My findings then were no surprise to the team when I presented these for discussion at one of the team meetings:

… possibly because you've expressed your views as part of the team. We sort of know, nothing is a surprise, because you've said those things before, we're aware that's what happening (Team member, team meeting, February 2003).

I also provided DSC project team members with an opportunity to read my thesis to provide further feedback. All of them reacted with enthusiasm to this opportunity, but only four provided feedback in time for me to incorporate it here. Their response was very positive. Team members suggested they really enjoyed reading it, although one person did mention she skipped
the more theoretical aspects which she found too difficult to get through. The response to the thesis was that it largely describes the project in a way that is consistent with the team members' experience of it:

It was a really interesting paper and the analysis of the project is pretty fair (Team member, telephone conversation, June 2004).

I didn't have any real problems with what you've written. In fact I often found myself thinking that it was a good explanation/rationalisation of what was happening. I agree that there was a real tension between what the organisation wanted and what we wanted to do (Team member, email, June 2004).

There were some aspects of this thesis that team members challenged and where they did, I have included their comments in the relevant chapters of this thesis. I would like to reinforce here that I was one team member amongst others in a project that was and remains ambiguous and contested. This thesis is not and cannot be a story that resolves those ambiguities; however, it does serve to highlight and explain them.

The above highlights that triangulation contributed to, and in fact was critical to, the exploration of convergence and diversity within the context of the DSC project. Overall, the qualitative case study research, combined with narrative analysis, allowed me to explore the multiple, discontinuous and contested ways in which team members enacted the project and constructed project narratives, and the way in which the project included and excluded the diverse stakeholders within an emerging platform for change.

2.10 Conclusion

In this chapter I described the process through which this thesis was constructed. I outlined how and why the DSC project became the single case study for this research, how I implemented the action research approach and integrated narrative analysis. I also highlighted how, within an overall constructivist grounded theory process, this narrative approach earned its way into the analysis. Furthermore, I discussed how a relationship of mutuality emerged between the DSC project team and me, what the limitations of this were and how this contributed to the project and my research.

In the following chapters I provide my analysis of the three phases of the DSC project. This analysis is based on both a constructivist grounded theory approach and narrative analysis. It is
important to note that the following chapters are my story, which in part overlaps, in part contests and in part extends the account the team constructed together (Department of Primary Industries, forthcoming).
3

Project development

3.1 Introduction

In Chapter 1 I argued that the emphasis on sustainability and a triple bottom line agenda demands a post-productivist approach to capacity building that is inclusive of the diversity of stakeholders in land management. In this and the following two chapters I discuss the way in which the Developing Social Capability (DSC) project was established and implemented. I explore where convergence occurred in the project by discussing the project narratives that were constructed and contested within it. This highlights how the project included a diversity of stakeholders in an emerging platform for change.

While subsequent chapters deal with project implementation, in this chapter I focus on the way in which the project was first conceived and developed by a small group of people within the Department of Natural Resources and Environment (DNRE). The chapter discusses how the project was funded and subsequently designed and developed into a project proposal for delivery by the DSC project team. I became involved in the project in the last three months of this phase, just prior to the establishment of the project team that would be responsible for project implementation. One of my supervisors had acted as an adviser to the steering group that was established to develop the DSC project, and he had worked closely with the leader of this group. My participation in the DSC project was negotiated as an extension of this relationship.

The analysis presented in this chapter is based on data that comprises primarily formal and informal project documentation, but also includes the notes of meetings I attended with my supervisor towards the end of this phase.

In this chapter I:
• discuss the Victorian policy context within which the DSC project was developed, which was characterised by a significant policy shift from the 'New Public Management' approach that favours private sector and market principles, towards an emphasis on the triple bottom line agenda, community engagement and integrated government (Section 3.2)

• examine the various capability building methodologies considered by the DSC project steering group and describe how the Rapid Appraisal of Agricultural Knowledge Systems (RAAKS) approach developed by Engel and Salomon (1997) was eventually selected to provide the basis for the DSC project strategy (Section 3.3)

• describe how social capability is constructed in both productivist as well as post-productivist discourse, where the former primarily serves the interests of government, while the latter is more representative of the idealist ambitions of staff involved in the project. What this suggests is that social capability building is not an inherently inclusive and empowering strategy (Section 3.4)

• argue that there is a need to identify and diagnose where social capability building strategies contribute to genuine participation and empowerment, and where they fail to do so. This and subsequent chapters contribute to such a diagnosis (Section 3.5).

3.2 Establishing the project

The DSC project was first conceived in 1999 during the final year of the Liberal Kennett government. The Kennett government had introduced significant expenditure cuts, extensive privatisation and increasing competition and outsourcing of services (Adams and Wiseman, 2003:13). This government had been at the forefront of a trend within governments in Australia towards the adoption of private sector processes and structures. These public administration processes, tools and instruments are often referred to as the 'New Public Management' approach to public administration. While I acknowledge that the term 'New Public Management' is contested (Davis and Rhodes, 2000:84), it is useful for referring to the principles of corporate management and marketisation, which underpin public administration practices within the Victorian government. Examples of the 'New Public Management' approach include the introduction of private sector management methods, the competitive tendering out of services,
and the implementation of a quasi-market within government departments as they are split into purchasers (policy-making) and providers (service delivery) (Davis and Rhodes, 2000:76, Reddel, 2002:55).

The purchaser-provider model was implemented in DNRE in the late 1990s. According to this model, outcomes and outputs for projects and programs were decided upon within the 'purchasing' section of the department, while they were delivered by 'providers' from within or outside the organisation according to predefined specifications and timelines. The purchaser-provider model thus separated policy development from service provision.

The DSC project was conceived and funded within the purchasing arm of DNRE. An increasing number of people in the organisation were interested in ideas about community capacity and engagement that gained in prominence in the 1990s. A small group of people within the purchasing group sought to pursue some of these ideas through the Growing Horizons Initiative (GHI) that was developed to provide the policy framework and funding structure for the organisation's priorities in ensuing years.

### 3.2.1 The Growing Horizons Initiative

The Growing Horizons submission to the Budget Estimate Review Committee in March 1999 (Department of Natural Resources and Environment, 1999) that sought funding for a range of DNRE activities, locates the DSC project within a neo-liberal growth focused policy narrative. As mentioned in Chapter 2, a narrative comprises an initial state of affairs (the beginning); an interruption or challenge to this state of affairs; a resolution of the resultant tension or problem (the plot); and a subsequent state of affairs (the end). The neo-liberal growth focused policy narrative within which the project was located as part of the funding submission begins with a description of how Victoria's food and agriculture sector is responsible for 35 per cent of all state exports and is one of the most successful sectors in terms of competing in the global market. Investment in knowledge and innovation is recognised as a key to economic growth and the competitiveness of nations. While there is no explicit interruption or challenge to this state of affairs, it is implied that without a turn of events or a change in approach, the position of Victoria in the global economy would be under threat. To address this threat, the GHI is to '… build the State's scientific capability to world standards, generate new knowledge and
technology, commercialise the technology, and facilitate market expansion' (ibid.). This narrative ends with the transformation of Victoria's food and agricultural industries with:

... larger, more efficient and more sophisticated farms, which are better linked to more capital intensive, and more market aware processing and distribution sectors. As a consequence, the general community will benefit from greater wealth creation, regional economic growth, cheaper high quality food, improved social outcomes and enhanced environmental values (ibid.:60).

This neo-liberal policy narrative conceives of social outcomes and enhanced environmental values as a flow-on effect of increased economic growth and wealth creation.

In the submission the DSC project is referred to as 'Project 8: Accelerating Growth through Rapid Adoption of Technology' (ibid.:33-35). The project narrative that is contained within the GHI proposal begins with a description of the complex environment in which people in agriculture are currently operating. The problematic situation around which the plot revolves is the inadequacy of traditional extension activities in terms of achieving the large changes required for accelerated growth. To resolve this, the project is to conduct research into human behaviour and cognitive processes and the use of modern communication media. The project is to consist of a virtual campus for innovative adoption technologies made up of four elements, namely the development of new processes for change management; the development of strategic learning alliances; the implementation of new communications technologies; and finally, the development of capacity to manage structural adjustment. The subsequent state of affairs in this narrative is accelerated growth through the implementation of new approaches to extension activities that '... establish a learning and continuous improvement ethos in the agriculture industries, and increase the rate and extent of adoption of new technology' (ibid.:34).

This project narrative is characterised by productivist discourse that emphasises new technology development as a pathway for change. While it highlights the need to develop new learning alliances, the term social capability is still absent, as is reference to participation or community engagement. The location for action within the narrative is a virtual campus for innovative adoption technology, where the main characters are people involved in agricultural industries as well as social and market researchers from within and outside DNRE. The characters in this plot do not explicitly include the broader community of stakeholders.

The GHI narrative was consistent with the Liberal state government's policy objectives and helped to secure funding for the DSC project, which was obtained through the government's
Science, Engineering and Technology Initiative (SETI) that was administered by the Department of State Development.

### 3.2.2 The 'Advantage Rural Victoria' Proposal

Following the elections in October 1999 there was an unanticipated change of state government, which marked the end of the Growing Horizons policy framework that had provided the basis for activities within DNRE. It took until November 2001 for the new Labor government to launch its policy statement entitled 'Growing Victoria Together'. This statement committed the government to a policy framework that has three broad aims: to integrate economic, social and environmental goals; to improve the capacity of government to manage complex policy challenges in an interconnected and globalised policy context; and to involve citizens, communities and other stakeholders in the policy process (Adams and Wiseman, 2003:12). The 'Growing Victoria Together' statement signified an alternative integrated mode of government that challenged the prevailing economic rationalist 'New Public Management' approach to public administration. Given the significance of this shift, it is not surprising that the development of the new policy statement represented '… a winding and at times contested path …' (ibid.:12).

In the meantime the DSC project was up and running. A steering group for the project had been established that was scoping the project. This occurred in a context where prevailing policy platforms were contested, while '… the new world [was] still some way from being fully formed or named' (ibid.:21). Nevertheless, there was a sense among some people within the DSC steering group that the shift towards the triple bottom line agenda and the emphasis on community engagement that was emerging within the new Labor government, was consistent with the direction in which the group was heading. However, long term funding for the DSC project and other GHI projects was uncertain. In response, DNRE staff developed the 'Advantage Rural Victoria' (ARV) proposal (Department of Natural Resources and Environment, 2000). This policy narrative was constructed to convince the new government that the suite of projects conceived as part of the GHI would meet the policy objectives of the new Labor government. The proposal contained a policy narrative that was strikingly different from the GHI narrative.
The beginning of the ARV narrative highlights the need for government to revitalise rural and regional Victoria. The plot revolves around five new strategies that aim to develop powerful new technologies vital to Victoria's future; to realise the potential of domestic and export markets; to develop sustainable land management practices; to encourage land use change; and to engage people in managing change and moving toward innovative community capacity building programs. This is to result in food and agricultural export growth, sustainable use of natural resources and stronger more resilient rural communities (ibid.).

While the productivist GHI narrative subsumed environmental and social outcomes under economic objectives, the ARV proposal is characterised to a significant degree by post-productivist discourse as it seeks an integrated approach to achieve these objectives. First of all, the setting for this narrative is not just the agriculture sector but rural and regional Victoria. Similarly, the plot revolves not around agricultural production, but around strategies to revitalise rural Victoria. Accordingly, the narrative does not place the farming community at its core. Instead it opens up a space for a broad range of stakeholders to play a significant part in the land management process. While the GHI does not refer to community engagement and participation, this ARV document considers community capacity building as one of its five core strategies (ibid.). Moreover, community engagement is considered integral to the success of the overall ARV initiative. Within this policy narrative, the DSC project is described quite differently from the way in which it was conceptualised within the GHI.

The beginning of the project narrative here discusses pressures on rural and regional communities to change with falling commodity prices, ongoing economic reform and climatic conditions, as well as the requirement to manage the environmental impacts of land-use. The plot revolves around involving rural communities in the process of revitalising rural Victoria. A key role for government is to work with rural communities to help them build capability to anticipate and respond to change. The project is to examine innovative approaches to build this capability and develop pilot projects to test these. While an explicit ending to this narrative is absent, it is implied that because community capability is integral and complementary to the overall ARV strategy, this project will contribute to the ARV objectives of export growth, sustainable use of natural resources, and stronger more resilient rural communities (ibid.).

Overall, the ARV proposal represents a shift from a productivist towards a post-productivist policy framework, which created the space to develop a project description that expressed the ideas emerging within the steering group. These ideas revolved around community capacity
building within a triple bottom line agenda, which represented a move away from production focused agricultural extension. However, while the ARV narrative convinced the Labor government that the GHI suite of projects would meet its policy objectives, it was inconsistent with the productivist, science and technology based discourse that continued to prevail within the SETI (now renamed the Science and Technology Initiative), the funding source for the project. The ARV proposal failed to secure more funding for the DSC project.

Despite this failure, the development of the ARV proposal was important in shaping a project narrative that was constructed in post-productivist discourse and significantly informed further project development and implementation.

3.2.3 The Science and Technology Initiative

In another effort to secure ongoing funding for the GHI suite of projects through the Science and Technology Initiative (STI), DNRE staff developed a submission that refocused on investment in strategic science programs in a way that was consistent with the priorities of the STI. A document was produced that reflected a reconfiguration of elements contained within the GHI, as well as the ARV proposal. The policy narrative within this document begins with a statement that ‘[r]evitalising rural and regional Victoria is one of the major policy challenges for Victoria's new Government' (State Government of Victoria, 2000:2). To address this challenge, the document commits the Labor government to a number of interrelated programs that will strive to achieve sustained growth of food and agricultural exports, ecological sustainable development, and engagement of country people and country communities. Two programs are proposed. The first program aims to increase the government's investment in research and development in order to develop long term technological solutions that will improve productivity and facilitate environmental sustainability in Victorian farming. The second program contains a number of strategies that aim to realise the potential of Victorian domestic and export markets (ibid.:8-11). The stated aim is to create economic, environmental and social benefits for rural and regional Victoria.

This policy narrative contains some of the post-productivist discourse that characterised the ARV proposal. The triple bottom line agenda sets the scene for the document, and the overall goal is to revitalise rural and regional Victoria. One of the three major policies emphasises the importance of engaging country people and country communities. However, the programs that
are proposed within this initiative are constructed within the linear growth focused productivist transfer of technology discourse as they aim to develop '... powerful new technologies vital to Victoria's Future' (ibid.:4), and to realise '... the potential of domestic and export markets' (ibid.:8). Furthermore, the main characters in this STI narrative are scientists, government and land managers. While the introduction contains a subheading 'Engaging country people and country communities', this section actually outlines the government's aim to invest in research to boost growth in the food and agriculture sector, and contains no further reference to strategies that may build community capacity (ibid.:3). The post-productivist discourse that characterised the ARV document is significantly watered down, and is subsumed under an overall productivity and growth focused narrative.

Nevertheless, ongoing funding for the suite of projects conceived within the GHI framework was secured. However, the funding for the DSC project was significantly reduced, and the way in which the project was constructed within this initiative did not reflect the ambitions for the project held by those most closely involved in its development. Nor was the DSC project ever considered an integral part of the STI. Quite the contrary, as is evident from the lack of reference to the DSC project in some of the STI documentation (ibid.).

3.2.4 Narrative policy making

The analysis of the project documentation highlights that a number of quite divergent policy and project narratives emerged in the project design phase. These multiple narratives are characterised by productivist and post-productivist discourse and reflect the shift in policy from a focus on productivity and growth to a triple bottom line agenda that incorporates environmental, economic and social objectives. Project developers used these divergent narratives simultaneously as they constructed the project. In reflecting on this, one policy officer within the organisation said that the policy making process is one of storytelling, where policy officers construct those stories that are likely to authorise existing activities and priorities of staff. In other words, this kind of policy making is like Weick's (1995) sensemaking process, where stories are constructed in a way that makes sense of existing activities and priorities in terms of policy discourse that is likely to validate and fund a project or activity and enhance the identities of staff that are involved in them.
Overall, the DSC project came about as a small group of people within DNRE pursued emerging ideas about community-based approaches to land management. In order to advance these ideas, staff constructed them in terms of prevailing policy narratives. As the 'Growing Victoria Together' statement which captured the new government's policy direction towards a triple bottom line agenda had not yet been fully articulated, advocates for the project needed to locate it in productivist terms to ensure project funding. At the same time, however, the ideas contained within the post-productivist ARV project narrative continued to inform thinking about project design and implementation.

In the remainder of this chapter I discuss how the project was further developed within the purchasing arm of the organisation, before it was handed over to the provider side of the organisation for implementation. I discuss how the tension between productivist and post-productivist project narratives continued to characterise project development.

### 3.3 Developing the work plan and project proposal

Once ongoing funding was secured, the steering committee for the project decided to contract out a literature review on social capability in rural Victoria. The brief for this literature review invited submissions from external consultants to provide information about the social capability requirements of various industry and community sectors in Victoria and outline relevant change methodologies and policy mechanisms to enhance social capability in Victoria. This review was to provide the steering committee with the basis to develop a strategy that would underpin the project.

My supervisor's association with the project began when he became part of a group that made a submission to the steering committee. The submission drew heavily on principles of co-learning and stakeholder participation and challenged the way in which the brief for the literature review was constructed. It suggested that what was required was not a 'hands-off' desktop study, or conventional research process, but a participative action research process that involves stakeholders in the learning process. This submission posits that '[w]ithout this, the recommendations will be external directives about what should be, rather than a co-designing of desirable and possible options' (Submission). The group's submission manifested a participatory approach to rural development that aimed to integrate purchasers and providers within the organisation into a learning system in order to address the key requirements of the brief.
While this submission did strike a chord with steering committee members, and ongoing interaction with those who submitted it was facilitated, it was unsuccessful in obtaining the contract for the literature review. Steering committee members argued that the ideas contained within this submission would be particularly valuable in the implementation phase of the project. Nevertheless, at this point in time the committee chose to continue on the more conventional path of project development that was consistent with the principles of the purchaser-provider model that separates project development from implementation. A 'hands-off' literature review was conducted by the Monash Regional Australia Project (MRAP) group and completed in 2001 (Cocklin et al., 2001).

In the remainder of this section I explore the recommendations made by the MRAP group and highlight how these contributed to the development of a strategy and methodology for the DSC project. I discuss Engeström's model of expansive learning (Engeström and Miettinen, 1999, Engeström, 1999, Engeström, 2000), as well as Engel and Salomon's (1997) 'Rapid Appraisal of Agricultural Knowledge Systems' (RAAKS) process which was eventually selected to provide the basis for the DSC approach to building social capability.

### 3.3.1 The Monash Regional Australia Project strategy

The MRAP report was delivered to the DSC steering group in March 2001. It proposed that Engeström's model of expansive learning provides a suitable framework to develop a social capability building strategy for DNRE (Cocklin et al., 2001). Engeström's model of expansive learning focuses on human activity systems which are seen as historically evolving collective activity systems. These systems are dynamic as internal contradictions drive a process where people collectively expand their learning about their activities and actions (Engeström, 2000:968). Engeström's model is based on activity theory and provides a framework for analysing work situations in a way that transcends the dichotomy between mental (theory) and material observation and intervention (practice) (ibid.:960). Activity theory challenges the positivist notion that knowledge exists outside and prior to action. Instead, Engeström and Miettinen argue that knowledge is practical and emerges from the structures and activities of a human activity system (1999:6).
Engeström's cycle of expansive learning aims to focus participants on the contradictions about an 'object' that exist within the activity system. A collaborative analysis of such contradictions creates a shared vision that involves an expansive solution of the contradictions. For instance, in one example provided by Engeström (a hospital setting) the object toward which the system was initially oriented was the patient constructed as someone with a singular illness episode or care visit. Through questioning and analysis this changed to an orientation towards patients as having long term trajectories and multiple illnesses and care visits. This then led to an expansion of the way in which the system was oriented to the object, which changed the activity for all parties in the human activity system (Engeström, 2000:966-967). In other words, Engeström's model of expansive learning facilitated a process of 'local discursive construction' (Engeström, 1999:385) of a shared object as it focused on the resolution of contradictions that existed about this object within a human activity system.

Engeström's cycle of expansive learning comprises seven key steps (Engeström, 2000:970):

- questioning of the accepted practice
- analysing the situation
- modelling the new solution
- examining the model
- implementing the model
- reflection on and evaluation of the new model
- consolidation of the new model into a stable form of practice.

Cocklin et al. (2001) suggest that Engeström provides a practical model that has been successful in achieving collaborative solutions in complex situations where antagonism was present. The MRAP group therefore based its proposed strategy to enhance social capability in the agricultural change context on Engeström's model.

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However, there is very little guidance in the MRAP report on how Engeström's model could be applied by the DSC project. For example, the report does not explore what the 'objects' for expansive learning may be within the food and agriculture sectors. Moreover, it is difficult to see how the strategy proposed by the MRAP group is derived from Engeström's model of expansive learning. The MRAP strategy comprises the following steps that are to be implemented in a case study that is based on a particular locality (ibid.:141-143):

- the development of a systematic profile of the community of interest. This is to include socio-demographic profiles, environmental considerations, institutional features, as well as an analysis of existing social capability
- the identification and engagement of stakeholders in an inclusive and participatory fashion
- the identification of priorities for the locality, which is to include setting goals for social, ecological and economic sustainability and the development of initiatives to achieve these goals
- the development and implementation of interventions to support social capability
- assessment of social capability outcomes in terms of an indicator framework.

This strategy does not contain an explicit method to question and analyse contradictions about the construction of an accepted practice or object. In fact, the strategy is not focused on an object, activity or practice, but on the identification and construction of the system itself.

Furthermore, the strategy proposes that participants work collaboratively to set goals. Engeström's model on the other hand represents a fundamental shift away from the notion of goal setting and planning. Engeström refers to Weick when he argues that:

> Objects are not to be confused with goals … Goals do not explain the emergence of actions; goals and plans are formulated and revised concurrently as one acts, and they are commonly explicated clearly only retrospectively (1999:381).
Apart from its tenuous link with Engeström's activity theory, the proposed strategy is problematic in that it implicitly constructs the change process and community in positivist terms. The following section explores this in greater detail.

3.3.2 A positivist approach to social capability building

The MRAP strategy proposes that DNRE starts by mapping out the essential features of a particular community. The first stage involves '… a systematic profile of the community of interest, focusing on socio-demographics, characteristics of the agricultural systems, environmental considerations, institutional features, and an analysis of existing social capability' (Cocklin et al., 2001:141, emphasis original). On the basis of this stakeholders can be engaged, and priorities for the locality identified, before interventions are developed and implemented. This process is to be informed by continuous monitoring and evaluation through the development of an indicator framework.

The approach implies that 'community' is a reality that merely needs to be identified and described. The development of a systematic profile of targeted communities prior to the engagement process is about mapping out such a community in a rational and scientific way. The development of an indicator framework that allows for assessment of outcomes similarly reflects the rational basis for decision making in relation to community development. It implicitly assumes that the context of change is fully knowable, can be mapped out and managed. It reflects a positivist epistemology that translates into a linear change management program that attempts to more fully understand the community in order to plan appropriate strategies to build social capability.

The rationality of government that underpins such community appraisals and assessments of social capability is likely to construct community in a way that privileges particular aspects, assets and capacities of communities over others (Herbert-Cheshire, 2000:206, Higgins and Lockie, 2002:426). There is a risk that '… social capability comes to be defined narrowly as an inseparable part of an economically and ecologically rational approach to management …' (Higgins and Lockie, 2002:426), where less measurable aspects are excluded. In other words, the community is constructed in such a way that privileges the perspective of agency staff and social scientists. Such appraisals and assessments shape the way in which people in the
community view themselves. They are not merely descriptive of an existing reality, but actively construct it (*ibid.*:425-426).

Critics arguing from a governmentality perspective inspired by the work of Foucault (1991), suggest that such a community appraisal based on scientific and rational knowledge becomes a 'technology of government' that 'yokes' (Dean, 1996:61) the behaviour of people in such communities to conform with the environmentally rational and socially responsible behaviour that is implicitly advocated and validated in the particular representation constructed about a rural community (Dean, 1996, Higgins and Lockie, 2002:426). It is argued that such a mapping out of a rural community actually constructs community in a way that renders it amenable to government intervention in order to serve the ambitions of prevailing 'advanced liberal' governments (Herbert-Cheshire, 2000:203, Rose, 1996:331). This becomes a process where a platform for change is constructed in such a way that the community is assimilated into processes of government. Such 'government through community' (Rose, 1996:332) involves a deconstruction of the dichotomy between government and community that is achieved through a process of assimilation where communities are 'governmentalized' (*ibid.*:353) as they are made visible and calculable by reports, investigations and statistical enquiries conducted from a government vantage point. A platform that is constructed in this way assimilates diversity and thus erases difference.

The approach that is proposed by the MRAP group is based on a weak definition of social capability, which is defined in the opening statement of the executive summary as the '… ability to *act* to manage change, as well as the resources (capacity) available to achieve that change' (Cocklin *et al.*, 2001:i, emphasis original). If you deleted the word 'social' from 'social capability' this statement would still hold. This is a watering down of the definition of social capability that is contained elsewhere in the report that emphasises the social relationships in which social capability 'inhers' (*ibid.*:4, emphasis added). This latter definition hints at the contextual embeddedness (cf. Flora, 1998:483, Flora *et al.*, 1997:626, Woolcock, 1998) that demands a narrative of change that explicitly recognises the emergent nature of the change process and the community itself, the constructivist approach that this demands and the implications for attempts to control or manage this process. As Shaw (2002) argues, the implication of this embeddedness is that there is no solid ground with fixed reference points that would allow us to map and manage change:
No single individual or group has control over the forms that emerge, yet between us we are continuously shaping and being shaped by those forms from within the flow of our responsive relating (ibid.:11).

Therefore, the post-productivist approach to rural development that social capability building needs to facilitate in order to address issues of sustainability is about charting:

… a course through the multiple spaces and territories that constitute the rural terrain … Thus there is no one unique and privileged vantage point, no one centre from which the rural can be captured and assessed. Rather, we must accept that … studies of the rural will be characterized by partial, incomplete and contingent views of increasingly complex ruralities (Murdoch and Pratt, 1997:57).

The implication of this is that government's knowledge and perspective on the issues at stake can only ever be a partial and contingent view. Hence, to deal with the issues that prevail in the natural resource management context, government needs to co-operate with other stakeholders in a way that deconstructs the dichotomy between it and other stakeholders and emphasises their interdependency. Such a deconstruction can only be empowering for other stakeholders if achieved without the kind of assimilation process described above. A space needs to be created and maintained in a way that facilitates the construction of community and change through diverse knowledge frames and practices by multiple and diverse participants in the rural development process. I return to the way in which such inclusive platforms for change are constructed in Chapter 6. In the meantime, I argue that the MRAP strategy was unlikely to construct such an inclusive platform for change. Despite its reference to Engeström's constructivist model of expansive learning, the strategy reflects a positivist epistemology that constructs the change process in linear terms where government is the locus of control for the change process.

### 3.3.3 Discontinuity in project development

The above critique of the MRAP strategy is one that derives from my analysis. As a social researcher I engaged with the theories through which the strategy was constructed and critiqued them. Those responsible for project development did not engage with the theoretical framework that underpinned the MRAP strategy. Instead they engaged with the strategy in terms of the key steps outlined in Section 3.3.1. From these steps the move towards the adoption of another approach - the RAAKS process developed by Engel and Salomon (1997) - may not have seemed significant. Members of the steering committee had become familiar with RAAKS as they had maintained links with the consulting group that had proposed to develop and
implement this method as part of its failed submission to conduct the literature review. RAAKS was based on soft systems theory developed by Checkland (1981, 1990), and one of the key members of the DSC steering group was familiar with this body of theory and the way in which it had been applied in the agricultural context in Australia (Bawden, 1990, Bawden, 1992, Bawden, 1997, Bawden et al., 2000). She found the RAAKS process therefore much easier to understand than Engeström's model of expansive learning. A decision was made to base the DSC project methodology on the principles of RAAKS. It was argued that RAAKS was more relevant to the project than Engeström's model as it had been specifically designed to deal with issues in agriculture. Furthermore, one of the advisors on the steering committee, my supervisor, had experience with RAAKS and was willing to contribute to the project through the supervision of my PhD research. Finally, as the RAAKS process met the criteria on which the MRAP strategy was based, its use was considered appropriate (Department of Primary Industries, forthcoming). These criteria required that the selected approach was interactive and participatory, built links with other sectors, involved monitoring and evaluation as part of the development of the evolving strategy and was adequately resourced to meet the education and training needs of staff, farmers and natural resources managers (Cocklin et al., 2001:139). The project proposal that was developed combined the principles of RAAKS with the key steps identified in the MRAP strategy.

The decision to implement RAAKS rather than Engeström's model was not made with reference to the different theoretical models they represent and while the RAAKS process was integrated into the strategic framework provided by the MRAP report, its principles were quite different from Engeström's activity theory that supposedly underpinned the MRAP strategy. The decision to implement RAAKS represents a discontinuity between the literature review on the one hand and project implementation on the other. It highlights the difficulty of transferring knowledge, in this case about social capability building, from one group to another. The steering group did not 'own' the recommendations made by the MRAP group. These recommendations were indeed 'external directives' (Submission), some of which were adopted and adapted, while others were largely ignored. Subsequent sensemaking in the implementation phase of the project hardly referred to the literature review.

This contracting out of the literature review was consistent with the 'New Public Management' tools and practices that prevailed within government. It has been argued that one of the consequences of this kind of contracting out is a loss of intellectual capacity within public agencies (Hess and Adams, 2002:69). Furthermore, this outsourcing is consistent with a view of
knowledge as an entity that is easily transferable and marketable. It assumes that knowledge can be developed by one group and sold to another. In other words, the consultants who developed the literature review could sell their acquired knowledge and transfer it to the steering committee, in the same way as the steering committee (purchaser) could subsequently develop knowledge about the project and transfer it to the providers who were to implement it.

The positivist 'New Public Management' principles of public administration are dominated by rational modes of thinking, where value-free knowledge and science are believed to provide the impetus for change and progress. In the change management literature this mode of thinking translates into an assumption that through analysis the environment in which organisations and people act can be fully understood (Gharajedaghi and Ackoff, 1994:26). It is further assumed that this understanding provides a sound basis for planning subsequent actions. A linear conceptualisation of the change process prevails, as knowledge is constructed as preceding and informing action.

Co-operative approaches to rural development have significant implications for the way in which we think about knowledge. Instead of a concept of knowledge as an entity that can be owned and transferred, co-operative approaches demand a constructivist understanding of knowledge that recognises how the notion of rational knowledge is contested by diverse knowledge claims that arise from the interaction with the broader community of stakeholders in the rural development process. It is argued that knowledge is socially constructed through this dialogical process between stakeholders that include but not exclusively comprise policy makers. Within both the public administration as well as the agricultural extension literature, the positivist notion of knowledge and change has been challenged. It is argued that a constructivist understanding of knowledge:

… allows the possibility of its [sic] being developed during the policy and management processes to which public administrators are only one party. The other parties to such an approach are the various communities of interest and locality relevant to particular policy areas (Hess and Adams, 2002:70).

The tendering out of the literature review on social capability was based on a positivist notion of knowledge. It pre-empted and undermined the possibility of a process of co-construction of knowledge that a co-operative approach demands. Epistemological differences then were at the core of this outsourcing process. The constructivist orientation of the project was subverted by the positivist public administration instruments and practices that prevailed in DNRE. Despite the constructivist orientation of the people involved in developing the DSC project, positivist
theories of public administration were embedded or inscribed in what Dean refers to as 'regimes of practice' within government, which 'yoke' the conduct and performance of staff (1996:61).

3.3.4 The Rapid Appraisal of Agricultural Knowledge Systems process

The RAAKS process, which was selected to provide the basis for the DSC project, was developed by Engel and Salomon (1997) following extensive research into agricultural innovation processes. As a result of this research, Engel challenged the linear conceptualisation of innovation where it is driven by scientific and technological development. He argues that innovation is a social process that '... emerges from diffuse social interactions among many different actors' (1997:11). According to Engel, agricultural actors achieve innovation through networking with other actors. Through the interplay between various actors, the influence of information and market forces is mediated (ibid.:129). Knowledge then is embedded in social relationships, rather than an entity that can be owned and transferred. Engel's conceptualisation of innovation is a constructivist one:

... we ought to take agricultural innovation as a complex, social process - one occurring among a variety of stakeholders - rather than as a matter of transfer or dissemination of technologies, knowledge or ideas (ibid.:125).

He goes on to suggest that agricultural innovation can be facilitated by improving or enhancing the networks among the diversity of actors. This could involve improving existing networks, as well as a complete reconfiguration of networks. For example, he argues that in the agricultural context the prevailing configuration of networks is unable to deal with the challenge of sustainable development. According to Engel, issues of sustainability can only be addressed through a reconfiguration of the networks around agricultural innovation by engaging with new and different institutions and 'actors' (ibid.:10).

The RAAKS methodology places questions about the quality of networks and the choice and diversity of participants in a network at the core of the change process. In fact, as the RAAKS process specifically aims to improve the 'social organisation of innovation' it is designed to develop the capability of a social collectivity to act to manage change, in other words, to develop social capability. Importantly, it is this emphasis on the social organisation of innovation that distinguishes the RAAKS process from other forms of participatory action research methodologies. RAAKS is suited to situations where effective network configurations
are not in place and where there is no platform from which a participatory action research methodology can be implemented. RAAKS is about constructing such a platform in the research process. As Engel (ibid.:159) argues '[t]he big difference between this and more traditional SSM [Soft Systems Methodologies] and PAR [Participatory Action Research] approaches is that it will have to be suited to dealing with problematical situations in which no joint management structure is typically available.' RAAKS then offers a participatory action research methodology that is specifically suited to the aim of social capability building and the construction of a post-productivist platform for change.

In constructing the RAAKS methodology, Engel was inspired by Checkland's (1981, 1990) soft systems methodology as this methodology is consistent with his conceptualisation of the innovation processes as emergent from social interaction between a diversity of people (Engel, 1997:162). Engel set out to develop a participatory action research methodology that would facilitate networking in a way that captures the multiple rationalities that characterise the innovation process in agriculture.

The aims of the RAAKS process are (ibid.:165):

- to identify opportunities to improve the social organisation of innovation
- to create awareness among participants in the process about the constraints and opportunities to improve their practices
- to identify other actors who could assist to enhance these opportunities or address the constraints.

The RAAKS process is usually implemented in three phases: During phase A participants aim to define the problem and the relevant actors or system. In phase B constraints and opportunities are analysed, while participants plan concrete actions to make improvements in phase C. The process is operationalised through the establishment of a RAAKS team that usually comprises a small group of people including some who are familiar with contextual issues, as well as facilitators who are familiar with RAAKS. This team co-ordinates the research process and ensures participation of other stakeholders throughout the process by means of regular workshops and the establishment of a steering committee (ibid.:166).
A resource box has been developed to support the RAAKS process (Engel and Salomon, 1997). This contains Engel's book on the social organisation of innovation in which he discusses the theoretical framework and extensive field research that provide the foundation for the RAAKS process. It also contains a manual with a brief reiteration of the theoretical underpinnings of the process, advice on how to implement the RAAKS process and a set of cards representing windows and tools that take the user through the steps of the RAAKS process. A comprehensive list of RAAKS windows and tools is included in Appendix 2.

### 3.3.5 The work plan and the project proposal

Following the decision to implement and develop a RAAKS-based methodology, the DSC project design was fine-tuned into an informal and internal work plan diagram and a formal project proposal. The project narratives that are contained within these documents locate the project differently. In the meetings to construct the work plan diagram the post-productivist ARV narrative is invoked, while the project proposal is characterised by the kind of productivist discourse that set the tone for the GHI and STI proposals.

The narrative that is invoked in the discussions and documentation relating to the work plan begins with an original state of affairs where strategy development in DNRE occurs in a top-down fashion. Research into issues and solutions is usually done prior to the implementation process that engages stakeholders in the change process. The plot in this narrative is about the DSC project challenging that approach through the implementation of the RAAKS process. The project aims to engage stakeholders in the entire change process, including problem identification, solution development and implementation. This thinking is captured in a document that describes the ideas that underpin the work plan diagram that was developed to guide the work in the project. This document states that the:

…NRE focus is consistent with approaches in the past where strategic direction has been generated internally. The RAAKS process complements this conventional strategic development by using a formal method for introducing the input of other stakeholders who are actively engaged in triple bottom line issues relating to landscape management' (Project notes - Work plan ideas)

The suggested approach is based on recognition of the contextual embeddedness of all participants in the change process and this includes government. While the project aims to facilitate organisational change towards co-operative approaches to land management, this
change is considered as emergent from the interaction with other stakeholders as part of the RAAKS process. This recognises that the interdependencies created by stakeholders in the change process promote new ways of doing things in the broader community as well as the agency itself. In fact, the process suggested in the work plan is designed around this mutual change process. As the notes state, 'modification of existing projects will occur as part of the case study work'. This project narrative then implicitly deconstructs the linear and dichotomous relationship between government and other stakeholders and integrates community and organisational development.

The lead characters in this plot are not just extension professionals or land managers but a broad range of stakeholders for whom this narrative creates a space to contribute to the change process. DNRE is no longer the expert or change agent, but part of a larger 'conglomerate of change agents' (Project notes - Work plan ideas). Furthermore, the potential pilot projects cited in this document are those that contribute to the triple bottom line agenda, and hence are broader in focus than productivity and economic growth. However, while this narrative is constructed in post-productivist discourse, it was at this time that a strategic decision was made to set the boundaries for the project to focus only on the agriculture sector, because the project was supported within the Agriculture Division and struggled to create a mandate to operate beyond the focus of this division.

Furthermore, while this narrative captured the thinking of the people involved in developing the project, it was simultaneously subverted through competing narratives that constructed the project in productivist terms. The previous section discussed the way in which public administration processes based on market principles subverted the DSC project. Another characteristic of the 'New Public Management' approach that prevailed within DNRE was an increased emphasis on the principles of corporate management that are also derived from the private sector (Davis and Rhodes, 2000, Hess and Adams, 2002). These principles were manifest in the project management framework that structured most activities within DNRE (Department of Natural Resources and Environment. Agriculture Division, 2001). Project management can be defined as the process by which activities are planned, organised, co-ordinated and controlled. It is often perceived as a neutral and objective way of structuring activities within an organisation. However, Hodgson argues that project management is not a neutral process, but acts as a control mechanism. According to Hodgson (2002), project management is a process that emphasises comprehensive planning in a way that accentuates the quantitative and calculable basis of projects. Hodgson's analysis of project management is
constructed in Foucauldian terms and accordingly he argues that project management practices shape the conduct of staff in ways that serve prevailing power dynamics. Furthermore, project management is consistent with the linear conceptualisation of the change process that characterises the positivist New Public Management approach that separates knowledge from action and purchasers from providers. This *modus operandi* is difficult to reconcile with a post-productivist co-operative approach to rural development that is based on a constructivist epistemology that challenges the linear notion of change and the idea that knowledge precedes action.

The development of a project proposal was a standard requirement within DNRE's operating environment. So when the literature review was finished, the people involved in scoping the project developed the DSC project proposal, which outlined the outputs of the project for the providers (the DSC project team) to deliver in the implementation phase. The project proposal locates the project within the project management framework. This framework was taken for granted as the way of organizing the project, even though there were many instances where team members and other stakeholders explicitly recognised that project management procedures clashed with the objectives of the project. The people involved in developing the DSC project discussed the contradictions between the emergent nature of the project on the one hand and the demands of the project management framework on the other. The constructivist conceptualisation of the project created difficulties in terms of developing a project description that needed to include 'SMART (Specific, Measurable, Accountable, Realistic, Timebound) outputs/deliverables'. In constructing the project proposal there was explicit recognition of the fact that a different story about the project was created to validate it within the organisation that was not necessarily consistent with other ways of thinking about the DSC project.

The narrative about the project that is contained in the proposal begins with a discussion of current extension programs. These are considered to have had only limited success in engaging land managers in extension programs that aim to facilitate adoption of sustainable management technologies. It is argued that existing extension programs were developed using knowledge and expertise that resides within DNRE and its partners. To achieve significant change, new knowledge must be accessed, and therefore collaboration with new groups and individuals is to be fostered in order to develop social capability. The plot of this narrative is about the project developing new extension methods that facilitate greater levels of participation in extension and higher rates of adoption of new technologies amongst farmers. In fact, the project proposal states that the deliverables for the DSC project will be ‘… at least 3 new and innovative change
management products (with broad stakeholder commitment to their implementation and success). These change management products are to be based on social and market research that involves extensive participation of stakeholders. As a result of the project, productivity improvements will be made as the project will facilitate increased rates of adoption of sustainable management technologies by broadening the scope of stakeholder interaction in change management activities.

As mentioned in Chapter 2, the beginning and end of a narrative provide the context for the plot, dictate the site and boundaries of action and identify the main characters. In the case of the project proposal these were not constructed around the concept of social capability. What is significant about the project proposal is that it contains no definition of social capability. It does implicitly define social capability as fostering collaboration with a diversity of groups and individuals in order to access new knowledge and expertise that does not reside within DNRE and its current partners. However, this implicit reference to social capability is made in a productivist context as the introduction and conclusion are framed in productivist terms. The context is defined as the limited success of engaging land managers in extension programs that aim to facilitate the adoption of sustainable management technologies. The conclusion is framed in terms of productivity improvements that in turn lead to economic growth.

The project proposal reflects the shift towards a post-productivist rural development process only to the extent that it explicitly recognises the need to broaden the stakeholder base in agriculture and that it suggests the use of the constructivist RAAKS method. However, this post-productivist discourse is subsumed under a predominantly productivist narrative that conceives of the main actors of change as extension agents and land managers. The project proposal constrains participation by other stakeholders as the change process is driven by pre-defined outcomes, processes and timelines. The project proposal constructs the project in terms that marginalise other participants from the change process, as it places internal organisational change processes at the core of the project, while broader systemic change becomes a secondary focus. Community engagement can only occur within parameters set by government, which is likely to lead to the kind of engagement that assimilates community into government regimes of practice (Dean, 1996), or government through community (Rose, 1996:332-336). Furthermore, in the project proposal social and environmental objectives are subsumed under the broader objective of improving productivity and economic growth. Hence, it assimilates post-productivist discourse into a predominantly productivist narrative.
The strategy for developing social capability that is proposed in the project proposal comprises three steps (Department of Natural Resources and Environment, 2001:3):

- As a first step in the project development phase, stakeholders are to be identified. These stakeholders are very loosely defined as '… people with an interest in natural resource management as it relates to agriculture …' (ibid.:3). Once identified, stakeholders will be interviewed in order to canvass their views and understanding of the meaning and consequences of the 'triple bottom line' agenda in natural resource management.

- In a next step, stakeholders are to be involved in synthesising the information collected during the interviews. In a series of workshops the issues raised in step one are to be discussed so that participants would reach a common understanding of what can be achieved in natural resource management. The implications for change management activities are to be analysed, and from this negotiation process priorities for change will emerge. This is to lead to agreement about action for the implementation phase.

- In a third phase stakeholders will be involved in identifying and implementing pilot activities in new or existing extension programs. Extensive learning from these pilots through ongoing evaluation activities will be shared with all stakeholders in order to modify existing extension projects.

As is consistent with the MRAP report, the strategy outlined in the project proposal begins with the identification of stakeholders in a selected community or locality. Once these stakeholders are engaged, priorities and issues for that locality can be identified and addressed. Convergence within the project is to occur around the locality or community of interest. Building social capability is about bringing this system together, and from the negotiation process that eventuates agreement about action should emerge.

The approach implies that engagement with the project occurs because of identification with the system, community or network per se. It is this that ensures coherence and continuity within a platform for change. The assumption is that if you bring people together, then that creates capability that will address emergent issues. This is consistent with the view that social capability is a resource ‘… that can be combined with human and physical capital to produce preferred outcomes' (Cocklin et al. 2001:4). Social capability is constructed in the same way that capital and natural resources have been, which is that they exist prior to the situation in
which they are applied or combined. This implicit conceptualisation of social capability is consistent with productivist discourse that is based on a realist ontology and positivist epistemology that constructs change as a linear process. It assumes that social relationships or communities exist prior to the ongoing dynamic that produces and reproduces them. In governments' approaches to community capacity building this positivist approach leads to the kind of strategy outlined in the MRAP report, discussed in Sections 3.3.1 and 3.3.2.

This is also the point where the strategy outlined in the project proposal diverges from the work plan which contains a different strategy for the project that is more consistent with the RAAKS process as it was developed by Engel and Salomon (1997). According to their account, the RAAKS process does not begin with the definition of a system. Rather, its starting point is a problem statement identified by a small group of people. The purpose of the RAAKS process is to redefine this problem statement through interaction with the broader system of stakeholders implicated in the problem statement. Salomon and Engel (1997:31-32) propose an iterative process of problem definition and stakeholder identification. Convergence within the project, according to the RAAKS kit, occurs around a problem situation that is defined and redefined through interaction with an emerging system of stakeholders. The RAAKS approach then recognises the contextual embeddedness of all participants in the change process, as change and innovation are constructed as emergent from the interaction between participants, as opposed to planned and extended by government to others.

The implications for the way in which convergence is facilitated within change programs and the implications this has in terms of inclusiveness and participation will be explored further in Chapter 6.

3.4 Divergent project narratives

What emerges from this chapter is that social capability is constructed by both positivist as well as constructivist discourse within the context of the DSC project. Positivist discourse about social capability is characterised by a linear conceptualisation of the change process, which constructs community and social capability as though they exist prior to the dynamic that produces them. This translates into linear social capability building programs where government manages the change process in a way that primarily serves its own interests. This positivist discourse about social capability is manifest in the project narrative that emphasises the
development of new extension methods as the prime purpose of the DSC project, where organisational development is separate from and prior to community capacity building.

Constructivist discourse about social capability reflects the emergent nature of change and the contextual embeddedness of all participants in the change process. This translates into a change program that deconstructs the dichotomy between government and other stakeholders. For the DSC project this means it requires a process such as RAAKS where organisational and community capacity emerge simultaneously from the interaction between the participants in the project collapsing the distinction between organisational development and community development. This constructivist discourse on social capability characterises the work plan and is consistent with the RAAKS process as it was conceived by Engel.

The divergent project narratives that consequently emerged in the context of the DSC project are outlined in Table 3.1. They operate within the project simultaneously, and are the source of significant ambiguity throughout the development and implementation of the process, as is discussed in Chapters 4 and 5.

<table>
<thead>
<tr>
<th><strong>Positivist project narrative</strong></th>
<th><strong>Constructivist project narrative</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear concept of change</td>
<td>Change as emergent, discontinuous and multi-directional</td>
</tr>
<tr>
<td>Productivist</td>
<td>Post-productivist</td>
</tr>
<tr>
<td>Social capability as a resource</td>
<td>Social capability as embedded in relationships</td>
</tr>
<tr>
<td>Government acts as external manager of the change process</td>
<td>Government acts as a participant in the change process.</td>
</tr>
<tr>
<td>Platform for change: extension practice, service provision</td>
<td>Platform for change: the broader community that incorporates government, industry, and other stakeholders</td>
</tr>
<tr>
<td>Lead characters: policy makers, change agents, service providers, extension practitioners</td>
<td>Lead characters: people, groups and organisations with an interest in natural resource management as it relates to agriculture</td>
</tr>
<tr>
<td>Organizational capability to be developed prior to community capacity building.</td>
<td>Organizational and community capacity as emergent from interaction between stakeholders.</td>
</tr>
</tbody>
</table>

**Table 3.1 Multiple project narratives**

### 3.5 Platforms and government

This chapter has highlighted how the prevailing positivist tools and instruments of public administration, such as those derived from the project management framework and the purchaser-provider model, subverted the post-productivist underpinnings of the DSC project.
Within the context of the purchaser-provider model in DNRE, participatory approaches are implemented within the provider or service delivery side of the organisation. What emerges from this chapter is that this model enforces a dichotomy between policy and implementation and between theory and practice, which does not create a space for the co-construction of knowledge that a post-productivist platform for change demands.

The obvious need for alignment of public administration practices, institutional arrangements, capacity and culture with the emerging emphasis on community engagement is increasingly acknowledged (Cocklin et al., 2001:vi-vii, Edwards, 2002, Hess and Adams, 2002, Maarleveld, 2000, Macadam et al., 2003:3). Authors suggest that public servants are dealing with multiple and competing knowledge frames that are brought to bear on issues as a diversity of stakeholders becomes involved in the rural development process. As a result public servants experience increasing complexity in their jobs as policy advice is now contested and developed in the public arena. They require new skills such as those of conflict resolution, negotiation, communication and knowledge management (Edwards, 2002, Hess and Adams, 2002, Maarleveld, 2000). Overall, the emerging interactive approach of government demands significant changes of existing bureaucratic processes and cultures. The findings presented in this chapter support the view that existing structures within government struggle to support the shift towards collaborative landscape management (cf. Edwards, 2002, Hess and Adams, 2002) and that change is required.

The question is how to conceptualise that change process and the differences and ambiguities that currently exist. Often these are couched in terms of the need to change organisational culture, where culture is understood in terms of the customs, traditions and prevailing belief systems and values that exist in an organisation (Macadam et al., 2003:23). Within DNRE there had been a push towards an integrated form of government that would be able to deliver across the triple bottom line. The 'One NRE' project was implemented to facilitate organisational change and integration between the diverse divisions within DNRE (Department of Natural Resources and Environment, Undated).

DNRE was often referred to as consisting of silos or insular divisions that focused on a particular industry or activity. The 'silo' mentality was considered to impede the development of a more collaborative, multi-disciplinary approach to land management. This organisational change context could be explained with reference to Lillrank and Kostama's (2001) concept of product/process (sub-)cultures that exist within silos of the organisation (cf. Boxelaar et al.,
They argue that change management and innovation processes need to take account of these sub-cultures in order to be successful. The notion of sub-cultures or silos within an organisation implies there are distinguishable sub-cultures that act as wholes within their own spheres and groups of people. This notion of culture being located within groups of people with their own customs, traditions, belief systems and values, is unable to account for the fragmented nature of organisational culture that existed within the DSC project. The analysis of the policy and project narratives that prevailed in the context of the DSC project indicates that competing narratives operated within the same space, within groups, and even within people, rather than across groups. Culture is embedded in practices and structures, which are not ideology or culturally neutral. Consequently, a mere focus on the belief systems, values, customs and traditions within an organisation is problematic, as it fails to bring into view the fragmented, but also pervasive nature of organisational culture.

The silo-perspective on the change context within DNRE considers cultural differences to be primarily vertically organised. More recently, Hess and Adams (2002:71) recognised that community capacity building challenges prevailing organisational cultures in a more pervasive and horizontal way. If we were to follow their argument, the ambiguities in the DSC project must be understood in terms of an overlay of constructivist public administration ideas and practices that emphasise social capital, networks and community partnership over the prevailing 'new public management' practices that derive legitimacy from positivist knowledge frameworks. Hess and Adams (2002:71) suggest that there is a dual shift occurring within government in Australia. On the one hand there is consolidation and expansion of market-based policy approaches that are based on economic rationalist knowledge frames (the 'new public management'), while governments are simultaneously embracing co-operative approaches to public administration.

Hess and Adams' view of the constructivist approach as an overlay represents a rather benign view of the differences and ambiguities. The implication of their paper is that we are in transition from one mode to another, which explains the existence of these multiple and competing approaches to public administration.

Proponents of the governmentality perspective that is inspired by the work of Foucault (1991) take a different view. They argue that the co-operative approach to rural development (or government more broadly) represents a new mode of government, where community is no more than a means of government (Rose, 1996:335). Through the implementation of co-operative
initiatives governments seek to establish rural subjectivities through which government objectives and programs are operationalised and implemented (Herbert-Cheshire, 2000:207, Raco, 2003:76, Rose, 1996). Community capacity building is considered a 'technology of government' which is defined as a means of government that '… colonises a domain, a space, or an institution, to reshape it according to its own requisites, to maintain and intensify the relations of authority it makes possible…' (Dean, 1996:59), in other words these policies '… not only impose conditions, as if from 'outside' or 'above', but influence people's indigenous norms of conduct so that they themselves contribute, not necessarily consciously, to a government's model of social order' (Shore and Wright, 1997:6). This is done by structuring the field of possible action, which shapes the conduct of subjects to align with the objectives of 'advanced liberal' governments (Dean, 1996:61). I have discussed in Section 3.3.3 how the 'regimes of practice' associated with the 'New Public Management' have structured the activities of people in the DSC project in a way that constructed the project in productivist terms. According to Dean, such regimes of practice become technologies of government when:

… we can identify a complex assemblage of diverse elements, held together by heteromorphic relations, concerned with the direction of conduct … Technologies of government are, in this sense, logistical. The powers they constitute are 'infrastructural powers' … (ibid.:64)

These technologies of government:

… constitute domains and objects of knowledge, and produce 'diagrams' of truth about subjects … [and] emerge from and inform the practical rationalities, forms of expertise and know-how that can render our being in the doublet of conduct performance' (ibid.:65).

This governmentality perspective is powerful because it is able to explain how prevailing organisational practices within DNRE continuously reconstructed the DSC project in productivist terms. It can explain why staff involved in the project, despite their post-productivist orientation, enacted productivist project narratives as they located the project within prevailing organisational narratives and practices. In the following chapters it is even more evident how this tension between competing narratives continued to subvert the project and the process of constructing an inclusive platform for change. In these chapters I discuss the tendency within the project to assimilate community stakeholders in the process of government in the way that is suggested above. Nevertheless, the project implementation also provides evidence of community empowerment and engagement that is more reflective of the ideals of community participation expressed by most staff involved in the project. The project represents
a struggle of two competing narratives of social capability where currently the productivist narrative prevails, yet the shift towards community governance has nevertheless created the narrative space to express issues in post-productivist terms. A post-productivist narrative about the project also shapes the conduct of staff and performance in the project. While there may be a tendency to 'governmentalise' community, co-operative approaches also create new domains and territories for other parties to shape and direct policy (cf. Raco, 2003:79).

It has been argued that the way in which various authors apply Foucault's governmentality perspective and post-modern theory more generally, constructs the gaze of government to be so totalising and pervasive that it leaves no space to establish an alternative and emancipatory or empowering agenda (ibid.:77). As Stenson and Watt (1999:200) argue, the gaze of government is not all-pervasive. Through the multiple interactions between government and community prevailing narratives and discourse are continuously reformulated and in this process hybrid logics and practices emerge that to some extent do reflect the local agendas and do offer opportunities to pursue these further. This means, that we must understand the context of change within which community capacity building approaches are implemented in terms of diversity, multiplicity, hybridity and fragmentation in the way that complexity theory suggests (Shaw, 2002). Furthermore, the notion of a central locus of control must be abandoned. What is important is that we:

… begin the task of anatomizing the new relations of power brought into play on this new multiple and fragmented territory of government. In doing so, we should not assume that all is for the worst … We need to engage inventively with the possibilities opened up by the imperatives of activity and the images of plural affinities. The role of such analyses should not be to praise or to blame, but to diagnose, to identify the points of weakness that might be exploited if we are to maximise the capacity of individuals and collectivists to shape the knowledges, contest the authorities and configure the practices that will govern them in the name of their freedoms and commitments (Rose, 1996:353).

In this chapter I have begun to outline and diagnose how the construction of an inclusive post-productivist platform for change within the context of the DSC project is compromised.

3.6 Reflecting on ambiguities

The retrospective analysis of the project development phase presented here highlights significant ambiguities about the project, its aim and its approach to capacity building. This
raises questions about how people involved in the project dealt with these ambiguities at the time. How were they perceived? How were they addressed?

As discussed, the ambiguities were sometimes explicit in the project, for example, when project staff discussed why they needed to develop the project proposal in one way in order to satisfy internal stakeholders, but saw the actual implementation of the project in very different terms. This tension between meeting organisational expectations on the one hand, and pursuing an innovative challenging new approach on the other, was always present in this phase of the project.

However, while this tension often frustrated and concerned project staff, it was also accepted as the way things were, given the innovative and challenging nature of the new approach. What staff did not recognise was the pervasiveness of the productivist organisational culture and the way in which they themselves also enacted productivist narratives of the project.

According to the principles of action research outlined in Chapter 2 it was my role to contribute to the reflexive capacity within the project. However, at this point in the project, as a relative novice to the agriculture sector, I did not feel confident to put forward my views in the way that would have been necessary to be effective. Moreover, I experienced the ambiguities as confusion, where I believed that I just did not grasp the project and the RAAKS process well enough. Furthermore, it was too early in the research process. At this point I had only a vague notion about myself as an action researcher in the project, and had not yet worked out or negotiated with project staff how to shape this role and perform my identity within the project. Hence, my contribution to the project at this early stage was minimal, as my concern was primarily to come to terms with the agricultural context, the organisation, the project, the RAAKS process and my role. In Chapter 7 I reflect in greater detail on my role as researcher and the reflexive capacity in the project. For now, suffice to say that the ambiguities that existed within the project were not adequately addressed, and as is discussed in the following chapters, they continued to plague the project throughout the implementation phase.

3.7 Conclusion

In my analysis of the project development phase I explored convergence within the project and how this affected the diversity of stakeholders. What emerged from the analysis was that
convergence occurred around competing project narratives, and was therefore partial and contested. This created ambiguity about the project, its purpose and approach, which was not addressed in the project development phase.

Overall, the following key points were made in this chapter:

- The DSC project was developed by a small group of people within DNRE who were interested in pursuing emerging ideas about community-based approaches to land management. To advance and fund these ideas, staff needed to construct them in terms of prevailing productivist policy discourse that was not consistent with their aspirations for the project.

- Two competing project narratives emerged, one that constructed the project in productivist discourse that constrains participation of a broad range of stakeholders and one that was constructed in post-productivist discourse that conceives of the change process as emergent from DNRE's interaction with a broad range of stakeholders.

- The tools, processes, practices and structures associated with the New Public Management approach to public administration, such as the purchaser-provider model, the project management framework and the tendering out of services, entail productivist regimes of practice that subverted the post-productivist orientation of people involved in the project and the participatory approach they sought to implement.

- Within the context of the DSC project social capability was constructed through both positivist as well as constructivist discourse. The former constructs community and social capability as though they exist prior to the dynamic that produces them, which is evident in the strategy proposed by the MRAP group. The RAAKS process, which was eventually selected for project implementation, is characterised by constructivist social capability building discourse that recognises the emergent nature of change and the contextual embeddedness of all participants in the change process.

- It is important to address the issues of governance and the ambiguities that result from implementing a co-operative approach within the context of prevailing economic rationalist approaches to public administration. We need to diagnose where the arising tensions compromise the construction of an inclusive platform for change. I have begun
this diagnosis in this chapter. In the following two chapters I discuss project implementation to further explore opportunities and threats to the construction of a post-productivist platform for change that is genuinely inclusive of the diversity of stakeholders in the land management context.
4

Process development

4.1 Introduction

In the previous chapter I discussed how the Developing Social Capability (DSC) project was designed and developed by the purchasing group of the Department of Natural Resources and Environment (DNRE). Once this process was completed, the project was handed over to the DSC project team on the provider side of the organisation. The DSC project team implemented the project in two stages: process development and pilot implementation. In this chapter I discuss the process development stage in which the DSC team implemented and adapted the Rapid Appraisal of Agricultural Knowledge Systems (RAAKS) process to develop their capability building approach to be trialled in subsequent pilot projects:

- In Section 4.2 I discuss the three phases of the RAAKS process implemented by the project, comprising problem definition and stakeholder engagement through interviews (Section 4.2.1); identification of constraints and opportunities to enhance social capability through focus groups (Section 4.2.2); and the planning of pilot projects (Section 4.2.3).

- In Section 4.3 I discuss the sensemaking activities that occurred within the context of the project in order to explore why the project team struggled to make sense of and construct a meaningful project identity during the process development phase.

- In Section 4.4 I discuss the implications of this for the way in which projects deal with ambiguity.

- In Section 4.5 I discuss convergence within the DSC project and the implications for diversity and difference within a platform for change.
4.2 Three phases of process development

The project team that was established once the project had been fully developed comprised nine people including myself. A few of these team members came from the Agriculture Division, while others had been involved in the natural resource management side of the organisation. All team members had experience in group approaches to extension or natural resource management, and all team members were interested in new ways of dealing with the community. However, the orientation of team members differed; some were particularly interested in evaluation, others in facilitation, some had more formal qualifications in participatory approaches to rural resource management, while others had conducted professional development activities to develop their skills in this area. Apart from myself there was one other team member who was a social researcher. However, he left the project during the first year. No one on the team had experience with the RAAKS process. Project implementation was therefore preceded by an induction course that aimed to build the team and familiarise it with the RAAKS process.

The induction course was conducted in two parts over five days, during which we (the team) began the process of developing the 'DSC Approach' based on RAAKS. However, the course turned out to be an unsettling and tentative beginning for the team. Between part one and two of the course I conducted my first round of interviews with team members (see interview schedule included in Appendix 3). These interviews confirmed that people were confused and uncertain about the project, its purpose, the role of team members, the RAAKS process and the level of engagement and support for the project by internal DNRE stakeholders. During the course, the team leader had described the project in terms that emphasised the participative and emergent nature of project construction. This was difficult for team members. While it provided creative opportunities, it also caused uncertainty and ambiguity, which placed significant pressure on a team that was seeking validation in what was perceived to be a largely unsupportive organisational culture. Furthermore, the open-ended nature of the project advocated by the team leader was inconsistent with the organisational expectations for the project that were outlined in the project proposal, which committed the team to the delivery of new extension methods.

The ambiguities about the project discussed in Chapter 3 quickly re-emerged and these were manifest in the way in which the team discussed the purpose of the project. For example, a project mission statement developed during the induction course emphasised how the project
The Developing Social Capability project exists to be a catalyst for a whole-of-community approach to innovation and learning within the agricultural sector (DSC induction course, September 2001).

However, at the same time team members described the project in a way that emphasised its focus on internal change processes:

The purpose of the project is to help the 'NRE community' to learn that meaningful natural resource management is possible if we include the wider community as part of the team (DSC induction course 12-13 September 2001).

One project narrative emerged that described the project in terms of a whole-of-community approach that would lead simultaneously to organisational and community development, while the other narrative represented the project as a linear process that sought to improve organisational capacity prior to the project's involvement with the broader community. These two competing project narratives were used interchangeably during the course without any explicit recognition of the different and competing ways in which these constructed the project and its relationship with the broader community.

### 4.2.1 Problem definition and stakeholder engagement

In the first meeting after the induction course we revisited the project's objectives. We also did a practice run of the RAAKS toolkit in order to familiarise ourselves with phase one of the process. In this exercise we attempted to clarify our purpose and determined that the project's objective was to enhance the capability of people within the agriculture and food sector to generate and respond to change. There was some frustration within the team that there had been too much discussion about the process during the RAAKS course that had only served to complicate matters.

At the next meeting the team wanted to move on from familiarisation with the RAAKS process. There was pressure to start 'doing' something and several team members were keen to begin the interview process. This was to comprise the first step in engaging other stakeholders. First we needed to identify the stakeholders in the project. Once this was done a large number of them would be interviewed in order to ascertain their views on the key issues in relation to social
capability in the food and agriculture sector. Extensive discussions in this and subsequent meetings focused on stakeholder identification and issue definition in preparation for the interviews.

In a brainstorming exercise a very broad range of stakeholders were identified. These included representatives of land managers, Landcare groups, environmental groups, catchment management authorities, indigenous groups, women's groups, various industry groups, flora and fauna officers, social researchers, private consultants, and internal DNRE stakeholders, such as senior managers, regional managers, extension staff and other service providers and scientists. This inevitably raised questions within the team: 'What is the purpose of interviews?', 'Why do we want their perspective?', and 'Why are we engaging them, what is the long-term result of engaging them?'

This led to further discussion about the purpose of the project, which shifted back and forth between conceptualising the project in terms of developing the capability of people in the food and agriculture sector on the one hand, and redefining extension and building organisational capacity on the other. At times these two aspects of the project were constructed as a single process that collapsed them into the one learning system. However, increasingly, discussion within the team constructed these two aspects in terms of a linear process, where the project team was to develop organisational capability in the first phase of the project in order to apply this learning in the pilot phase where the focus would be on building community capacity.

The ambiguity about the project was raised as a regular point of discussion. Some team members, including myself, were concerned that the project would move away from a constructivist approach and revert back to a linear change management approach. However, not everyone on the team was familiar enough with the level of theory that allowed them to engage in this kind of discussion, or even to recognise or understand this ambiguity. As a result, discussions about the contradictions in the project often only served to increase confusion and frustration about the project.

The ambiguity became explicit when the team split into two groups to develop the interview questions for stakeholders. When the two groups reported back, it became clear that two very different sets of questions were developed. One group focused on the issue of social capability in general and developed its questions around that, while the other group focused on the issue of
redefining extension. It was not until this point that it became clear to everyone what the ambiguity entailed, where the differences were and that this ambiguity needed to be addressed.

This was when the uncertainty within the team was temporarily reduced as we were able to focus on this ambiguity and make a decision about the issue that the project would focus on. It was determined that the purpose of the project development phase would be 'to identify ways to enhance the social capability of people in the food and agricultural sector to generate and respond to change'. However, this decision was made without an in-depth exploration of the ambiguities. The discussion within the team focused on the manifestation of the ambiguities rather than the underlying epistemological differences and their implications. Furthermore, while this purpose statement did broaden the scope of the project beyond a mere focus on extension, it was about identifying ways to develop social capability, as opposed to just building social capability. This confined the scope of the process development stage to change management practices, where the lead characters were the change agents themselves. There was significant convergence within the team around this focus on change management practices, which located the project in a linear narrative of change.

Following this decision a list of potential interviewees was developed which included mostly service providers, extension practitioners, managers and change agents from a broad range of agencies and organisations concerned with a variety of issues in relation to natural resource management and agriculture. Some team members were concerned about the lack of engagement of land managers in the interview process. These concerns were dismissed with arguments that land managers and other community stakeholders would be engaged in the pilot stage of the project, when the focus would shift from organisational to community capacity building. Nevertheless, a small number of land managers were included. However, those that were selected were primarily people with a long association with DNRE, who had multiple and often leading roles within the community or even DNRE or other agencies. In the interviews these land managers tended to engage in service provider or policy discourse instead of speaking from their position as land managers.

In total we conducted 51 in-depth, semi-structured interviews (see interview schedule in Appendix 3). Team members enjoyed doing the interviews; some even suggested they were 'fun' and 'exciting'. At this time it also felt like the project was gaining momentum. Furthermore, while several team members had been involved in conducting interviews before, they felt that the way in which these were conducted had been more carefully designed:
I really liked the way we designed it, tested it, redesigned it, tested it, redesigned it, you know, kept improving the interviews (Team member, second round interviews, July 2002).

While there was some concern about the fact that interviews per se are not new, the way in which the findings were to be dealt with as part of a broader participatory action research (PAR) or RAAKS process was considered different and innovative for DNRE.

The interviews generated a good response. Targeted people were willing to participate, and team members suggested that the interviews generated very valuable information. The interview process was also considered a success in terms of developing the bonds within the team and the networks beyond it.

Extensive notes and in some cases transcripts were produced from these interviews. The analysis of these was to provide us with a more comprehensive view of the way in which various stakeholders viewed issues of social capability in the Victorian context and who they considered to be important stakeholders. This was to provide the basis for phase two of the RAAKS process where these issues would be further explored.

According to Engel, the RAAKS team is to involve stakeholders in analysis and synthesis of information to facilitate collective decision making about subsequent actions (1997:163). However, at this point a decision was made that the analysis of the interviews would be conducted by an external consultant. The project was under increasing time pressure to achieve its milestones because of a reduction in staff, as two people had left the project to take up other positions within the organisation and one was on extended leave.

The report that was produced by the external consultant provided an in-depth account of the way in which change agents constructed meaning about social capability. It also outlined constraints to social capability building that were identified by interviewees (Mentor Consulting, 2002). However, the report was delayed and delivered too late to inform the implementation of phase two, the focus groups - a point of significant frustration to the team.

In making the decision to put the analysis to tender, the team leader acted in a way that was consistent with the New Public Management approach to public administration that characterised DNRE's activities. This may explain the lack of questioning about this decision.
within the team. As mentioned in the previous chapter, such public management practices are considered objective and neutral supporting activities within an organisation. However, tendering out the analysis of the interviews was inconsistent with the constructivist epistemology that underpins the RAAKS process. It undermined the social construction of knowledge within the DSC project team - a fundamental aspect of the RAAKS process. The consultant who conducted the analysis was familiar with the RAAKS process and did make some attempt to involve team members in the analysis. However, this was minimal due to time constraints. Furthermore, as her report was delivered after the date required, it could not provide the basis for the design and implementation of the focus groups.

4.2.2 Identifying constraints and opportunities

Phase two of the RAAKS process is about exploring constraints and opportunities to improve the practices of participants in the process. To this end we organised a series of focus group discussions. Upon completion of the focus group discussions we wanted to be in a position to identify pilot projects to work with in the next phase of the project. In order to do that we needed to ascertain from the interview data what were perceived to be the key issues that needed to be addressed in order to equip people in the agriculture and natural resource management sector to manage successfully in a changing environment.

As the consultant's report on the analysis of the interviews was not completed in time to design the focus groups, I volunteered to scan the notes and transcripts to identify the issues that interviewees believed needed to be addressed. A list of 21 issues was discussed at the next team meeting. These were grouped into broad themes that provided the basis for four focus group topics:

- relationship based information management
- networking and positioning in the value chain
- water quality and use
- community viability: labour and volunteerism in rural communities.
It was decided that these issues would be explored in separate focus groups. For each issue two focus group discussions were held; one that included primarily land managers and community stakeholders, and one that included primarily service providers and policy officers (the questions that guided the focus group discussions are included in Appendix 4).

What emerges from the analysis of the documents and notes of meetings pertaining to this period in the project is that the ambiguities about the project had not been adequately resolved. As we moved from the interview process to the focus groups, the emphasis of the project had once again shifted. In designing and planning the focus group discussions, we referred to the need to be able to develop pilot projects from the findings. In selecting participants and locations for focus group discussions, we worked backwards from a list of potential pilot projects that could be conducted around each of these issues. Hence our focus was once again on issues within the broader community, rather than on the change agents and the organisational change process, as had been the case in preparing the interviews. Consequently, we included land managers and other community stakeholders in the focus group discussions. However, these stakeholders became involved only once key issues had already been identified in the interview process, in which they had not participated.

Overall, there was significant discontinuity between the interview process and the focus group discussions in terms of the way in which we constructed the project, its purpose and the issues we were dealing with. This reflected the unresolved ambiguity about the project and was exacerbated by the fact that neither the team members themselves nor any other stakeholders were involved in the analysis of the interview data and therefore did not 'own' the results presented in the report.

Nevertheless, the focus group discussions were considered a successful activity by team members as they contributed to the team's capability in terms of understanding the issues and the process, as well as skill development.

As had been the case with the interviews, the focus groups mostly generated a good response from targeted participants and yielded good information. However, some concerns were raised about the focus groups. Team members expressed concern about the selection of participants. It was argued that most land managers that participated held positions of responsibility and did not necessarily represent the 'average' land holder. Some team members had selected participants on the basis of recommendations of DNRE staff, while others used the snowball technique, by
inviting one land manager who then invited people in his local area. Team members concluded that the latter technique had been more effective in generating a focus group discussion of land managers that did not consist primarily of those already familiar with DNRE and its programs. On the whole, a view prevailed within the team that the project had not succeeded in engaging stakeholders beyond the already established DNRE networks.

The focus groups impeded the construction of a post-productivist platform for change in another way, as the discussions reinforced the linear and dichotomous relationship between government and the community. As team members conducted the focus groups, they performed their identities as 'facilitators', or objective outsiders. While the project's mentor had the expectation that these focus groups would be conducted in a participatory fashion, they were conducted by team members in a way that was consistent with the literature that emphasised that the researcher is a passive observer or facilitator of the focus group, but not an active participant within it.

The construction of the researcher as a passive observer or third party facilitator was evident in all the focus groups conducted by the team. Generally, team members set up the conversations, elicited responses, but did not engage or put their own views or that of government. This did little to deconstruct the dichotomy between government and the broader community. It actually reinforced it. In the focus groups the facilitators (DSC team members - the researchers) extracted information from the other stakeholders (the researched). A sense of partnership or mutuality between government and other stakeholders was not fostered in these discussions. The following statement made in opening of the focus group discussion on water use highlights this point:

\[
\text{The other thing is, please don’t make it a question and answer session. It needs to be a conversation between you guys. I’ll be fairly quiet through the day, through the hour and a half (Team member, focus group on water use with land managers, April 2002).}
\]

In the focus group on labour and volunteerism with land managers and community stakeholders (March 2002) the following exchange further highlights the dichotomous relationship that characterises that discussion:
Team member:
Alright, so I'm going to ask you to do some writing now and I'm going to ask you to spend a couple of minutes just thinking on your own and I've got some papers and pens to easily write things down and I'm going to ask you to think back of the conversations that we've had and not draw in other information but just from the conversations that we've had. What are these key points that you feel were covered in these sessions? I'll just give you a couple of minutes I would just like to see your perspective on that.

Participant:
After we have written it down are you going to give us a test?

The focus groups were conducted in a way that extracted information from the researched, rather than by developing a partnership with them. The conclusion of this focus group further reinforced this:

So I really thank you for your time. I hope it will stimulate some thoughts and some discussions. We will certainly take this information back into the project that we are working on and it will help benefit the other themes that have come out of the other good work that has come out of the research so far. I don’t have all of your addresses and I was wondering whether just on any spare slip of paper that you have in front of you, you could just write your names and addresses and I can send you out a letter just to let you know where we go to from this information so how we are going to use and where we will actually be utilizing it (Team member, focus group on labour and volunteerism with land managers and community stakeholders, March 2002).

At the end of the focus group discussions ownership of the issues was still located with the DSC team.

However, it was not only team members who performed their identities in a way that impeded the reconfiguration of the relationship between government and other stakeholders. Land managers made sense of their role and that of the DSC project team by reinforcing the transfer of technology narratives of change as they participated in the focus group discussions. Land managers in the focus group discussion on water use, for example, defined the problems they are facing primarily in terms of a lack of information or technology, or in terms of a problem with information and technology transfer, as is evident from the following statements:

All the irrigators here, we were talking a while ago about the information transfer … Over at Tatura they’ve got a set up where they’ve dug the trenches in the ground and they can measure the water that is going through the ground and the formation of the water under various irrigation systems. Now, that would have been a great thing for a lot of people to have seen, but have any of you blokes ever seen it? Here is that gap. Here is where you can go in and see that water, because it's glass and so forth. You can see this water coming down and it's under sprays and it's under flood and under various things, but that information is stuck in an office somewhere. It got about this much in the Country News once or twice. There should be an Open Day there. This is what happens (Land manager, focus group on water use, April 2002).
The story’s only half done. The research has been done. There’s been big dollars spent on doing that, but it’s just stopped (Land manager, focus group on water use, April 2002).

As both facilitators (team members) and land managers located themselves within the dichotomous relationship between government and land managers that prevails, it is not surprising perhaps that this discussion concluded with the following interchange:

Team member:
Is there anything here today that we’ve talked about that you reckon would be worthwhile [to pursue further]?

Participant:
I think you have to listen to your tape and work it out. It will come out of that.

On the whole, the focus group discussions, as well as the interviews, were more about extracting information from people for use by other actors, than they were about engaging participants and DNRE staff as partners in the change process. In other words, the focus groups did not contribute to the construction of a post-productivist platform for change that involved a reconfiguration of the relationship between government and other stakeholders that is characterised by mutuality between different stakeholders.

Perhaps the term 'focus group' was unfortunate as it induced sensemaking within the DSC team that located this activity in social science discourse that emphasises a dichotomy between the researcher and the researched in a way that is at odds with the RAAKS process. One team member in fact sourced references on focus group discussions and brought these along to ensure that the discussions were conducted in accordance with established protocols and principles. This was motivated by the need to ensure that the approach was valid and rigorous, which would allow for validation of the DSC project and its approach within the broader organisation, and in particular within the evaluation group, of which this team member also formed part.

The term 'focus group' and the way in which these were conducted was problematic, however this was not discussed at the time. When reading my critique, one team member was surprised that this issue was never raised with the team at the time:

I was surprised that the focus groups were run differently from the way […] had intended. None of us were aware of this. My reaction was why didn't he tell us? (DSC team member, email, June 2004)
It is possible that if the team had been advised to conduct workshops, which is in fact the word used by Engel (1997:166), this may have facilitated an entirely different sensemaking response within the team that may have led to a more interactive exploratory approach to this phase of the project. However, what this indicates is that the team was quite dependent on the advisor (my supervisor) to implement the RAAKS process, yet his contribution to the project had never been formalised and hence he was not involved closely enough with the project to guide the team every step of the way. The lack of experience and understanding of RAAKS within the project team made it difficult to implement the approach effectively.

Another issue that impeded the construction of a post-productivist platform for change concerns the way in which the analysis and synthesis of information collected in the focus groups was conducted within the team - not shared with a broader group of stakeholders, as Engel (1997:163) proposes. This analysis contributed significantly to skill development within the team, as team members familiarised themselves with data analysis processes and software. There was also considerable learning about social capability as a result of this analysis. For instance, team members identified that issues of alignment, sensemaking and networking needed to be addressed to enhance the capability of people to deal with change. However, as this synthesis of information was not shared with other stakeholders, the DSC team was now in a position where it needed to 'sell' these issues and the DSC approach to potential pilot participants in order to pursue them further. While it turned out to be relatively easy to establish pilot projects, it proved more difficult to pursue the issues identified, a fact ironically entirely consistent with the constructivist critique of linear change management programs that is outlined in the supporting documentation of the RAAKS process.

Overall, at the end of this phase ownership of the DSC project was located solely with the DSC team. A sense of partnership or collaboration between stakeholders had not been established in the focus group discussions. The project team had been unable to transcend the dichotomous relationship between government and other stakeholders that prevails in the natural resource management context. The group discussions tended to focus on general issues and solutions and failed to move to the identification of specific actions or pilot projects. No platform for change around a particular issue had emerged that could provide the basis for further action planning of pilot projects. As it turned out the pilot projects focused on issues emerging from within the partner projects, rather than the issues identified through the DSC process so far. The transition from focus group discussions to pilot projects then represented another point of discontinuity in the project.
4.2.3 Planning the pilot projects

The final step in the DSC process development phase was to develop a number of pilot projects in which to trial 'the DSC approach' that was derived from RAAKS and adapted during the process development phase. Initially the idea had been to work both within existing extension projects as well outside them on specific issues. However, at this time the team had converged around the idea that in order to meet organisational expectations it would be expedient to work within existing extension programs. DSC team members would work within these programs to enhance their social capability building capacity. The team would help extension staff to familiarise themselves with the PAR approach, which would transform extension practice within the pilot project.

As mentioned above, opportunities to run workshops to plan pilot projects did not emerge from the focus group discussions. However, the DSC project did generate enough interest to initiate discussions with individuals who had participated in interviews or focus group discussions about potential pilots. These discussions occurred on the basis of existing networks of individuals in the DSC team that had been reinforced by the interviews and focus group discussions. As outlined in Section 2.4.2.3 a total of three pilot projects were eventually negotiated, creating partnerships with the grains industry extension program, Topcrop; DNRE's Environmental Best Management Practices (EBMP) project; and the fisheries group of the FarmBis program.

The way in which the RAAKS process was adapted and implemented within these three pilots varied significantly, and these differences provide a number of insights into the construction of a platform for change and social capability building more generally. In the following chapter I describe these pilot projects in greater detail.

4.3 Making sense of the project

Platforms for change in the form of pilot projects did not emerge from the interview and focus group process. The process development stage of the project had been characterised by significant ambiguity and discontinuity, which reflected the multiple project narratives that existed within the DSC project from the very beginning. The aim of the process development
phase was to develop a social capability building approach to trial in a number of pilot projects. The project identity revolved around this 'new' approach, which team members at times referred to in productivist terms as their 'product'. However, what strikes me in writing up the project's activities and trying to make sense of them, is that as a team we operated in a confusing and uncertain environment without ever adequately coming to terms with the ambiguities that plagued us. If sensemaking is about imposing coherence on an ambiguous situation, then our collective sensemaking was incomplete at this point, as no shared narrative that imposed coherence on the ambiguities within the project had yet emerged. Towards the end of the process development phase there were a number of instances where team members felt frustrated at their inability to describe the project to others in a convincing way. For example, as one team member suggested:

I guess I never felt confident that I could describe the project in a way that would make the earth move for other people, that their eyes really lit up and said 'yep, that's really valuable, I could use that stuff', or 'I'm going to be really keen to see what comes out of it' (Team member, second round interviews, July 02).

Two other team members reflected on the difficulty of presenting the project to the Topcrop program:

I feel I did not do justice to the project … I still don't feel we have answered our own questions about the activities we will be doing, and who will do it - lots of room for improvement (Team member, DSC team email exchange, May 2002).

As a team we've got the 'Spiel' right, just not the delivery of it as slick as it should be. It's the process that lets us down. We lost a few people and we weren't able to get all the options, barriers, challenges into a tangible 'what it looks like on the ground' context (Team member, DSC team email exchange, May 2002).

Another comment made in that same email exchange:

[TopCrop staff member] feels that the group walked away with the comment of 'so what' about our project. It feels like he had an expectation that we would have gone some way to convincing group members that they could all apply PAR changes to their existing processes today, and therefore reap the benefits for themselves … (Team member, DSC team email exchange, May 2002)

According to team members, the approach taken by the project took people in DNRE outside their comfort zone, as the project challenged prevailing paradigms. This made internal communication challenging:
… it's really important to use the sort of language that they understand and … if they want hard results then we've got to be able to put stuff in a way that they can relate to, even though it mightn't necessarily be our preferred way of describing the project.
(Team member, team email exchange, May 2002)

Uncertainty and ambiguity prevail, which at times manifested itself as conflict or disagreement within the team:

… people are being pulled in all different directions, and the basis of it all is our central team and how well we operate within that and at times we're not operating terribly well within that (Team member, second round interviews, July 2002).

At the end of the process development stage, discussions within the team regularly focused on the difficulty to describe the project and its approach in terms that were familiar and engaging to others in the organisation, and the challenge to represent the team's approach as a new and different way of doing things. Both these aspects (validation and differentiation) are critical in the process of identity construction; as discussed in Chapter 2, there is no identity without the simultaneous construction of similarity (identification) as well as difference (differentiation) (Albert, 1998:8, Albert et al., 2000, Jenkins, 1996:3-4).

In the remainder of this chapter I explore how and why the project team struggled to tell its story, and perform its identity during the process development phase. I do this through an exploration of the sensemaking that occurred within the context of the project. I discuss a number of project narratives that team members and other participants located the project within as they made sense of the project, including a soft systems (Section 4.3.1), a social science (Section 4.3.2) and an evaluation narrative (Section 4.3.4). I argue that in seeking validation within the organisation (identification), team members located the project in narratives that subverted project narratives that allowed for differentiation.

### 4.3.1 A soft systems project narrative

One of the ways in which some team members made sense of the project was through soft systems theory. The consultants to the DSC project who co-ordinated and delivered the induction course, as well as the team leader and one other team member had been associated (in various ways) with the University of Western Sydney (Hawkesbury), where they had been exposed to the principles of soft systems theory that were advocated in courses for agricultural
professionals. Their thinking about the project was therefore heavily influenced by the Hawkesbury soft systems philosophy.

In the 1980s a group of educators at Hawkesbury embraced the soft systems methodology developed by Checkland (1981) and adapted this within their education program for agricultural professionals. There was an increasing awareness of the relevance of systems approaches to agriculture in response to a growing recognition of the systemic issues arising within this domain, such as the environmental and social issues associated with agricultural production. According to Bawden et al. (2000), these issues called for a systemic approach to agriculture that brings communities together to learn and act collectively in order to achieve systemic change.

However, many of the systems approaches that did emerge within agriculture remained trapped within the positivist paradigm that perceives of the system as an entity that can be understood and manipulated in order to achieve change. The systems approach initiated at Hawkesbury was based on a recognition of the limitations of this hard systems approach, and educators adopted a soft systems approach that emphasised that a system is the synergistic outcome of the interactions between the parts of a system (Bawden, 1992:162). In other words, the system is not just the sum of its constituent parts, but must be understood in terms of the properties that emerge from the interactions between its parts. This soft systems approach then is not about developing an understanding of a system as an (external) entity, but is about understanding a system as a process with emergent properties. Furthermore, as this holistic approach assumes that all is connected within it, the group at Hawkesbury argued it was important for agricultural professionals to recognise they were part of the system and needed to learn to think in a systemic way. The Hawkesbury approach is therefore about scientists, farmers and agricultural professionals working with each other to co-construct new worlds together. This means that the main priority for agriculturists is not ‘…learning about systems through inquiry…’, but learning ‘…how to become systems of inquiry’ (Bawden et al., 2000:400, emphasis original).

Theories of experiential learning and the concept of praxis were central to this Hawkesbury philosophy. Praxis is defined as ‘…the recursive process by which a practitioner uses theories and practices in ways where each continually improves the other in the overall quest for improvements in the world’ (Bawden, 1990:306). The foundation of praxis, according to Bawden, is the experiential learning process as conceptualised by Kolb (1984), which allows the learner to explore issues through participation in what is being learned. It involves a dynamic
and recursive flux between theory and practice, and reflection and action (Bawden, 1992:174). Furthermore, an important aspect of Bawden's systemic approach is that people are no longer just learning within meaning schemes, or learning new meaning schemes, but are also learning through meaning transformation (Banathy (1984) in Bawden, 1990:312). To sum up, the Hawkesbury group developed an education program that aimed for agricultural professionals to become "facilitators of systemic development", helping farmers and rural communities in general, as "networks of actors" to "learn their own ways forward" …' (Bawden et al., 2000:404).

The DSC team leader, who had moved with the project from the purchasing group to the provider side of the organisation, saw the role of the project team as a facilitator of such a learning system. However, during the induction course, which marked the establishment of the project team, she chose not to impose her view of the project on the team. Consistent with her soft systems orientation towards the project, she hoped that the course would allow team members to co-construct the DSC project as a learning system. In the first two days of the course, she therefore only shared her ideas about the project with the team informally as part of a broader team discussion. When she did this she described the project in terms of ongoing learning:

> With extension we've had some great activities, but the world is changing … there is a need to evolve into the future: That is what developing social capability is all about, so that in the future we do not get stuck on a recipe. It is about learning, double loop, triple loop learning, a spiral … (Team leader, DSC induction course, August 2001)

She argued that the project was not about delivering the next wave of extension. Rather, the project was 'where the spiral [of ongoing learning] begins'. The project narrative that was invoked here began with a state of affairs where new extension programs are developed and delivered to achieve specified outcomes. The problem situation around which the plot revolved was that there was no process in place that facilitates ongoing learning about ways of dealing with the fluid and dynamic change process. The DSC project was about developing a conduit for this ongoing learning process by which new ways of dealing with change would continuously evolve. In line with the Hawkesbury philosophy, the project was about developing a learning system that would facilitate not only learning within meaning schemes, or acquiring new meaning schemes, but would also and primarily facilitate continuous meaning transformation (Bawden, 1990:312). This constructivist narrative challenged the project proposal which focused on the delivery of new extension methods. The project proposal then was about learning within meaning schemes, or at best acquiring new meaning schemes.
Furthermore, while the narrative contained within the project proposal was about transforming extension (see Section 3.3.5), the soft systems project narrative was about transcending it.

As a social researcher I engaged with the soft systems project narrative by critiquing it and connecting it with theories about change and identity. These provided me with the narrative resources to make sense of the project and my role within it. However, while team members welcomed the opportunity to be involved in a soft systems project that provided them with the chance to be more involved in project construction, several team members also felt uncomfortable about the way in which the project was described by the team leader. As these team members generally had extensive experience as extension officers, this narrative challenged their sense of self and increased uncertainty about the project. If the project was not about developing extension, then what was it? And what would others in the organisation make of it? Most team members had little or no exposure to soft systems theory, and consequently, team members lacked the resources that would allow them to construct a coherent project narrative that they could locate themselves and the project within. Hence, uncertainty prevailed. Some team members coped well with this uncertainty as they trusted the process and the team's ability to come to terms with these uncertainties. Others found the uncertainty more unsettling.

In response to this uncertainty, the team leader decided to provide a presentation on her thinking about the project which struck a chord with several team members. In this presentation the team leader told a story about her own background in extension, her exposure to soft systems thinking and her aspirations for the DSC project. In telling this story she made sense of the project by relating it to soft systems theory in a way that built on her view of the project which she discussed earlier in the course.

She provided a pictorial account of the history of extension, where it evolved from a transfer of technology approach to a soft systems approach. According to this account, the extension officer used to be a technical expert who advised farmers on how to improve their farming practice. In response to growing recognition that the social aspect of this interaction with the farmer was important, extension officers became social experts dealing with the farmer and their farm. A subsequent step in this history was made when systems thinking emerged, which required the extension officer to view the farmer and his farm as an integrated system that required a holistic approach to extension. However, at this point the extension officer was still working on the system. The DSC project represented the final step in this story, where there would be a shift from a hard systems to a soft systems approach, which would see the extension
officer as well as the farmer as part of a learning system. This means that extension agencies would work from within the system, rather than on it.

This presentation provided some clarity for team members on the purpose of the project. Team members engaged with those aspects of soft systems theory that emphasised the development of new ways of working with the community. The presentation was well received and subsequent sensemaking about the project reflected aspects of the project narrative outlined in the presentation. Discussions during the second part of the course focused on the relationship between DNRE and the community.

The soft systems project narrative is post-productivist as it creates a space for a multiplicity of stakeholders to participate in the change process. My principal supervisor and I understood this soft systems project narrative as one that collapsed the distinction between organisational development and community development, as the interaction between all stakeholders would affect both the organisation as well as the broader community. We operated within the project with reference to this conceptualisation of the project. We anticipated that the team's methodology and the new extension methods referred to in the project proposal would emerge from trialling the RAAKS process within the pilot projects; in other words, from the interaction with other stakeholders. What we failed to recognise was the extent to which this view was not shared within the team. While the team leader referred to soft systems theory, stressing the need for agricultural professionals to become part of the learning system, to work from within the community, she suggests that the process development phase nevertheless was never about building community capability:

I think this is the only point where I would have any strength of disagreement about what you've written … I believe we saw that the process development phase was about developing the team's capacity … It was about us coming to terms with the RAAKS/soft systems etc. while learning what people within the system thought about the issue of developing social capability. I'm not convinced that we saw the implementation phase being about community capability (Team member, email, June 2004).

The reference to soft systems theory then was made in the context of an overall linear change management process that was reflected in the way in which the project was enacted. The project was divided into two aspects: developing the team's methodology and the implementation of this methodology in pilot projects. According to the soft systems narrative these two aspects of the project are part of the one process, as a soft systems approach would fold the learning of the extension practitioners and that of other stakeholders into the one learning system. However, the
conceptualisation of the project that the team leader referred to above became the dominant project narrative that team members located the project within, which separated organisational learning from community capacity building. As a result the lead characters in the process development phase included only extension practitioners and change agents, as discussed in Section 4.2.1. This structure created a narrative space for performance within the process development phase that did not allow the project's performance to be about anything other than extension practice, in a way that was consistent with the project proposal and other productivist narratives about the project.

While the above narrative prevailed, the extent of engagement of the various stakeholders was constantly questioned by some team members, and became a cause of some frustration. With hindsight, this ongoing debate and frustration can be traced back to the multiple narratives that existed about the project within the team. As people located the project within divergent narratives, their expectations of the extent of stakeholder engagement differed. These ambiguities were never adequately addressed or resolved.

The soft systems narrative was enacted in a way that reinforced prevailing ways of doing things. However, the soft systems narrative was not only subverted by the practices of team members, but also by the organisational structure. For example, the decision by the team leader to impose her view of the project that was developed within the purchasing group (in which she had participated) actually displaced the soft systems narrative itself. As team leader she was caught at the interface of two colliding processes - the purchasing process through which a steering group had developed ideas about the project that emphasised its participatory nature, which ironically had to be imposed upon the implementation team who were simultaneously supposed to participate in the process of project construction. Frustration amongst some team members reflected the ensuing tension:

I felt I had to come up with the right answers. That there was a truth out there and the truth out there was what I had to find, that I wasn’t really able to construct my own truth (Team member, second round interviews, July 2002).

Again, the purchaser-provider structure impeded the construction of a post-productivist platform for change that was genuinely inclusive of participants, in this case team members themselves.

Overall, the soft systems project narrative afforded the team opportunities to construct a post-productivist project narrative that differentiated the project from prevailing ways of doing things.
in DNRE, in other words to construct difference. The opportunities for change were located in this project narrative. However, this project narrative was contested and continuously subverted by competing project narratives that reflected prevailing organisational structures and practices.

### 4.3.2 A social science project narrative

Another project narrative that allowed team members to differentiate themselves within the organisation was that which constructed the project as a social science project.

There had been increasing recognition of the relevance of social science to natural resource management within DNRE. The DSC project team sought to differentiate itself by highlighting its emphasis on social research. The project narrative that team members located the project within begins with an original state of affairs where the organisation's approach to natural resource management is underpinned primarily by the economic and bio-physical sciences. This emphasis is inadequate in terms of addressing the social aspects of natural resource management. As one team member said:

> … in NRE we manage natural resources. I think we missed the point. We don't, we actually manage people … We can only influence those resources by influencing people … In essence our NRE function is a social one … it is to do with social change. So therefore it is critical that we have an understanding of social theory … How can we operate in that field if we don't understand it. We put massive amounts of money into research into ring-tailed bandicoots and pasture and all the rest of it, but that means naught if you then can't apply the findings of that, and the only way you can apply it is to engage people who manage our resources. That's just blindingly obvious (Team member, second round interviews, July 2002).

The DSC project aimed to address this by creating rigour in the organisation's approach to the social aspects of natural resource management. The soft systems emphasis on praxis was to facilitate this by connecting the organisation's practices to sound social theory. This was to enhance the validity and credibility of existing and emerging approaches to extension and change management within DNRE. Overall, this project narrative conceives of the project as a conduit to enhance the organisation's social research capacity.

However, while the rhetoric within the organisation increasingly reflected this recognition of the relevance of social science to natural resource management, there was a general lack of understanding about the broad scope for application of social sciences in this field. I often encountered an expectation from people that social researchers explore social issues such as
those relating to labour and employment, rural decline, indigenous issues and other explicitly social issues. However, the scope for the contribution of social research in natural resource management is much broader than that. Social researchers have added to our understanding of the innovation process and other issues that may once have been perceived as strictly technical. In fact, most of the issues in agriculture and natural resource management today have a social component to them, and social researchers are well placed to enhance our understanding of these issues and change processes.

More importantly, however, the post-productivist rural context is characterised by competing knowledge claims that are constructed through diverse and incommensurable knowledge frames. In order to facilitate genuine participation it is important that community based approaches are based on a constructivist rather than a positivist epistemology:

The epistemological difference between traditional positivist approaches and the new constructivist or interpretive approach is that, under the latter, policy work actually interprets and constructs the meanings of the ideas and what constitutes usable knowledge about the ideas in any given policy area. Rather than searching for the 'right' definition of such ideas and applying objective knowledge to the rational pursuit of ranked goals, the interpretivist or constructivist approach posits that policy networks and the discourse within the networks constitute policy and policy commences with struggles over the meaning of ideas (Hess and Adams, 2002:71).

Hess and Adams (ibid.), as well as Bawden (1990:310-317) before them, therefore argue that the study of knowledge and how it is constructed is important in terms of dealing with current policy demands arising from the shift towards post-productivism. In dealing with the multiple knowledge frames that invariably emerge in a post-productivist setting, the most valuable skill for agency staff will be the capacity to manage knowledge (Hess and Adams, 2002). As Hess and Adams (ibid.) argue, public administration needs to be underpinned by a broad disciplinary base of the various research methodologies of all the social sciences, which include both positivist and constructivist approaches, as well as quantitative and qualitative research methods.

However, it was my experience that advocating a focus on theory, let alone theories of knowledge, was often dismissed as esoteric when dealing with practitioners, public administrators and policy-makers. While there is increasing recognition within DNRE/DPI that social research is important, there is very little understanding about the range of social research methodologies or the epistemological and ontological foundations of the various knowledge frames that are drawn upon within the department. Furthermore, as Whittaker and Banwell
(2002:259) argue in relation to anthropology, social research within DNRE/DPI is often seen as no more than a collection of research techniques, rather than a range of disciplines each with very distinct theoretical concepts, concerns and questions.

As discussed in the previous section, the team leader made sense of the project and its approach with reference to soft systems theory. Team members generally shared the view that there was a need to address issues in the natural resource management context in a systemic way. However, what was not so well understood was the constructivist epistemology of soft systems theory and its concomitant notion of emergent properties. Some effort was made during the induction course to explore the concepts that underpinned RAAKS. For example, one of the training sessions focused on the concept of knowledge. However, team members found this level of theory difficult to engage with and the language of the RAAKS kit hard to come to terms with, and therefore they very quickly moved to the RAAKS tools to make sense of the process (see Appendix 2).

Furthermore, their sensemaking of the process was not connected with theories or perspectives on social capability. In fact, sensemaking within the team referred surprisingly little to the concept of social capability. For example, the team did not explore how and why the RAAKS process may contribute to social capability building. The induction course also did not revolve around the concept of social capability; the term was hardly mentioned. Similarly, in both rounds of interviews that I conducted with team members at the beginning and end of the process development stage, team members hardly used the term social capability. It was only towards the end of the process development phase that our reflections turned to issues relating to social capability. We were prompted by outsiders and a newcomer on the team who were asking us about our definition of social capability and how our approach contributed to the development of social capability.

On the whole the team struggled to make sense of RAAKS with reference to theories of knowledge, learning, innovation and social capability. As the final report states:

At the end of the process development phase the team reflected on their earlier frustration whilst learning about the process. Too much time was thought to have been spent 'getting a handle' on RAAKS before any activities were initiated (Department of Primary Industries, forthcoming).

Team members suggested they did not begin learning about RAAKS until they were immersed in the process. However, most sensemaking about the process occurred through a focus on the
tools and steps of the process. Presentations and descriptions of the project's approach focused largely on these tools and steps in the process of RAAKS, as opposed to the underpinning constructivist theory that focuses on the social organisation of innovation. In short, it were the methods and tools that defined the project's approach, not the methodology.

In describing the project in terms of its tools and methods it became almost meaningless. It is like speaking with a builder about the house he/she is constructing in terms of the hammers, nails and other tools and instruments used to build it. That does not provide any insight into the kind of house being built, and how that may be different from the house next door. It is the principles and methodology that define a process, not the tools and methods. However, most team members were not familiar with soft systems theory or concepts such as epistemology and ontology. As a result the team did not have the narrative resources to make sense of and engage with the theoretical framework that underpinned the RAAKS process, or to make connections between methods and methodology.

Without that it is difficult to distinguish RAAKS from PAR approaches more generally. Increasingly the team referred to its approach as a 'PAR approach' rather than as a RAAKS process. It was argued that RAAKS was an example of a PAR approach, but just what distinguished RAAKS from other PAR approaches was not explored. The research aspect of the DSC approach had come to the fore, at the expense of the soft systems focus. Team members developed research questions that were to guide the process. At this time the team also focused more explicitly on what social capability meant and how it could be developed, as is evident from the research questions that were developed (DSC team meeting, August 2002):

- What is social capability?
- How can we develop social capability?
- Does PAR build social capability? How? Why?
- How can we use this understanding of social capability within the pilot projects?
- How can the DSC approach help DNRE achieve its goals?
These questions were relevant for the team and the organisation. In order to validate the project in the organisation and to define and develop a social capability building approach it was important for the team to address these questions; however the shift towards PAR displaced the broader systemic, interactive and iterative process of problem identification that characterises RAAKS.

It was not until one of the meetings with my supervisors that the question was raised why the terminology within the team had changed from RAAKS to PAR and what that meant in terms of the approach taken. This question led to a period of intense reflection within the team, which allowed us to distinguish that two different approaches had emerged within the context of the project. As is discussed in Chapter 5, the Topcrop pilot followed the RAAKS process quite closely, while the EBMP pilot diverged from RAAKS as participants in this pilot used other PAR literature to make sense of their activities. The process that was to integrate the learning across the three pilot projects was also constructed in PAR discourse rather than RAAKS.

While there had been extensive discussion about the ambiguities regarding the process, they were not fully resolved. In writing papers and the final report, the team referred to 'their' approach, but there was still significant difficulty in describing what the distinguishing features were of the DSC approach, where it was based on RAAKS, where it diverged from it and why. Again, the defining features of the DSC approach were couched in terms of tools and methods. For example, the DSC approach was differentiated from other approaches including RAAKS by referring to the use of the Open Space Technology (OST) in order to obtain stakeholder perspectives on issues. This was not underpinned by a rationale, methodology or theoretical principles that justified or explained why and how this differentiated the DSC approach.

To build the organisational capacity to deal with community-based approaches to rural development, DPI will need to come to terms with and embrace constructivist, qualitative social research approaches as more than just a collection of tools and methods. Furthermore, the department needs to engage in discussions about issues of epistemology and ontology. While this may seem quite remote from the day-to-day practices of public administrators or agricultural professionals, it is critical in order to deal with the multiple and contested knowledge claims that characterise the post-productivist land management context (cf. Hess and Adams, 2002).
Team members reflecting on this agree, but raise questions about the possibility of achieving this. For example, one team member suggests:

I agree with your comment that we focused on tools to define the process. And I also agree that we need to engage in more discussions that are epistemologically and ontologically based. From a pragmatic perspective though, I wonder if it's useful to take such a theory-based approach. I guess I'm wondering if we can have these conversations without knowing what epistemology and ontology are. This is a practice based organisation, and while we need to work more strongly from a position of principles and theory, I'm not confident that academic concepts will ever be popular. So how do we develop the organisation's capability without turning people off? (Team member, email, June 2004).

Another team member concurred with this, arguing that he was 'not stupid', yet he struggled with it, despite being open to such ideas. He too raised a concern about the need to make these approaches accessible to practitioners in organisations.

Overall, despite some of my reservations about the narratives outlined above, they did represent attempts to reconstruct the organisational identity in post-productivist terms, as they were about the organisation's participation in new, post-productivist communities of meaning. Both the soft systems project narrative and the social research narrative were about challenging prevailing ways of doing things. However, as mentioned before, these narratives were contested and subverted by concurrent narratives and organisational structures that forced a linear process onto the project and continued to define the project and the organisation more broadly in productivist terms. This is not surprising considering the long history and dominance of such narratives and structures in the organisation.

4.3.3 An evaluation narrative

While team members engaged with the soft systems project narrative, sensemaking of the project within the team also occurred with reference to the project proposal. For instance, during the induction course there was extensive discussion about how the project team felt pressured to deliver new methods of extension as was outlined in the project proposal. Even though some team members were aware of the tensions between the project proposal and soft systems theory, most team members believed that in order to engage senior management and other organisational stakeholders they needed to emphasise the development of new extension methods as the primary focus of the project. In their interactions with others they located the
project within the project proposal narrative in order to validate the project within the organisation.

Overall, the linear project narrative contained within the project proposal validated the DSC project within the organisation. However, it simultaneously constructed the project in productivist terms. In other words, in constructing the project identity, differentiation is subverted by the process of validation or identification. Another project narrative operated in a similar fashion. This was the narrative produced through evaluation activities. DNRE had a dedicated Evaluation Support Team that aimed to enhance the organisation's evaluation capability. An increased emphasis on evaluation was a further manifestation of the principles of corporate management that characterised the 'New Public Management' approach to public administration within DNRE (Department of Natural Resources and Environment. Agriculture Division, 2001).

The DSC project team had strong connections with the Evaluation Support Team of the organisation. In fact, one team member of the DSC project was simultaneously located within the Evaluation Support Team to foster the DSC team's evaluation capability.

Initial discussions within the DSC project team about the evaluation strategy focused on the need to conduct the project's evaluation according to the framework developed by Bennett (1976) to meet organisational requirements. This framework is designed specifically for conventional linear extension programs. However, the evaluation officer on the team proposed that an action evaluation strategy that was consistent with the PAR process of the project would also be developed.

At one of the team meetings an evaluation support officer from the Evaluation Support Team was invited to assist in constructing the project's Bennett's hierarchy. This person was a well-regarded officer within the organisation and the team felt energised by her participation in the project. This evaluation activity was conducted early in the life of the project, consistent with the view that evaluation contributes not just in terms of impact assessment, but also to the project development process. However, it came at a time, a few months into the project, when most team members struggled with some aspects of the project. Team discussions had focused on questions and uncertainty about engagement of stakeholders, how and whether the process would lead to pilot projects, and what these would look like. Furthermore, the vast amount of work generated by the interview process that was under way meant that some team members
wanted to get on with their work, rather than participate in more discussions about the project. Nevertheless, the entire team was present at this meeting. It turned out to be a milestone event for the project. As I discuss below, a project narrative was constructed that provided clarity as it allowed team members to make sense of the various project activities, processes and stakeholders and their connections. A (temporary) collective understanding of the nature and goals of the project emerged, which reduced uncertainty and ambiguity about the project and which improved the morale of the team significantly.

DNRE/DPI's Evaluation Support Team advocates the use of Bennett's hierarchy for project development and evaluation. Bennett's hierarchy refers to a hierarchy of steps in a program or project and provides a program logic that can be used both for project development and evaluation purposes. This framework was developed through an analysis of the chain of events within extension programs (Department of Natural Resources and Environment. Evaluation Support Team, 2002). It has been adapted by the Evaluation Support Team for use within DNRE/DPI. Programs and projects are encouraged to produce a report, or 'performance story', in terms of the steps in Bennett's hierarchy, which include:

- inputs, or resources in the form of time, money and staff
- processes, activities or strategies to achieve change
- people, participants or users and their characteristics
- reactions: participants' or users' ratings of the activities, processes or strategies
- knowledge, attitudes, skills and aspirations (KASA) change as a result of the activities, processes or strategies
- production, behaviour or practice change associated with activities, processes and strategies
- results and changes in the social, economic and environmental conditions (SEEC).

As this evaluation framework was designed on the basis of analysis of existing extension programs, it is not surprising that it is largely consistent with the linear transfer of technology
model of extension, which is challenged by the soft systems theory that also underpins the project. Some team members including myself expressed concern about the contradictions between the project's systems approach on the one hand and this linear approach to evaluation on the other. However, the use of Bennett's hierarchy was justified as it was considered useful in communicating what the project was about in terms that others within the organisation would understand. According to the member of the Evaluation Support Team, projects within the organisation could 'talk to each other' and be compared through the use of Bennett's hierarchy. The use of Bennett's hierarchy provides legitimacy and credibility to a project within the organisation.

With the help of the evaluation support officer, the project team constructed the hierarchy for the DSC project (Figure 4.1). Through this activity a linear project narrative was constructed, which described the project in terms of three interconnected 'legs'. The first leg represented the process development phase where the project team would facilitate a PAR process with the 'immediate users' of the project. These were defined as change managers or extension practitioners. The result of that phase would be the design of a number of pilot activities which were to be implemented in the 'developing social capability leg' of the project. At this stage the project would work with the 'final users' defined as 'communities in agriculture and the environment', while simultaneously facilitating ongoing learning and reflection with change managers through the development of a virtual campus or learning centre (virtual campus leg).

In locating the project within Bennett's hierarchy, the team identified a hierarchy of 'users' of the project, distinguishing extension practitioners as immediate users from community stakeholders as end users. The lead characters in this narrative then were providers (project team) and users (extension practitioners and change managers), which constructed the relationship between the project and other stakeholders in terms of the dichotomy that characterises the linear transfer of technology model. The project team was the owner of a process or 'product' that was implemented or transferred within a subsequent setting.

Other stakeholders, who were not providers or users and who traditionally did participate in the rural development process, would be consulted through interviews and focus groups during the project development phase. However, as the practice of these stakeholders was outside this narrative, their participation was no more significant than the kind of consultation that occurs in market research or other non-participatory social research processes.
Figure 4.1 The DSC project logic
They had no ownership or role to play in the change process. Some comments made in the subsequent meeting illustrate this:

[Our] focus is on practitioners at this point. The community is not important at this moment. In the next phase we focus on the customers (Team member, team meeting February 2002).

We start it as an internal process, let's get our house in order (Team member, team meeting, February 2002).

This is the first stage about the change agents. The next stage is getting customers involved (Team member, team meeting, February 2002).

In subsequent meetings and specifically in the context of discussions about the evaluation of the project, linear and productivist discourse prevailed. A shift in the way in which the team discussed the project is evident from analysis of meeting notes. While potential participants in the project were initially referred to as 'actors', team members were now talking about community stakeholders and farmers as 'customers'. Similarly, team members discussed the project in productivist discourse as they referred to the 'product' of their project.

The project narrative that was constructed here was about a PAR project that would facilitate change within the extension profession. However, despite the rhetoric of the team, it was no longer about a soft systems approach that aimed to facilitate the development of a learning system that included the diversity of participants in the land management process. Furthermore, this narrative also consolidated the view that the project was about transforming extension practice, rather than transcending it, as it placed extension practice, rather than the diversity of practices within the broader system, at the core of the project.

One of the team members would like to stress here that team members did recognise the limitations of Bennett's hierarchy and saw it as a linear representation of a much more complex process. Furthermore, she states that:

I think the statement about the narrative consolidating the view that the project was about transforming extension practice rather than transcending it is true. I believe that by the time we reached this point of the project we were all fairly tired and worn down by the system and from a realistic viewpoint did not believe that we would be able to achieve more than an improvement (Team member, email, June 2004).

The evaluation project narrative was further developed in a subsequent meeting with members of the evaluation support team in order to ensure that it was consistent with the overall Bennett's
hierarchy that was constructed for the Science and Technology Initiative (STI) of which the DSC project was a part. This required that the project was constructed in discourse that was consistent with that program's focus on science and technology as key drivers for change in the agricultural sector.

Overall, the evaluation activities around Bennett's hierarchy facilitated sensemaking of the project both within the team, as well as the broader organisation. The evaluation framework provided the narrative resources to construct a coherent story about the project, the team's role within it, and the position of the project within the overall STI. Furthermore, acknowledgement and validation by the evaluation support team enhanced the team's sense of identity within the organisation.

There was significant engagement with this project narrative within the team. As the project manager stated in an email to the team:

The evaluation framework discussion at Geelong achieved strong agreement on the purpose of our project and an image of success (Team email exchange, March 2002).

It represented another moment of convergence around the project. As with the interview process, however, convergence occurred around a narrative that constructed the project in productivist terms that subverted the post-productivist project narratives and shifted the focus of the project from the broader food and agriculture sector and the role of DNRE within that to internal processes and systems.

It must be noted that this shift did not occur uncontested within the project team. However, dissenting voices were losing their battle to keep the project focused more broadly on social capability building, rather than on internal change processes. Moreover, those people who were most explicitly critical of the direction in which the project was heading, left during the process development phase to take up other positions within the organisation.

Overall, this section has highlighted that as the team engaged with evaluation processes it constructed productivist project narratives that were consistent with prevailing ways of doing things within the organisation. The use of Bennett's hierarchy validated the project in the organisation at the expense of differentiation and change.
From a governmentality perspective it could be argued that evaluation is an internal 'technology of government' that 'yokes' (Dean, 1996:61) the behaviour of staff to conform to the rationality of advanced liberalism. Bennett's framework for evaluation was used within DNRE as a strategic project development tool. In the case of the DSC project, the project development activities to construct the project's hierarchy according to the principles outlined by Bennett displaced the RAAKS process, which was implemented to facilitate a participatory process to also design the project. From interviews with team members at the end of the process development stage it was evident that most saw the team's overall PAR approach as an evaluation process, consistent with the way in which Macadam et al. describe the role of evaluators in capacity building:

> Evaluators are best seen as facilitators of a negotiation process that culminates in consensus on better informed and sophisticated perspectives amongst stakeholders (2003:33)

This implicitly defines evaluators as the leaders of the change process, while other change mechanisms and agents are displaced. Yet evaluation activities have limited scope as a mechanism for organisational change if they serve primarily to validate and compare projects within an organisation. Evaluation activities often facilitate organisational learning in a way that facilitates learning within meaning schemes as they tend to address questions that derive from within the context of projects and organisations, rather than questions that transcend these boundaries, especially if validation and comparison are the objectives of such evaluation.

This raises significant questions about the role of evaluation in capacity building projects. Evaluation should be recognised as serving organisational needs, as opposed to broader community objectives. Perhaps this means we should recognise the limited scope of evaluation activities and should refrain from allowing evaluation activities to colonise the entire domain of capacity building in the way that occurred during the process development phase of the DSC project. This impeded the development of a project that could facilitate genuine transformation towards the construction of a post-productivist platform for change. Evaluation served to assimilate the project into prevailing ways of doing things within DNRE.

This does not mean that the Evaluation Support Team at DPI has no role to play in the organisational innovation process towards public administration practices that are more consistent with the emerging ideas of community capacity and social capital. However, in order to be effective it will need to explore appropriate and supportive evaluation tools and strategies.
that underpin capacity building processes rather than displace them. Furthermore, the evaluation team needs to abandon its use of Bennett's hierarchy as a one-size fits all approach. Overall, as the Evaluation Support Team was well-regarded within DNRE (and now DPI) and has developed quite a profile, it is possibly in a position where it can make a significant contribution to this innovation process.

4.4 Dealing with ambiguity

Overall, at the end of the process development phase team members were still struggling to establish a meaningful project identity around their approach to social capability building. Weick argues that sensemaking is the process of imposing coherence on a situation by selecting those meanings, imposing coherence and framing things in a way that is consistent with a sense of self (1995:27). There was no single, coherent and shared sense of self within the DSC project that provided the basis for collective sensemaking, for selecting and enacting some meanings over others. Convergence occurred around a number of competing project narratives, but at no stage was this convergence complete and total. Sensemaking of the project occurred by locating it discontinuously and fragmentarily in competing project narratives. At times it was constructed through the soft systems narrative, but at other times through the enactment of linear narratives such as those of evaluation and project management. In this process, the ambiguities were continuously reinforced.

Weick refers to this as a situation of equivocality, where information can be interpreted in multiple ways (Griffin, 2000:243). The experience of the DSC project team confirms Weick's thesis that in situations where equivocality is high, prevailing ways of doing things, or standard operating procedures, are unable to remove uncertainty from a situation. He argues that in organisations where there is too much stability and reliance on standard operating procedures and rules, the opportunity for innovation is compromised (ibid.:243-245).

According to Weick ambiguity provides the impetus for learning and change in organisations (ibid.:238). He suggests that a number of communication cycles, which involve an act-response-adjustment cycle that includes the diverse participants, are required to reduce the ambiguity (ibid.:244). However, in order to address and learn your way through the ambiguities they need to be visible, explicit and understood. In narrative terms, learning involves the construction of a new narrative that plots and reconciles the ambiguities of a particular situation (Clandinin,
2000:9). In Chapter 7 I discuss that as a result of the prevalence of the technical rationality model of practice within DNRE, the uncertainties and ambiguities within the DSC project were not explored and addressed adequately. Ambiguity and uncertainty were considered a threat.

Reflexivity and the need to problematise people's representations of the world is critical if we are to provide a space for other and different views and practices to be included in a post-productivist platform for change. Therefore, one of the challenges for change management practices within a post-productivist setting is to improve the reflexive performance of projects such as the DSC project. Advocates of reflective practice argue that participants in the research process need ‘… to discover and question the role of invisible fields, such as the way that perceptions, assumptions, and values inform what they do and think' (Groot et al., 2002:210). Much emphasis has been placed on perceptions, values and assumptions of participants; in other words on the way meaning is negotiated and constructed. However, the invisible fields that structure activities also include regimes of practice and structures of government and public administration. I argued that the ambiguities within the DSC project stem from the tension between the positivist epistemology of economic rationalism that underpinned the public administration tools and procedures that prevailed within DNRE on the one hand, and the constructivist epistemology that underpinned the community-based approach developed by the DSC steering group. The perceived neutrality and objectivity render the public administration tools and practices within DNRE as invisible fields, yet prevailing ideology is very powerfully embedded within them. This highlights that to improve the reflexive performance of capacity building projects, it is important to develop tools and methods that can attend to the ways in which meanings, practices and structures affect a platform for change.

4.5 Identity and change

In this chapter I have argued that towards the end of the process development phase the linear way of conceptualising change prevailed, whereby organisational development was conceived as a separate process that precedes community development. In fact, while the community featured very prominently in early meetings of the project, a network mapping exercise towards the end of this stage made hardly any mention of community stakeholders and featured internal audiences as the primary focus for the project. During the course of the process development phase the broader community of stakeholders was literally marginalised from the change process.
Furthermore, there was an inherent tension between the two aspects of identity construction, identification and differentiation. It were the soft systems and social science project narratives that afforded the team and the organisation opportunities for differentiation and change. However, as team members sought validation within the organisation, they located the project within positivist and linear narratives of evaluation and project management. In other words, by facilitating identification and seeking validation (the construction of similarity) team members engaged with project narratives that constructed the project in a way that subverted its distinguishing features (differentiation, or construction of difference). In constructing similarity, 'difference' was subverted and assimilated into prevailing ways of doing things.

The analysis of the process development stage challenged two key assumptions that underpinned my research when I first started; firstly, I assumed that learning and change involved a process of identity (re-) construction; secondly, I assumed that convergence within a platform was inherently positive and beneficial.

The first assumption was challenged when the team leader outlined her view of the project as being about the development of a learning system that is a dynamic and creative process that is always ongoing. This suggested that innovation, change and learning are as much about constructing identity, as they are about simultaneously escaping positions and identities. The soft systems project narrative outlined by the team leader implicitly conceptualised the change process as ongoing and fluid in a post-modern sense, where the innovation process is not just the construction of a new identity, or the development and badging of a new extension product or program, but about always being in the process of constructing identity, without becoming fixed or captured by a specific identity or way of doing things in a finite and singular sense. Innovation and change are dependent on the combined process of identification and differentiation, the inherent tension of which produces a dynamic that is ongoing.

The second assumption was challenged as it became clear that convergence was only ever partial and always contested. Moreover, convergence occurred not just through consensus building, inclusion and engagement, but primarily through marginalisation, exclusion and assimilation. Marginalisation and exclusion of land managers, for instance, occurred over the course of the process development phase. While the project began with an explicit aim to work with and as part of the community, on issues identified by community stakeholders and land managers, these stakeholders actually moved towards the periphery of the project as it
proceeded. This was already evident in the interview phase, which did not include a significant number of land managers. Through the construction of the project's Bennett's hierarchy - an evaluation narrative - this peripheral position of land managers was further consolidated. Furthermore, convergence in the project occurred by assimilating the soft systems and post-productivist aspirations, objectives and activities of the DSC team within broader productivist regimes of practice, which impeded the ability of the project team to differentiate itself from prevailing ways of doing things and hence impeded its ability to initiate change both within the organisation, as well as the broader community.

Processes of identity construction that prevailed in the project emphasised identification as the team sought validation within the organisation. This resulted in convergence around narratives that marginalised, excluded and assimilated. Yet, innovation and change are also dependent on differentiation, which involves challenging boundaries, opening up to others and different ways of doing things.

The experience of the DSC project team suggests that ambiguities should be explored and understood. Moreover, it is important to embrace the differences that exist within a project, rather than assimilate these into prevailing ways of doing things. In other words, the narrative that is constructed to reconcile ambiguities needs to create a space for diversity, instead of reconciling the ambiguities in a way that assimilates or marginalises what is different.

Consequently, it is important that platforms for change do not rely only on the process of identification, but also on a recognition and acceptance of difference and differentiation. Change management practices, in the context of both community as well as organisational development, often emphasise consensus and coherence as an ultimate outcome of the change process. Reflective practices within PAR approaches are often focused on the reduction of ambiguities to ensure coherence and consensus. While soft systems thinkers in the rural development context have argued that change is emergent from people's interaction within a system and have suggested that coherence emerges from the tension of differences (Bawden, 1997:4), they have generally not come to terms with the necessarily multiple and discontinuous pathways for change that result from such an approach. Bawden conceptualises the ongoing systems dynamic in modernist discourse that constructs the inherent tensions and differences in terms of a Hegelian dialectic between opposites - thesis and anti-thesis. From this dynamic, he argues, a 'glorious unity of opposites' (Bertalanffy (1981) in Bawden, 1990:311), or synthesis emerges. Yet, if we concede that the interactions within the system are multiple, simultaneous, multi-
directional and ongoing then the assumption that the change process, or the interactions within the system, will lead to a coherent, inclusive whole must be questioned (Frow and Morris, 2000:317). I would argue that as the learning system creates a dynamic where the world is created constantly, simultaneously, yet differentially, this suggests it is necessarily multidirectional, fluid and discontinuous. Furthermore, as this dynamic is always ongoing, narrative closure and unity within a platform may always be sought, but never achieved.

Shaw discusses the implications of the post-modern world we live in for change management practice, and argues that we need to develop the capacity or 'craft' of living and participating in such a complex world by learning…

… how we may live at times with a somewhat less 'safe' sense of self, as we experience changing and being changed by our sense-making interactions, as the enabling constraints we are mutually sustaining undergo spontaneous shifts. This is a capacity I think we need to strengthen in the increasingly fluid world of today's organizations and I am linking it to developing increasing appreciation for the craft of participation as self-organizing sense-making (Shaw, 2002:146).

The learning suggested by Shaw is a kind of post-modern learning where people learn the craft of being with others in an ever-changing world. According to Shaw this means learning to participate in processes where:

… multiple ways of making sense of what we are doing are more obviously in play simultaneously. I am interested in the way conflicting themes which are organizing our experience of working together emerge, propagate and change in the ongoing conversations in which I participate. I am not trying to gather in one place a 'microcosm of the whole', where a clear 'system of interest' has been identified, but rather working as part of loose webs of relationships both legitimate and spun through a multitude of other kinds of relating (ibid.:145-146).

This craft is one that facilitates ongoing learning in everyday settings, as opposed to learning in once-off workshops and processes. It also means we need to learn to live with others in a way that is based on a more fluid sense of self and community (ibid.:146). This is similar to the ongoing process of meaning transformation that is distinguished from learning within meaning schemes and learning new meaning schemes (Bawden, 1992:166). However, while Bawden remains committed to modernist notions of synthesis and unity, Shaw embraces diversity and difference in a way that challenges such modernist ambitions.

Learning theorists have argued that there are two types of learning. Single loop learning is about improving existing practices, where the underlying rules or principles are not in question.
Double loop learning, on the other hand, occurs when the essential principles of a situation are questioned and challenged. Double loop learning is similar to what is sometimes referred to as epistemic learning, which involves ‘… the deliberate breaking down and restructuring of mental models that support worldviews’ (Ison et al., 2000:39). This kind of epistemic learning requires that people are aware of and in some way monitor the epistemic nature of the problem they are dealing with, and realise where and why they understand a problem and potential solutions differently from the next person (ibid.:39). According to Ison et al. (ibid.:46) only then is it possible to achieve the kind of second order change that modifies the whole system, rather than first order change that involves improvements in the work we are already doing. Double loop learning then is about challenging and reconstructing people's identities and cultural foundations. However, epistemic or double loop learning is about learning to become or constructing a new identity, while the kind of learning Shaw refers to reflects post-modern complexity, contingency and discontinuity as it involves the craft of being in a world where we learn to live with an ambiguous, fluid sense of self in order to embrace diversity and difference.

Shaw's account is interesting in that it describes the imperatives of the post-modern change context very well. It challenges the totalising and unifying ambitions of many modernist change management practices. It serves to remind us of the inherent limitations of processes such as RAAKS and PAR. However, does this mean we should abandon change management practices altogether? In answering that question I would like to turn to the way in which some feminist, postcolonial and critical theorists have appropriated post-modern theory to enhance their continued commitment to a transformative and emancipatory politics. These authors argue that post-modern theory increases our awareness of difference, diversity and the limitations of our discourse, yet morally and ethically they remain committed to the modernist emancipatory project. These authors propose to use post-modern theory strategically to highlight the open-ended and contingent nature of their discourse. In land management and change management terms this means that we continue to aspire to sustainability, to double loop learning, to transformation and to identity construction, using our modernist theories of change, while also using post-modern theory to highlight their limitations, their open-endedness and inherent contingency (cf. Harvey, 1991, Hekman, 1990, Spivak, 1990). This will improve our reflexive performance and create a space for the 'other', for difference to be expressed, which is critical if we aim to construct a post-productivist platform for change that is inclusive of a broad range of stakeholders in the land management process.
So while change management and post-modernism are inherently at odds, the former can benefit from a close association with the latter (cf. Hekman, 1990). Therefore, unlike Shaw (2002), who suggests that we abandon many of our modernist change management practices and give way to the art of changing conversations in the workplace, I would suggest that we explore how to use post-modern theory strategically to intervene in and improve our change management practices and enhance our reflexive capacity.

Overall, the soft systems project approach aims to address some of the issues arising within the post-productivist agricultural change context. However, the above has highlighted that soft systems theory remains trapped within modernist discourse that aims for consensus and unity within a learning system. I would suggest that the use of post-modern theories of difference within the rural development context may help to embrace the diversity that characterises the agricultural change context. In fact, post-modern notions of change processes as multiple, fragmented and discontinuous logically follow from the soft systems argument that change is emergent.

In this thesis I have integrated post-modern theory and a focus on narratives within what I refer to as a narrative action research. This has provided me with the tools to make explicit the multiple and competing narratives that existed within a platform for change, and this has made difference and diversity explicit. In Chapter 7 I examine in greater depth how my supervisors and I contributed to the DSC project and I explore how the narrative action research approach that I implemented contributed to the reflexive performance of the DSC project.

4.6 Conclusion

The central concern of this thesis is the process of convergence by which a post-productivist platform for change emerged within the DSC project. In this chapter I have made the following points in relation to this:

- The ambiguities within the project resulted in significant discontinuity within the process development phase, which impeded the development of an inclusive platform for collective action. As productivist project narratives and organisational structures prevailed, ownership and control of the process remained with the DSC team.
As there was no single coherent narrative about the DSC project, sensemaking about the process occurred by locating it discontinuously in competing project narratives, including those derived from soft systems theory, social science, project management and evaluation. In this process the ambiguities were continuously reinforced.

Sensemaking within the team occurred primarily with reference to methods and tools, rather than methodology and theory. I have argued that to build the organisational capacity for community-based approaches, DPI will need to come to terms with and embrace constructivist, qualitative social research approaches as more than just a collection of tools and methods. Team members acknowledge this, but raise concerns about the accessibility of such approaches and theoretical concepts within a practice-based organisation.

The positivist evaluation activities associated with Bennett's hierarchy displaced the RAAKS process as a project development mechanism, and colonised the domain of capacity building. As the evaluation activities facilitated validation and identification within the organisation, they were limited in scope in terms of facilitating processes that aim to transcend organisational boundaries and practices. I have argued that evaluation activities should not displace capacity building strategies but support them.

Innovation, change and learning are as much about constructing identity, as they are about simultaneously escaping positions and identities. In other words, innovation derives from the dynamic tension between identification and differentiation.

In the case of the DSC project, convergence was only ever partial and always contested by simultaneous competing narratives. Furthermore, convergence within the project was negotiated through either marginalisation or exclusion of elements that were different, or through the assimilation of other and different elements, where their unique aspects were lost.

While participatory approaches often focus on consensus and coherence as an ultimate outcome of the change process, this thesis posits that it is important for platforms for change to be constructed not only through processes of identification, but also through a recognition and acceptance of difference and differentiation in order to avoid the abovementioned processes of marginalisation, exclusion and assimilation.
• The uncertainties and ambiguities within the DSC project were never adequately addressed. Yet reflexivity and the concomitant embrace of difference and ambiguity is critical if we are to provide a space for other views and practices to be included in a post-productivist platform for change. Furthermore, I have argued that to improve the reflexive performance of capacity building projects, it is important to develop tools and methods that not only attend to the way in which meanings are constructed, but also to the way in which practices and structures affect a platform for change. The narrative action research approach described in Chapter 2 holds promise as a methodology to achieve exactly that.

• There is a need to reconceptualise diversity and challenge the theoretical framework that underpins much of the current participatory rural development literature that focuses largely on consensus building. I have suggested that we use post-modern theory to improve the reflexive capacity in platforms for change, while simultaneously maintaining a firm focus on the idealist, modernist project of becoming, of transformation and emancipation, however partial and contingent this may be.
5

The pilot projects

5.1 Introduction

In Chapter 3 I argued that productivist regimes of practice and narratives prevailed in the project development phase. In Chapter 4 I argued that the tensions between productivist and post-productivist project narratives continued to plague the project during its implementation in the process development stage. In this chapter I explore the three pilot projects implemented by the Developing Social Capability (DSC) project in order to examine how the DSC approach contributed to the construction of a post-productivist platform for change within each of these pilot projects:

• In Section 5.2 I discuss the Topcrop pilot and highlight how the Rapid Appraisal of Agricultural Knowledge Systems (RAAKS) process contributed to a more systemic approach to stubble management that engaged a broad range of stakeholders in the change process. However, the process as it was implemented struggled to contribute to the kind of change that would move participants beyond productivist meaning schemes and ways of doing things.

• In Section 5.3 I discuss the implementation of the Environmental Best Management Practices (EBMP) pilot project. I argue that this pilot project operated within the parameters and meaning schemes of the EBMP project. As a result the pilot failed to move beyond the positivist framework within which this project operates.

• A similar argument is made for the FarmBis pilot, which is discussed in Section 5.4.

Before I discuss these pilot projects it is necessary to note that this chapter is based on analysis of notes of team discussions about the pilot projects, two rounds of interviews (11) conducted
with pilot project team members prior to and following their involvement with the project (of which I conducted the first round and other DSC project team members the second round, Interview Schedules included in Appendix 3), a selection of transcripts and notes of interviews (28 of 59) with pilot project stakeholders conducted by pilot project team members (see Interview Schedule contained in Appendix 3), notes of sessions conducted within the EBMP workshop (14) taken by pilot project team members (see Appendix 5), notes of pilot project team meetings (8) and documentation supporting the joint projects, including a discussion paper, a conference paper and the DSC project's final report. Apart from involvement in three meetings of one of the pilot projects (Topcrop), I did not participate as part of any of the pilot project teams, but my involvement in the DSC project team meetings continued throughout the pilot phase except for a three-month period in which I travelled overseas.

5.2 The Topcrop pilot

The first joint pilot project that the DSC team negotiated involved the Department of Primary Industries' (DPI) Topcrop project. This extension program works with the grains industry to increase farm sustainability. It does so through the provision of information and by working with groups of grain farmers to share information about farming practices and learn about new technology (Department of Primary Industries, forthcoming, Topcrop Victoria. Department of Primary Industries, 2003:2).

People involved in the Topcrop program believed that a pilot project that trialled the DSC approach would assist in the development of a greater understanding of the issues around stubble management. Grain farmers' choice of stubble management practice has both economic and environmental implications. (Topcrop Victoria. Department of Primary Industries, 2003:2). For example, while stubble burning is considered by some as an effective way of dealing with stubble, it raises environmental concerns about the loss of remnant vegetation, air pollution and soil erosion. Many people in the grains sector anticipate that this practice will be banned in the future. A stubble retention system on the other hand improves soil quality and yield in the long term, yet could result in stream pollution from greater chemical use for pest control (Topcrop Victoria. Department of Primary Industries, 2003).

Stubble management practices by grains farmers concern a broad range of stakeholders, including farmers, the broader community affected by pollution from burning, agronomists,
flora and fauna staff of DPI, the Environment Protection Authority (EPA), the Country Fire Authority (CFA) and Catchment Management Authorities (CMAs). Not surprisingly there are divergent views amongst stakeholders on what constitutes acceptable stubble management practice and as a result Topcrop facilitators find it difficult to provide consistent advice on stubble management to their farmer groups (Department of Primary Industries, forthcoming).

The issue of stubble management is one that has plagued the grains industry for quite some time and attempts to address this issue have been numerous. Just prior to its engagement with the DSC project, the Topcrop team was about to embark on a process to establish best management practices to deal with stubble. Topcrop staff were to conduct research into this issue through interviews with farmers and field trials. The results from this research were to be extended to growers in the conventional transfer of information mode and group discussion.

Instead a joint project was established between Topcrop and the DSC project to implement the DSC participatory action research (PAR) approach to identify how the broad range of stakeholders around stubble management could '...work together to reduce the environmental impact associated with managing stubble, while improving the effectiveness for production.' (Department of Primary Industries, forthcoming). As a subset of this objective, the joint project also aimed to determine DPI's role in improving the way stubble is managed in Victoria (ibid.).

### 5.2.1 Pilot project implementation

Two people from the Topcrop program were identified to work closely with the DSC team to implement the DSC approach that was based loosely on RAAKS. The implementation of the pilot project involved the following steps:

- identification of the stakeholders with an interest in stubble

- identification of the issues around stubble management through a number of interviews with stakeholders. This stage concluded with the preparation and distribution of a discussion paper that highlighted the issues and opportunities for change that emerged from the interview process (Topcrop Victoria. Department of Primary Industries, 2003)
• exploration of the issues and the identification of activities to improve stubble management practices in a workshop that involved representatives from the diverse stakeholder groups.

Implementation of the systemic RAAKS process meant that the Topcrop pilot project initially engaged a broad group of stakeholders that included people well beyond the conventional scientist-adviser-farmer relationship that characterises extension. During a brainstorming exercise a broad range of stakeholders was identified. This list was expanded during the interviews as interviewees were invited to identify further stakeholders. The final list comprised farmers, service providers, agronomists, representatives from the CFA, the EPA and Catchment Management Authorities (CMAs), but also end users of straw, conservationists from within and outside government, and a representative from the Asthma Foundation (Department of Primary Industries, forthcoming). Through a total of 52 in-depth interviews with stakeholders the pilot team explored how people perceived issues around stubble and stubble management, how people dealt with stubble, what opportunities people saw to improve stubble management practices and how they might work together to deal with stubble more effectively (see Interview Schedule in Appendix 3). Extensive notes of the interviews were analysed by the joint project team, using NVivo software. Findings were disseminated in a discussion paper that was distributed to pilot stakeholders (Topcrop Victoria. Department of Primary Industries, 2003).

The discussion paper highlights the complexity of stubble management. It provides a comprehensive description of the environmental, economic and social issues arising from stubble management practices and also includes a discussion of the various farm management practices, decision-making processes and criteria that lead to particular stubble management choices. These stubble management options broadly comprise stubble burning, stubble retention and the use of stubble off-farm. Farmers’ decisions on stubble management are based on issues relating to soil health, pests, weeds and disease, machinery availability, as well as environmental, social and economic concerns (Topcrop Victoria. Department of Primary Industries, 2003:5).

Perceived opportunities for improving stubble management reported on in the paper included the following strategies (Topcrop Victoria. Department of Primary Industries, 2003):
• more research and development, including the development of new machinery and technology; research into different farming systems to seek '… a balanced use of all management tools' (Topcrop Victoria. Department of Primary Industries, 2003:13); and specific research into microbial sprays and their effectiveness to break down stubble, plant breeding and stock feed supplements

• improvements in the skills of extension practitioners and the relationship between the extension agency and their stakeholders

• an exploration and expansion of potential end use opportunities, such as particle board, mulch, fuel alcohol and paper production

• financial incentives

• regulation and legislation.

The discussion paper concludes by raising a significant question about the emphasis that stakeholders placed on research and development as the key pathway for change:

The question that has to be asked is, is this always the right approach? Are there other ways of finding a solution? It is important to realise that research and development may not provide a magic potion. It may only be able to provide incremental gains that will hopefully lead to a solution (Topcrop Victoria. Department of Primary Industries, 2003:15).

The discussion paper invites readers to reflect on this and other issues raised in preparation for a workshop that involved representatives of the various stakeholder groups to explore these issues further and identify ways forward (Topcrop Victoria. Department of Primary Industries, 2003:15).

The 'Stubble Management Workshop' was conducted following the dissemination of the discussion paper. For this workshop a total of 80 stakeholders were invited, of whom 24 attended, including farmers and representatives of the CFA, DPI, the Department of Sustainability and Environment (DSE), machinery companies, the Commonwealth Scientific and Industrial Research Organisation (CSIRO), the EPA, local government, CMAs and Greening Australia.
In the workshop participants were taken through the following steps:

- a brainstorming exercise to identify options and approaches for stubble management
- an exploration of the advantages and disadvantages of the various approaches
- identification of questions and issues raised
- identification of actions to move forward.

Participants in the workshop committed to a total of sixteen actions that included the coordination and development of a clear policy of stubble burning across the EPA, CFA, DPI and DSE; research into stubble management methods, new products that use stubble, and specific technical and scientific issues relating to stubble; education of land holders on specific issues raised; following up of issues in farmer groups; setting up a stubble management workgroup in south west Victoria; and the development of a bibliography of resources and a website on stubble management.

Since the conclusion of the Topcrop pilot project, DPI staff developed an in-house policy paper to guide the development of a stubble management working group. The work involved in the development of a more formal policy document that would serve the broader range of stakeholders could not be justified within DPI. A stubble management working group was established, but to date it has failed to attract funding for projects. It has been able to set up a number of stubble demonstration sites for research and extension purposes and it is anticipated that these will provide the basis for funding in a next round of allocation.

### 5.2.2 Outcomes and benefits of the joint project

The Topcrop pilot delivered some significant networking benefits for participants. Connections between stakeholders were one of the main benefits reported by participants in the pilot project, especially for Topcrop staff:
I think probably the one thing that sort of excites me is … I’ve found a group of people in [name of town] called [name of company] who actually produce a building material out of compressed straw, and it’s a very environmentally friendly process that they use and essentially they produce a product that is being used in a lot of large scale building projects… It's pretty exciting that this straw could be used for something as useful as that and as valuable as that ... (Pilot team member, round one interview, October 2002)

[I will] try and build [or] consolidate a combined approach to stubble R&D that addresses the range of issues in an on-going, rather than 'band aid' fashion (Workshop participant, participant feedback, May 2003).

[I] will encourage native vegetation staff to work more with Topcrop staff (Workshop participant, participant feedback, May 2003).

According to a pilot project team member the process has brought together stakeholders who have not worked together in the past:

There’s the basis for society being able to be capable in its own sense. It’s just having a way to actually bring that out. That’s what this process does … Talking to the CFA, I keep coming back to that example, but it's just a good one, but they’re doing all this work on these permits for burning and so on, and if it wasn’t for this project we wouldn’t even know about that, and they wouldn’t even know that we really are looking at doing something to try and reduce the reliance on burning as well. And maybe we have goals in common and hence can work together (Pilot team member, round one interview, October 2002).

Furthermore, as mentioned in Chapters 1 and 3, the policy shift towards sustainability requires that agencies such as DPI recognise that their clients comprise not just the farming community, but the broader community of stakeholders in agricultural issues. The Topcrop pilot was able to construct a platform for change that achieved that. As one staff member argued, the DSC approach allowed it to move away from advocacy on behalf of farmers towards an inclusive approach that takes account of the broader range of perspectives that prevail in the community:

It’s opened us to broader ranges of stakeholders and helped us, yeah, not get locked in by any particular group of people, so we’re not trying to advocate for a particular group. We’re more interested in trying to get the whole story … This way we didn’t try and sell it from any one point of view (Pilot project team member, second round interviews, June 2003).

Apart from the connections made between stakeholders, many participants reported that their views and perspectives on stubble management and farming practices were challenged and broadened as a result of their involvement in the workshop:

It gave me an understanding of how complex cropping is. I will be more empathetic with farmers rather than judgemental, as they do have many complex issues to tackle (Workshop participant, participant feedback, May 2003).
I learnt a lot about possible end uses for straw and I now have a better understanding of the current stubble management options for different regions (Workshop participant, participant feedback, May 2003).

The joint project not only contributed to networking and shifts in understanding of the issues, but also concluded with the identification of action plans at the workshop. However, as discussed, follow up of these was limited. Such failure may be inherent to the RAAKS process, as Engel argues that:

…we can expect RAAKS to be powerful in generating new insights, understanding and proposals for designs involving new relationships, but since these last are typically based on verbal commitments alone, how strong can it be in generating tangible action? (1997:172)

On the whole, the above suggests that the pilot project succeeded in a re-appraisal of the issue of stubble management by taking a systemic approach that engaged a broad and diverse range of stakeholders in the issue.

However, in the case of the Topcrop pilot learning occurred within existing meaning schemes that involved primarily improving current ways of doing things. While the discussion paper raised the fundamental question whether the focus on research and technology development could provide the answer to stubble management issues (Topcrop Victoria. Department of Primary Industries, 2003:15), the workshop did not return to that question. Instead the workshop operated from within the research and technology development paradigm. Options for change discussed at the workshop included legislation, regulation, incentives, information dissemination, research and technology development. All of these are about doing more of the same, but better.

This lack of learning beyond meaning schemes was exacerbated by the limited time available to implement the pilot project and the single workshop organised was not enough to allow for adequate synthesis of information gathered in the interview phase of the RAAKS process. Furthermore, in the Topcrop workshop the different views of stubble management were discussed alongside one another. The ambiguities and conflicting world views that underpinned these were never made explicit or explored. The workshop shied away from exploring the uncertainties and ambiguities that derive from the tensions between the environmental and economic imperatives of stubble management. The overall process implemented in the Topcrop pilot moved very quickly from an appraisal of stubble and the different perspectives and issues
on it (RAAKS phase A), towards action planning (RAAKS phase C), without adequate reflection on these perspectives and issues (RAAKS phase B).

The windows and tools for phase B of the RAAKS process (see Appendix 2) provide a number of activities that make explicit the different ways that participants make sense of a situation. For example, window B1 is designed '… to understand the ways different actors makes sense of their own individual performance, and what they expect from a joint effort' (Engel and Salomon, 1997). Window B3 asks participants to reflect on the types of knowledge that are important for the successful performance of the system, while window B7 explores communication between participants, asking whether people 'speak the same "language"' (ibid.). Reflection on such questions could have contributed to what Engel refers to as the social organisation of innovation (Engel, 1997). Such reflection may have enhanced people's awareness of the limits of their ways of knowing and opened them up to new communities of meaning, thus facilitating learning beyond prevailing meaning schemes.

Overall, the Topcrop experience suggests that a short-term project such as the DSC project can be successful in engaging a diverse group of people in an issue. However, it struggled to contribute to the kind of change it set out to deliver. Productivist narratives prevailed in the Topcrop pilot, as pilot activities were located within a narrative of change that privileges research and technology development as the impetus of change. The plot in this narrative of change revolves around the development of new science and technology to improve environmental outcomes, while simultaneously maintaining or even improving productivity outcomes. While this pilot project did set out to be more inclusive of the diversity of stakeholders in stubble management, the main characters in this plot are nevertheless scientists, farmers and extension officers. Hence, the platform for change that was constructed in this pilot was a productivist one. In fact, it could be argued that at the conclusion of the pilot project, the Topcrop team was back to the position it started from: implementing field trials and establishing demonstration sites for extension purposes. Moreover, staff involved in the pilot project moved on to other programs or resigned from DPI. Nevertheless, following recent public concern about stubble burning, almost a year after the conclusion of the pilot project, the manager of the Topcrop program has proposed to further the systems PAR approach to deal with the issue (Team member, email, June 2004).
5.3 The Environmental Best Management Practices pilot

A second pilot that was established involved DPI's Environmental Best Management Practices (EBMP) project. The EBMP project started in February 2000 with the development of a set of benchmarks for environmental management practices on farms. This benchmarking process took one and a half years and involved a large number of farmers in south west Victoria. Two workbooks were developed, one of which included ten worksheets that take farmers through a self assessment process, and one action planning book that allows farmers to record how they are intending to improve environmental practices on their properties. These workbooks were tested with farmers before facilitators were employed to work with approximately 400 land managers across 22 catchment groups in the Corangamite and Glenelg Hopkins catchments in south west Victoria.

Facilitators implemented the EBMP project in three stages. In the first stage farmers used the workbook to assess and benchmark their environmental management practices against others in their catchment and across south west Victoria. While farmers undertook their own assessments, facilitators collected and collated their data. One of the outcomes of the EBMP project is a database with extensive information about environmental practices in each of the catchments.

At stage two, farmers were provided with aerial photographs of their properties to assist with the development of action plans to improve their environmental practices. In a third stage of the EBMP project facilitators tried to encourage farmers to work together as neighbours or sub-catchment groups in order to develop local area action plans. It was anticipated that this would eventually lead to a more co-ordinated approach within catchments. However, while farmers were brought together in groups to discuss their results, the EBMP project had not yet succeeded in facilitating local area action planning at the time that the joint project with the DSC project was negotiated.

The joint project between the EBMP and DSC projects was negotiated with the EBMP project leader and through discussions with a small number of facilitators in the project. It was decided that it would explore and improve ways to facilitate collective action within the catchments through the implementation of DSC's PAR approach. A secondary aim of the pilot project was to explore DNRE/DPI's role in facilitating collective action in the catchments.
The outputs of the joint project were anticipated to include new approaches to addressing issues associated with community involvement in improving catchment health in south west Victoria; a PAR based extension 'package' for the EBMP project that could be applied to other natural resource management programs across the State; communication and extension of this package to a wider DNRE audience; and reports detailing the effectiveness of PAR as an extension model within DNRE.

DSC team members, in consultation with the EBMP facilitators, designed the process to be implemented in the EBMP pilot. This process included the following steps:

- a literature review about community involvement in improving catchment health
- identification of the system and people to be involved through a network mapping exercise with the EBMP project manager and some EBMP facilitators
- identification and exploration of the issues around community involvement in catchment health through a workshop based on the principles of Open Space Technology (OST) (Owen, 1992) and follow up interviews
- analysis and synthesis of information collected in the workshop and interviews, to be presented in a discussion paper
- identification of pathways for change, solutions and implementation strategies through a workshop with key stakeholders
- packaging, communication and extension of these.

The EBMP pilot project operated under significant time constraints. Unlike the Topcrop pilot, the work involved in the EBMP pilot was over and above the job descriptions of the EBMP facilitators. Time constraints were further exacerbated by the fact that both projects were close to running out of funding, which meant that only six months was available to implement the pilot project. As a result, the EBMP pilot only completed a number of the steps outlined above.
5.3.1 Problem definition and stakeholder engagement

As mentioned above, the initial problem definition on which the pilot was to focus had been developed during the negotiation process to establish the pilot project with the project manager and some facilitators. Once the joint project was established two members of the DSC team worked primarily with two facilitators of the EBMP project to implement the PAR approach. Initially, DSC team members were the main drivers of the joint project as the EBMP facilitators had no experience and very little understanding of the process.

The pilot project team decided on a literature review as a first step in exploring the issue of community involvement in catchment health. Key themes the team sought to explore included the rationale for community involvement in catchment health, factors affecting people's involvement, and ways in which people become involved. The team identified key references and allocated tasks to conduct the review. However, the literature review was eventually abandoned in the face of severe time constraints.

Another step was to define the system and its stakeholders. This occurred through a network mapping exercise that involved the joint pilot project team. The list of people with an interest in community involvement in catchment health that was generated as a result of the network mapping exercise was used to invite people to attend a workshop to explore the issue further. At the time of planning this next step, several people within DPI had participated in a course and an international conference on OST conducted in Victoria that year. As a result there was enthusiasm and interest in this method amongst staff in DPI.

OST was developed by Owen (1992). Workshops designed according to the principles of OST invite people to participate in a forum organised around a specific theme. At this forum participants are given the opportunity to set the agenda as they are invited to convene discussions around issues relating broadly to the theme of the workshop that they feel passionate about. The forum becomes a self-organising workshop with participants taking responsibility for the sessions they run. Proceedings of the discussion groups are shared amongst participants.

Someone with considerable experience of the OST method advised the team on how to implement it appropriately. However, the principles of OST clashed with the objectives of the overall PAR process implemented in the pilot, which is much more structured than the OST process. OST workshops are designed as stand-alone events and are based on principles that
suggest that 'Whoever comes is [sic] the right people'; 'Whatever happens is the only thing that could have'; 'Whenever it starts is the right time' and 'When it is over it is over' (ibid.:70). Yet in the case of the EBMP pilot, the OST workshop was part of a comprehensive, systemic approach, which meant that whoever was there did not necessarily include the right people, and that more needed to happen following the workshop, and therefore the process was not over when the OST workshop concluded. The systemic approach required that the team capture the diversity of views in a more structured and comprehensive manner than the OST workshop allowed for.

I expressed my concerns about the choice of OST as a method for phase one of this pilot project. I thought that this method had been selected without careful consideration of the aims of the joint project and the range of methods available to achieve the goals of phase one of the PAR process. Furthermore, the interviews with EBMP facilitators and discussions with the EBMP project team indicated that dairy farmers (one of the key stakeholder groups in the project) would be unlikely to attend a day long workshop.

In response the pilot team attempted to overcome the limitations of the OST workshop by taking extensive notes during sessions and by subsequently making these available for analysis in order to write a discussion paper. The team also conducted follow-up interviews with those unable to attend the workshop. Combined these strategies served to provide the team with a more comprehensive set of notes and information upon which to base a discussion paper, which in turn could provide the basis for action planning. However, the ambiguity about the selection of methods was never reflected on with reference to the principles of the process that we were trying to implement or any theories of social capability and change management. It was decided that time and resource constraints did not allow the team to implement other methods.

The invitation for the OST workshop to potential participants was expressed in broad terms by means of four focus questions to entice participation. These questions were:

- How do catchment management activities and local environmental actions happen in your community?

- Who does what? Some people work in groups, others don't. What are the results of the different approaches?
• What activities have inspired you?

• Where have unexpected things happened when communities work together?

A total of 35 people attended the workshop including land managers and representatives of local industry, Landcare groups, CMA's, Greening Australia, 'Friends of...' groups, consultants, the local council, the EPA and water authorities. Topics raised and discussed at the workshop focused on issues relating to community involvement in the catchment, but also on broader environmental issues faced by participants (a list of workshop sessions is included in Appendix 5). The emphasis in these sessions was on open ended exploratory and free-flowing discussion of the issues raised.

OST events are often constructed around an almost spiritual atmosphere that aims to take people along on a satisfying journey of collective productivity. Owen suggests that the process generates and is generated by love (Shaw, 2002:142). While the EBMP pilot workshop was never characterised by such a description, it was nevertheless conducted in a way that aimed to generate a sense of community and coherence amongst participants. In the process, issues were again raised alongside one another in a way that allowed people to participate from within prevailing meaning schemes. The workshop failed to address and explore in depth issues of misalignment, ambiguity, uncertainty and diversity that exist in relation to environmental management and catchment health. In critiquing OST Shaw suggests that the emphasis on a sense of community can only create a very temporary sense of fellow-feeling that fails to come to terms with the multiple and conflicting ways of making sense of a situation (Shaw, 2002:145).

Nevertheless, the OST workshop conducted as part of the EBMP pilot was considered a success. It provided team members with an opportunity to trial a new and innovative method as part of the PAR process, and according to May et al. (2003:8) 'it proved to be … an entry point for participation and potential involvement of stakeholders'.

5.3.2 Synthesis of information

Following the workshop, the EBMP pilot team conducted a further twelve interviews with representatives of stakeholder groups who did not attend the workshop (Interview Schedule
Pilot team members participated in a training session to familiarise themselves with NVivo to allow them to analyse the data obtained from interviews and workshop sessions. From this analysis a discussion paper entitled 'Insights into Community Involvement in Catchment Management' was to be generated to provide the basis for the action planning phase of the project. However, it was never completed.

At this point allocated time ran out for the implementation of the pilot project. Nevertheless, DSC team members reported at the time that EBMP facilitators were convinced by and committed to the DSC process and continued to work on aspects of the joint project well beyond its official conclusion date. It was anticipated that the DSC PAR process would continue to inform EBMP project development into the future (May et al., 2003:9). However, since the conclusion of the pilot project, EBMP pilot team members have left the project or the organisation.

5.3.3 From RAAKS to PAR

What distinguished the EBMP pilot from the Topcrop pilot was that in implementing the DSC approach it shifted further away from RAAKS and implemented a PAR strategy that still reflected some of the ideas of systems thinking, but very much worked from within the constraints of the EBMP project and its main concerns.

The structure of the pilot project followed that of a research process in that the team conducted a literature review, collected and synthesised data and aimed to produce a report to provide the basis for action planning. The research aspect of the project came very much to the fore, as the EBMP pilot was located within PAR discourse that diverged from RAAKS. It worked within the parameters of the EBMP project as it aimed to develop ways in which to improve collective action and co-operation within the catchments. This was negotiated with and relevant to DPI staff; however, such learning does little to improve environmental practices per se. It was PAR in the sense that EBMP facilitators participated actively in the research process, but it was not RAAKS, as it did not create a new forum or system that included a broad range of stakeholders in (re-)defining the issues around environmental management in catchments. In reflecting on this well after the project had concluded, a DSC team member suggested that:
One key ingredient I think was missing (in my mind anyway) with the 4-step PAR compared to RAAKS, was that the problematic situation needed to emerge from the stakeholders in the system, not be based on 'management' or the extension officers 'problems' alone. My impression is that neither [DSC team member] or [DSC team member] fully understood this at this point either or did not know how to put it in practice during negotiations - as they were involved in the first meeting with [name of EBMP project team member] in EBMP … where the issue of 'collective action' in catchment management … was selected for the EBMP pilot. Now I see this was an issue about how the Department and the EBMP project could facilitate collective action - our practice - not something other stakeholders necessarily saw as a situation which warranted attention … But it was EBMP's, or in a broader sense, extension officers' practice we were trying to 'develop'. 'Whose practice?' is a question I needed to be asking to be true to RAAKS, but was not asking. Looking back on this is a real point of frustration for me. And similarly with the FarmBis pilot (Team member, email, November 2003).

In Chapter 3 I argued that community engagement and social capability building processes are at times constructed in positivist discourse, where the rationality of government prevails and whereby communities are 'governmentalised' (Rose, 1996:353) as they are made visible and calculable by rational assessment procedures implemented by government. Within the EBMP pilot the development of a set of benchmarks for environmental management practices on farms, the subsequent implementation of a process to assist farmers in assessing and improving their own practices, and the development of a database that maps environmental practices across catchments using standardised assessment criteria, were all manifestations of a rational and scientific approach to environmental management. This kind of community involvement does 'yoke' (Dean, 1996:61) the behaviour of farmers to conform to a rational mode of behaviour (Higgins and Lockie, 2002:426). This was not always a smooth process, and comments by EBMP facilitators suggested that farmers often did not take easily to the format of the EBMP workbooks. While farmers were consulted in the development of the benchmarks, and while the EBMP project team was responsive to farmer needs and displayed great willingness to continuously improve their tools to assist farmers, their approach nevertheless privileged a rational and scientific way of knowing. As such the EBMP project did not create the space for the construction of environmental practices within catchments that reflected the diversity of knowledge frames of the range of participants within it.

The DSC approach was about creating a post-productivist platform for change that was based on a constructivist perspective that was to create a space for a diversity of participants and their different ways of knowing and doing things. The principles underpinning the DSC project emphasised the need to involve people in the identification of issues and solutions for change in a way that would open up a broad range of pathways for change. However, in remaining within the parameters of the EBMP project, the pilot project operated within a positivist framework
that outlined a single pathway for change through the use of benchmarks. While the overall goals of the EBMP project team are worthy of respect, the positivist approach they used both within the project itself and the pilot, becomes a mere 'tool of government' that marginalises other ways of knowing and doing and consequently alienates or excludes farmers and other non-government stakeholders from active participation in the change process.

5.3.4 Outcomes and benefits of the joint project

The final DSC report indicates that the main benefit of implementing the DSC approach in the EBMP pilot was the way in which the approach made the pilot team think more broadly about who the project's stakeholders were and enabled them to extend their networks (Department of Primary Industries, forthcoming). Pilot team members said they changed the way in which they operated as a result of their involvement in the pilot project, as they were usually involved in informing farmers, while the pilot project had made them realise the importance of listening to and questioning farmers before developing plans and strategies. Pilot team members also developed a greater knowledge of what others involved in catchment management were doing to improve environmental management.

The DSC final report concludes that participants in the pilot team showed significant shifts in their learning about the process, about social capability, and about the way in which the PAR process can contribute to social capability. However, the pilot project was significantly constrained by time and resources issues, and while the project may have increased participants' understanding of the broader system in which they were involved, it fell a long way short of achieving its goals in the limited time available. Furthermore, by operating within the parameters of the EBMP project, the pilot remained trapped within a positivist framework that did not allow it to establish a post-productivist platform that was truly inclusive of the diversity of people involved in catchment management by creating a space for them to perform their identities.

Despite some of the difficulties in achieving the goals of this pilot project, it generated a lot of exchanges between DSC team members (including myself) about the methods and methodologies that underpinned this pilot project. Since the conclusion of the DSC project, we have explored through emails and telephone conversations some of the ambiguities and difficulties presented by this pilot project and have done so with reference to theories of change.
management, such as soft systems theory. The ambiguities and difficulties associated with this pilot project generated a lot of reflection and learning about what it was the DSC project was grappling with and how this may be achieved, more so perhaps than any other aspect of the DSC project. If the DSC team had been able to build on and capture this learning and share it with others, this pilot would have been successful as a true pilot, a testing and learning opportunity for DPI. However, the final report glossed over the ambiguities and uncertainties, focusing primarily on the achievements of this pilot project.

5.4 The FarmBis pilot

The third pilot negotiated by the DSC project team was one that worked with the fisheries group of the FarmBis program to enhance participation of indigenous people in aquaculture education activities. Following negotiations with several other projects, the FarmBis pilot was established very late in the course of the DSC project. As a result it suffered from significant time constraints, but nevertheless managed to secure outcomes that were considered favourable by its participants.

While I participated in discussions about this pilot at DSC team meetings during the time that the pilot was negotiated with FarmBis representatives, I had no involvement in its implementation, as I was overseas during this period. The account below is based primarily on the way in which the project was discussed in the DSC team meetings prior to its implementation, the final DSC project report, a conference paper written about the DSC project (May et al., 2003) and pilot project documentation.

The FarmBis program is an initiative funded jointly by the Commonwealth, State and Territory governments and provides financial assistance to primary producers to participate in business and natural resource management training programs. In Victoria the FarmBis program is delivered by the Rural Finance Corporation and DPI. The program aims to improve primary producers' '… business practices to make them more self-reliant and improve the profitability, productivity and sustainability of their enterprises' (Department of Primary Industries, 2004).

One of the goals of the FarmBis program is to increase participation of indigenous people in training and education activities (Department of Primary Industries, forthcoming). The FarmBis fishing industry co-ordinator saw a joint project with the DSC team as an opportunity to
implement a systemic PAR process to engage Koori people in discussions about their learning needs in aquaculture. The DSC project team saw co-operation with the FarmBis program as an opportunity to challenge that program's emphasis on training, as opposed to learning:

I remember a conversation I had with the pilot team early on in the process. I described to them a radio report I'd been listening to in the car about a Steiner school activity, where the kids were involved in building a barn and had learnt a lot of things about maths, geology, building materials etc. etc. on the way. As a group we discussed that the challenge for FarmSmart was to accept that people can learn what they need to learn without attending formal training sessions (DSC team member, email, June 2004).

A pilot project team was established that included two DSC team members, the FarmBis fishing industry co-ordinator, a senior fisheries officer and a development officer for the local Koori community.

5.4.1 Negotiating the pilot project

The concern about the process of 'government through community' that seeks to assimilate people into regimes of practice that serve the priorities of advanced liberal governments (Dean, 1996, Rose, 1996) that was raised in relation to the EBMP pilot, is even more pertinent in the context of the FarmBis pilot. However, this time these issues were discussed and debated within the DSC team.

The decision to focus on finding ways to engage Koori people in aquaculture education activities was made despite concerns raised in team meetings about the viability of aquaculture and the environmental issues surrounding it. Team members, including myself, questioned whether it was really in the interest of Koori people to become involved in aquaculture. The viability of aquaculture was questioned, as were the environmental implications of this industry. This raised a further question about why the joint project should focus on aquaculture, why it did not just focus on a much broader question about community development or well-being in the Koori community and explore where FarmBis could contribute to this. However, these concerns were sidestepped as there was a strong sense in the DSC team that the pilot project needed the FarmBis program's 'buy-in' in order to be perceived as successful within DPI. The needs of the FarmBis program and its concerns about aquaculture and Koori participation then were first and foremost in the joint project. Again, as a result, the DSC project worked within the parameters of a government-initiated program in a way that failed to challenge its ways of
knowing and doing. The aim of the pilot program was to deliver results to the partner program, rather than to the broader system of stakeholders. The pilot project then was no more than a PAR process that focused on issues that are relevant to government in order to improve FarmBis practices and to establish rural indigenous subjectivities through which government programs and objectives are operationalised and achieved (Herbert-Cheshire, 2000:208, Raco, 2003:76, Rose, 1996:347).

This represented the very scenario that the DSC project was trying to redress - it focused on and worked within the parameters of problem situations identified by the department itself, instead of engaging the broader range of stakeholders in (re-)defining problematic situations. It also represented the kind of scenario that post-colonial scholars are concerned with, as in the change management process a relationship is established between the knowing subject (self) - government staff - and its object (the other) - the Koori community - in a way that aims to be emancipatory and empowering, but actually erases and denies the subjectivity of the latter (Mohanty, 1991, Spivak, 1990).

5.4.2 Exploration of the issues and identification of ways forward

The exploration of issues around indigenous participation in FarmBis fisheries' education activities occurred in a less formal way than had been the case in the Topcrop and EBMP pilots. A list of questions was developed to provide the basis for a 'Walk and Talk' session (included in Appendix 6) whereby pilot team members were shown around an aquaculture enterprise run by the manager of the local indigenous community centre. Conversations were also held with a local state politician and the local development officer for the Koori community.

Instead of the more formal data analysis process conducted in the other two pilot projects, the information gleaned from the 'Walk and Talk' sessions was discussed in face to face and email discussions. As a result of the above, a process that involves indigenous people in developing their own learning package was developed and implemented. This final step occurred after the conclusion of the DSC project, reflecting the commitment of pilot team members to the DSC approach. One of the issues that had emerged was that indigenous people often undergo training programs that do not identify employment opportunities at the completion of the training. A key feature of the learning program that was developed as part of the pilot program was that it did identify such opportunities (Department of Primary Industries, forthcoming).
5.4.3 Outcomes and benefits of the joint project

Pilot project team members reported that the joint project with the DSC team had been very successful in improving their understanding of ways to engage indigenous people (Department of Primary Industries, forthcoming). What they liked about the approach was the flexible and emergent nature of the process, which was thought to be appropriate for working with indigenous people (ibid.). Furthermore, the approach enhanced team members' networks with other departmental staff and stakeholders.

The experience of people involved in this pilot project was overwhelmingly positive. For example, a development officer for the local Koori community suggested that:

> The aquaculture training program at [location] received extremely positive feedback from the participants. I must commend the efforts of the trainers in achieving appropriate rapport, trust and respect from the group. This is a major factor in achieving the desired outcomes for all parties involved. It is an extremely challenging task, delivering training programs to indigenous groups …. Since the introduction of [pilot team member] and his team the morale and motivation levels have improved considerably. If this can be kept up the results are anticipated to be a role model program for indigenous and mainstream groups in other areas (Letter, October 2003).

Pilot team members suggested they would continue to use the approach in future project design and planning processes (ibid.).

While the reported success of the FarmBis program is very encouraging and has enhanced FarmBis training development practices, indigenous people did not participate in the development process. Their voice is only heard through FarmBis or DPI staff. Despite the success of the project, questions remain about whether the pilot project served the needs of the targeted community, or only those of the FarmBis program and a very limited subset of the Koori community. Only by speaking with the diversity of stakeholders (including the broader Koori community) will DPI be able to construct a post-productivist platform that creates a space for the diversity of stakeholders to participate actively in the change process.

Overall, the discussion of the three pilot projects so far has raised significant issues about the role of government in community capacity building projects and the way in which governments establish platforms for change that serve their needs, and as a result marginalise other and
different ways of doing things. Convergence within such platforms assimilates 'other' stakeholders within prevailing ways of doing things.

5.5 Conclusion

In Chapter 3 I discussed DSC project development by the purchaser group in DNRE. I began to outline and diagnose where the construction of an inclusive post-productivist platform for change was compromised, highlighting how social capability can be constructed in positivist, productivist terms, as well as post-productivist terms. I argued that prevailing public administration practices within government subvert the construction of an inclusive post-productivist platform for change. In Chapter 4 I discussed how the project was further developed during the first stage of implementation and highlighted that the tension between productivist and post-productivist project narratives continued to plague the project. During the process development stage, convergence within the project was only ever partial and temporary, and it was negotiated through marginalisation, exclusion or assimilation of participants into regimes of practice that privilege government ways of knowing and doing.

In this chapter I have discussed the implementation of three pilot projects that aimed to implement the DSC approach that sought to create a more inclusive community engagement process that provides a space for a diversity of people to contribute to the rural development process. While the pilot projects were perceived to be successful in extending the networks of participants involved, none of the pilots challenged prevailing meaning schemes and ways of doing things in a way that would allow participants to make sense of and embrace difference and diversity and as such participate in new communities of meaning.

Through the pilot projects, the government constructed platforms for change that assimilated and marginalised difference. I have argued that the DSC project remained trapped in the very practices, structures and meaning schemes it was trying to redress. It worked within the parameters of problem situations identified within the department, instead of engaging other stakeholders in the definition of problems statements and the development of solutions. In doing so, the project had shifted from the systemic RAAKS process to a more generic PAR approach.
In Chapter 6 I explore how integrity with post-productivist platforms may be facilitated, while in Chapter 7 I explore how the reflexive performance of projects such as the DSC project may be improved in order to better embrace diversity and difference.
6
Integration within a post-productivist platform for change

6.1 Introduction

When I first started this research I was working with the assumption that co-operation within a platform for change required what I then referred to as 'shared identities'. Following the initial literature review and data collection, I realised that this notion of shared identities was problematic. People do not share identities, but they may share cultural and identity narratives in particular social settings. In my data I explored how, when and where people converged within the context of the Developing Social Capability (DSC) project. As discussed I found that convergence occurred around multiple, simultaneous, yet competing project narratives. At no stage during the life of the DSC project was there comprehensive, ongoing and stable convergence around a single project narrative.

As discussed in Chapters 3, 4 and 5, convergence within the project was built on a process of identification at the expense of differentiation and difference. The post-productivist aspirations of the project team were subsumed within the dominant productivist regimes of practice of the organisation. The experiences of the DSC project highlight how important it is for platforms for change to be constructed not only through processes of identification, but also through a recognition and embrace of difference and diversity. As Bawden (1997:4) argues, coherence is to be derived from the tension between differences, or dissensus, rather than consensus. The aim of this chapter is to discuss how integration and cohesion amongst the diversity of stakeholders in a post-productivist platform for change can be facilitated in a way that better accommodates and embraces difference and diversity. It aims to contribute to the way in which capacity building projects facilitate convergence around substantive issues in conditions of diversity and difference. In the next chapter I add another layer to this by focusing on improving the reflexive
performance within such projects, in order to deal more effectively with diversity and difference.

In Chapter 1 I defined a platform as the structure or social configuration that facilitates collaboration between stakeholders on an issue. The success of a platform for change depends on some degree of integration between the diverse participants - without it collaboration is impossible. Paine (1997:167) argues that '[i]ntegrity combines the unity of the actor … with unity of the community…, integrity is an integration of value systems'. The kind of integration that is implied in this definition is one that is premised on the construction of sameness and identification - in this case shared values. I propose to work with a different notion of integration. The Australian Pocket Oxford Dictionary (Moore, 1993:555) defines the meaning of the word 'to integrate' as to 'combine (parts) into a whole'. It is in this sense that I refer to the word integration. Such integration requires mutual recognition (Wenger, 1998:56), as well as recognition of mutuality (Aarts and van Woerkum, 2002:421), but not necessarily an integration of value systems.

Mutuality is constructed through what I refer to as the site of integration around which a platform for change is constructed. By site of integration I mean that aspect, point, place or unit that facilitates a sense of 'wholeness' and cohesion within a platform through mutual recognition and recognition of mutuality. The aim of this chapter is to explore the various sites of integration that have emerged within the case study, but also more broadly in land management practice and theory.

At this point it is important to explain the apparent contradiction between the post-modern position that is evident in this thesis on the one hand, and this search for integration or 'wholeness' on the other. I have argued that it is important to aspire to sustainability and by extension to learning and change. We therefore cannot (and choose not) to avoid modernist attempts to construct coherence and stability in an uncertain and unstable environment. However, my search for integration is one that recognises that any sense of wholeness and coherence is only ever that - a sense. It does not imply that such coherence is 'real', inclusive, complete and comprehensive; rather it is always incomplete and contested. The exploration below aims to contribute to our understanding of how various sites of integration are constructions that include, but also exclude, marginalise and assimilate people. It challenges any totalising and fixed sense of cohesion that may exist.
It is my experience that in change management practice very little attention is paid to sites of integration and how these affect participation of stakeholders. Initiatives are variously organised around landscape (for example, the Department of Primary Industry (DPI)'s Our Rural Landscape program), an issue (the Environmental Best Management Practices (EBMP) and FarmBis pilots), an object (the Topcrop pilot) or a community (the Victorian government's Community Capacity Building Initiative (CCBI)), often without any explanation or exploration of why the platform is constructed in this way. Yet as is discussed in this chapter, the site of integration around which a platform is constructed has significant implications for the way in which diverse participants are included in the rural development process.

In what follows I discuss and explore 'community' (Section 6.2), 'problem/issue' (Section 6.3), 'practice' (Section 6.4) 'material substrate/object' (Section 6.5) and 'landscape' (Section 6.6) as sites of integration for a platform for change in order to draw some conclusions about facilitating integration amongst a diversity of stakeholders within a post-productivist platform for change (Section 6.7).

6.2 Community

In designing community capacity building initiatives Victorian government agencies have generally developed broad catch-all approaches that focus on community capacity building per se, without initially specifying an issue, practice or product that could limit the scope of participation. This also characterised the initial approach taken by the DSC project team. As discussed in Section 3.3.1, the Monash Regional Australia Project (MRAP) report proposed that the DSC project implement a five-step plan to build social capability in rural communities in Victoria. The first step involved the development of a systematic profile of a number of case study communities and this was to provide the basis for subsequent stakeholder engagement, the identification of priorities for that community, and action planning. The DSC project brief similarly conceived of the change process as starting with the identification of the system, that is, 'people with an interest in natural resource management as it relates to agriculture'. The induction course for the DSC project team was also based on this notion of community as the site of integration around which to structure the project. The course was designed around an exercise where project team members were to implement the Rapid Appraisal of Agricultural Knowledge Systems (RAAKS) process in communities of interest and place around Victoria, for which extensive information was made available. When actual project implementation
commenced, the DSC team began with a brainstorming exercise of the stakeholders in the food and agricultural sectors, who have an interest in natural resource management and the triple bottom line agenda. As discussed in Sections 4.2.1 and 4.2.2 many of these stakeholders were interviewed and invited to focus group discussions. In this phase of the project various people participated, however, no sense of mutuality emerged and hence no platform was constructed from which the project could launch into the pilot phase of the DSC project.

The assumption that underpins the approach undertaken in this initial phase of the project is that a system or community is a reality that exists as a building block for capacity building that merely needs to be identified and invited to participate. This approach is characteristic of many capacity building approaches. For example, the Victorian government's CCBI that was implemented at the same time as the DSC project, began its approach by issuing '… an open invitation to small rural communities to participate in the CCBI' (Department of Primary Industries, 2002:1). This system or community then provides the site of integration around which convergence within the project is to occur.

Underpinning such approaches are definitions of community that emphasise what people have in common. For example, the community-building website developed by the Victorian government conceives of a community as

… a local area, neighbourhood, suburb or town. But a community might also be a group of people who have common interests or problems they want to address. They may share social or cultural backgrounds, or hold similar aspirations…(State Government of Victoria, 2002).

Cavaye, whose work informed the Queensland government Department of Primary Industries and was circulated within the DSC team, suggests '… a community is a collection of people that share something significant in common' (2000:7).

Approaches built around the notion of system or community as a pre-existing and objective entity tend to emphasise shared values, norms, and unity as necessary requirements for collaboration. This concept of community is imbued with relatively unproblematic and essentialist notions of convergence and integration. Yet, as Somers & Gibson argue:

… there is no reason to assume a priori that people with similar attributes will share common experiences of social life, let alone be moved to common forms and meanings of social action (1994:79).
Moreover, when such convergence does occur, it must be questioned. A critique of the concept of community that conceives of it as a naturally existing and objective entity is well-developed within the discipline of anthropology (Gupta and Ferguson, 1997a, Gupta and Ferguson, 1997b). It is argued that:

Studies of ethnographic writing have revealed the apparent boundedness and coherence of 'a culture' as something made rather than found; the 'wholeness' of the holistically understood object appears more as a narrative device than as an objectively present empirical truth (Gupta and Ferguson, 1997b:2).

Gupta and Ferguson (ibid.4) highlight that the point of this argument is not merely to deny the possibility of cultures or communities as existing as essentialist and fixed entities within a locality, but rather to emphasise that all forms of convergence and associations are social and historical creations that need to be questioned and explained, not given the status of natural fact. As Gupta and Ferguson do of academic texts, one could criticize the community building approaches described above for taking the community or system as a given '… without asking how perceptions of locality and community are discursively and historically constructed' (ibid.6). In the case of the DSC project convergence was facilitated through exclusion, marginalisation and assimilation, providing further support to the argument that notions of community or convergence are inherently problematic.

The implication of this is that there is no such thing as a community that represents an 'objective' reality that exists prior to the relationships that shape it, which provides an unproblematic site of integration around which a post-productivist platform for change can be constructed. Moreover, as discussed in Section 3.3.2, the community appraisals that usually underpin capacity building projects in fact shape and construct community in a way that privileges the government's vantage point and hence may do little to empower local communities to manage in changing circumstances (Higgins and Lockie, 2002:425-426).

Another issue with approaches that are based on community as a site of integration is that they often aim to build community per se. As a result such projects are defined in very general terms. In the case of the DSC project, one of the team members articulates his concerns about this:
… they [the induction course facilitators] said here is the model - you're going to go into this community, I can't think of the exact instructions, but … how are you going to apply RAAKS in this setting? And this struck me as very unusual because you haven’t defined a problem or an issue. You said we’re just going to go into this community and apply RAAKS. Now in traditional extension as such you usually have something that you are actually taking into the community, okay, you're trying to change something or you're trying to get them to take up something. That’s traditional extension, but in this role or the way we are talking about social capability, they are saying well no, we are not necessarily going to actually give them something, we’re actually going to build their capacity to be able to take on change in the broadest possible sense (Team member, first round interviews, September 2001).

He goes on to make the point that:

Community capacity building, I think politically, is very difficult for NRE. I’m concerned that … NRE has suddenly decided that we are going to go out and build capacity … without considering who will be working in partnership with who, why we’re building the community capacity of these communities … And it concerns me that, look, why aren’t we involved also with the Department of Human Services, the Department of Education? What role does NRE have in community capacity building? … You know that just confuses a little bit … I think it’s a reaction to traditional extension. In the past it's been sort of recognised that we’re out there selling a product … There's almost been a complete back off from the notion that we actually have a product to sell, to making it so general with the lines blurred with other government departments and other institutions … So this community capacity building project is actually a more general … it's not related to anything specifically to Natural Resource Management (Team member, first round interviews, September 2001).

This team member argues that as DNRE 'backed off' from conventional extension that revolved around a specific agricultural product, practice or method, its aims have become so general that this raises questions about the mandate of the project and DNRE's role in community building more generally. The broad and open approach to capacity building erases the narrative space from which an organisation like DNRE performs its identity as a public sector natural resource management agency. This is a reversal from the transfer of technology approach to extension, where the organisation controlled the narrative space and performed its identity as a technological expert and limited participation and identity performance of other actors.

Within the DSC project government takes on the role of objective third party facilitator, yet as discussed in previous chapters, the project was unable to escape its productivist moorings. Its performance of its role as facilitator of a platform for change then only served to obscure that the project ultimately served productivist interests. A government is not a third party and therefore cannot fulfill the role of objective facilitator of a platform for change. Whether this means it cannot be the catalyst for such a platform remains to be seen. In the meantime, it is important for government to participate in and (co-)construct platforms for change that allow it
to explicitly perform its identity as a government agency with a mandate and agenda derived from the broader political and democratic process.

The post-productivist imperative to be more reflexive and inclusive then demands not a reversal of conventional relationships, but a deconstruction of the dichotomous relationship between the agency and other stakeholders. It demands a narrative space that allows for the diversity of stakeholders to perform their identities, including government. In other words, social capability is not dependent on government shifting its role from that of expert to that of third party facilitator of community capacity building, but on the development of a whole new relationship, where all stakeholders act as active participants in the rural development process, including government. Strategic policy staff within DPI are currently exploring various governance arrangements, including network governance (e.g., Kickert et al., 1997), which could assist in constructing a role for government in such a configuration (Petris, forthcoming).

To sum up this section, community as a site of integration is problematic as 'community' is a construction that is contested and contingent. Identification with and construction of a community involves the construction of similarity and social continuity in a way that obscures simultaneous processes of exclusion (Gupta and Ferguson, 1997b:13) and assimilation. Community as a site of integration is premised on the construction of sameness and similarity, rather than differentiation. That this is problematic is evident from the previous chapters. Furthermore, community as a site of integration defines the DSC project in such general terms that it obscures the narrative space from which an agency such DPI/DNRE performs its identity. It raises issues about the mandate of the department and hence the legitimacy of the platform that the organisation constructs.

**6.3 Problem or issue**

As the DSC project development phase began with the identification of the system it diverged from the RAAKS process from the outset. Engel and Salomon (1997) propose that the starting point for the RAAKS process is a problem statement identified by a group of people. The purpose of the RAAKS process is to redefine this through interaction with the broader system of stakeholders that is implicated in the problem statement. The RAAKS process involves an iterative process of problem definition and stakeholder identification. Unlike community building *per se*, this approach would allow government to declare its stake in an issue and
define problems, while recognising that these are tentative and need to be redefined and possibly even challenged through interaction with other stakeholders.

One could argue that the site of integration around which convergence is to occur within a project, according to the RAAKS kit, is a problem situation that is defined and redefined through interaction with an emerging system of stakeholders. In fact, in Engel et al. (2001:307-308) it is argued that social actors invest in processes for change when significant actors perceive a problem situation. In the case of the DSC project a problem statement was eventually developed as the team struggled to identify stakeholders without it (see Section 4.2.1). However, the problem statement was broad in order to be meaningful to the various stakeholders already identified. Moreover, it was developed subsequent to initial stakeholder identification.

The RAAKS process is based in part on the soft systems methodology developed by Checkland and Scholes (1990). This participatory action research (PAR) methodology was designed to address problematic situations that are of concern to people in a broad range of settings. In applying the soft systems methodology a group of enquirers identify human activity systems that are relevant to a specific problematic situation. The idea is that the enquirers make models of these human activity systems, which they subsequently use to question the real world situation in a comparison phase. This comparison is to generate debate in order to define purposeful action which should improve the original problem situation (ibid.:6). The soft systems methodology differs from hard systems engineering from which it is derived as the task of an engineer is to provide solutions for an already identified need within a given activity system. Engineers therefore are geared towards 'how' oriented activities. Hard systems thinking, according to Checkland and Scholes, is predicated on the notion that the need and the relevant activity system are a given. Yet in their experience that starting point is the exception rather than the rule. In many cases the needs and activity systems are problematic and require further enquiry that addresses both questions of what needs to happen and how. The matter of identifying needs and ways of addressing this need occur not at the beginning of a transformation process, but much later on (ibid.:17-18). In diverging from the RAAKS process the DSC team addressed the human activity system as if it existed in the world, and failed to grasp the essence of soft systems thinking (cf. Checkland and Scholes, 1990:24).

However, unlike the initial DSC project development stage, the EBMP and FarmBis pilots did start with a problematic situation or issue defined by people within DNRE/DPI. For the EBMP
pilot the issue was the difficulty in facilitating collective action within catchments, while for the FarmBis pilot the issue was the lack of Koori involvement in aquaculture training activities. Potentially these issues could have provided the tentative problematic situations that could have been further explored, redefined and even challenged and changed through the implementation of the RAAKS process that would involve the relevant human activity systems. However, the issues within the EBMP and FarmBis pilots were translated into objectives that reflected hard systems approaches to problematic situations. The focus for enquiry for the EBMP pilot was defined as an exploration of ways to facilitate collective action within the catchments. For the FarmBis pilot, the objective was to explore how to engage Koori people in aquaculture training activities. As argued in Chapter 5, these objectives were not negotiable. DSC project team members felt they had to meet the needs of EBMP and FarmBis staff in order to obtain staff 'buy-in' and to be validated within DPI. Stakeholder involvement in subsequent activities was subsumed under the overall objective of meeting the needs of EBMP and FarmBis staff within DPI. This reflects a hard systems approach as the starting point for enquiry was to explore how to achieve something, when priorities, needs and what to do are already defined - in these cases, the need for collective action in catchments and the need for Koori people to become involved in aquaculture training activities. This pre-empted the soft systems enquiry process that expands the understanding of the problematic situation in order to explore what needs to happen by whom, prior to addressing the question of how this will be done (cf. Checkland and Scholes, 1990:17-18).

A final important point to make in this section is the fact that there is a crucial difference in the way in which Checkland and Scholes develop their methodology, compared to the way in which it is adapted in the RAAKS kit. I have argued that for Engel and Salomon the implicit site of integration is a specific problem situation, for which there is significant concern. However, for Checkland and Scholes (ibid.:33), the 'root definition' of a human activity system provides the 'source' of the system. They define the root definition as the core purpose of purposeful activity systems, which has to be expressed in terms of a transformation process in which some entity (input) is changed into another or new form of entity (output). They emphasise the need to name inputs and outputs in terms of entities not verbs, arguing that:

The error … is to name the input and output as verbs instead of entities. Actions do not get transformed into anything; they may lead to conclusions or other actions, but 'lead to' is a different concept from 'are transformed into': a causal sequence is not the same as a transformation. It is vitally important always to express inputs and outputs as entities: the concept of 'transforming' demands it (ibid.:33-34, emphasis original).
The RAAKS resource box does not provide any guidelines that reflect this emphasis on an input-output transformation that is expressed in terms of an entity that provides the source around which the soft systems can be modelled. Instead, as I have argued, the implicit site of integration around which the RAAKS process constructs a platform for change is the problem statement itself.

Similarly, the EBMP and FarmBis pilots are not oriented towards entities, but define the transformation process in terms of verbs, that is to improve involvement of stakeholders in catchment management, and to engage Koori people in aquaculture training activities. As Checkland and Scholes (ibid.:34) point out, such actions do not transform anything, but lead to other actions and conclusions. These definitions of the change process allowed the pilot project teams to lose sight of their purpose and the transformation process with which they were ultimately concerned - that is catchment health in the EBMP pilot and the well-being of Koori people in the case of the FarmBis pilot. These required far broader and immediate involvement of stakeholders in the process of enquiry that included negotiation of the problem situation as well as identification of ways to address it.

This leads us to a focus on entities or objects, where 'object' is defined loosely as that to which our activities are directed, as the core aspects of the transformation process. The problem situation then is the catalyst for the platform for change; however, the transformation process is oriented to an entity or object that provides the site of integration. In Section 6.5 I return to this notion of 'object' as a site of integration for a platform for change in order to highlight how this can serve both convergence as well diversity and difference within a platform for change. Before that, however, I discuss the notion of practice as a site of integration around which to construct a post-productivist platform for change.

6.4 Practice

Various authors have argued for a much greater emphasis on practice as a pathway to change (eg. Paine, 1997, Wenger, 1998). One example of such a practice perspective is Wenger's notion of 'communities of practice', which has gained in currency of late in the Australian rural capacity building arena. For example, Macadam et al. (2003) prepared a report on capacity building in rural Australia, which was developed with input from a significant number of academics and practitioners involved in rural development in Australia, including people
associated with the DSC project. Macadam et al. (ibid.:19,26) propose that rural capacity building initiatives develop a social learning system that incorporates an array of communities of practice. Communities of practice are to provide the 'building blocks' for rural capacity building (ibid.:3). Given the prominence of this concept in current capacity building circles, it is worth exploring how this change management theory revolves around practice as a site of integration for platforms of change and to what extent it provides a suitable basis for the design of a post-productivist platform for change.

In developing the concept of 'communities of practice' Wenger (1998, 2000) sought to challenge prevailing notions of learning that conceive of it as an individual process that can be separated from everyday activity and results from one person teaching another. Instead he suggests that learning is a fundamentally social process that involves people negotiating and producing meanings '… in the context of [their] lived experience of participation in the world' (1998:3). Wenger then defined a community of practice as a group of people who are mutually engaged '… in actions whose meaning they negotiate with one another' (ibid.:73). Within a community of practice, participants negotiate a joint enterprise, which gives rise to relations of mutual accountability (ibid.:78-81). In the process the community of practice develops a shared repertoire, which includes that community's set of shared resources, styles and discourse (ibid.:82-83). Wenger argues that learning is the engine of practice, and practice is the history of that learning. A community of practice then is not a given, fixed structure, but an emergent structure that resides within the fluid and ongoing process where meanings are negotiated and constructed (ibid.:96-97).

Overall, Wenger considers practice as the locus of learning and development. He argues that:

'[o]rganizations are social designs directed at practice. Indeed, it is through the practices they bring together that organizations can do what they do, know what they know and learn what they learn' (ibid.:241).

Wenger (ibid.:47-48) defines practice as what people develop and engage in, in order to do their job. He suggests practice is not an antonym for theory, but refers to the process that engages the whole person in both acting and knowing at once. Importantly, he argues that practice is not the mere implementation of codified procedures, regulations and contracts, but emerges through a process of sharing, negotiating and developing practice within a community of practice.
It is important to note here that the concept of communities of practice is used and appropriated in very diverse ways. I have emphasised here the aspects of joint performance and mutual engagement that characterise the one example in Wenger's key text (1998); however, sometimes Wenger's ideas are discussed in a way that disregards these aspects, as communities of practice are conceived as imagined communities (cf. Anderson, 1991), where mutual engagement and joint performance is lacking. This ambiguity about communities of practice is due at least in part to the lack of multiple examples in Wenger's own work. It is beyond the scope of this thesis to offer an extensive critique of Wenger's work. What is important for this thesis is that Wenger considers practice to be the locus for learning. He proposes that platforms for learning are designed around communities for which practice provides the source of coherence and continuity (1998:49). In other words, practice is the site of integration around which platforms for change are to be constructed.

Despite this emphasis on practice as a source of continuity and coherence within a community, Wenger is careful not to imbue his concept of a community of practice with notions of homogeneity and sameness. He refers to three simultaneous modes of belonging through which people's identities within communities of practice and social learning systems are constructed (1998:181-187, 2000:227-228). These comprise engagement, imagination and alignment. Engagement refers to doing things together, to the active involvement in mutual processes of negotiation of meaning. Imagination is about people producing images of themselves and the world around them in a way that orients them beyond the community of practice. Alignment occurs when local activities are aligned with structures, activities and purposes beyond the boundary of the community of practice. According to Wenger learning occurs when these three modes of belonging are combined in the process of identity construction. However, the inherent tension between these processes means that communities of practice are not necessarily stable and harmonious. The tension drives the process of negotiation through which the practice emerges and evolves.

These modes of belonging constitute identity through a simultaneous process of establishing similarity or sameness on the one hand, and difference or distinctiveness on the other (Jenkins, 1996:3). The challenge for communities of practice is to strike a balance between these processes. According to Wenger, if there is too much mutual local engagement without the simultaneous alignment with forces and purposes beyond the community of practice, then learning is impeded:
The local coherence of a community of practice can be both strength and a weakness. The indigenous production of practice makes communities of practice the locus of creative achievements and the locus of inbred failures; the locus of resistance to oppression and the locus of the reproduction of its conditions; the cradle of the self but also the potential cage of the soul (1998:85).

In the previous chapters I argued that as DSC project team members sought validation within the organisation, they located their activities within productivist narratives that prevailed in the organisation. By facilitating identification and seeking validation within the organisation, team members engaged with project narratives that constructed the project in a way that subverted its distinguishing features. Convergence within the project was negotiated through either marginalisation or exclusion of elements that were different, or through the assimilation of other and different elements, whereby their unique aspects were lost. The DSC project became hostage (cf. Wenger, 1998:85) to productivist regimes of practice within the organisation, as processes of engagement and the construction of similarity and identification prevailed over differentiation.

Overall, the DSC project was unable to construct a post-productivist platform for change that spanned the diversity of communities of practice that operate within the land management context. Similarly, Macadam et al. (2003:42) acknowledge that communities of practice in the rural context can become hostage to their history, insular and inward focused and suggest that the sustainability 'mindset' is evident in the rhetoric of agricultural agencies, but not so much in the 'practical reality where a productivity mindset still dominates' (ibid.:35).

This raises significant questions about what that means for existing communities of practice in rural Victoria as a basis for capacity building. The findings of this research suggest that prevailing regimes of practice may have served agricultural interests in the productivist era; however, they offer very little as a site of integration for a post-productivist platform for change. As Jacobs (2001:7) argues, if sustainability is enacted within a practice then it becomes subsumed under the structure of that practice, which was evident in DSC project as discussed in the previous chapters. She suggests that it is no longer adequate to address issues of sustainability within the context of a practice as sustainability dilemmas arise between and across practices.

Furthermore, while the rural change management literature draws from organisational theory such as Wenger's, the natural resource management context is far more fragmented and lacks relations of mutual engagement and accountability that exist within organisations. Research
conducted by the DSC project suggests there is very little alignment between and within the diverse stakeholder groups in the natural resource management context (Department of Primary Industries, forthcoming). The imperatives of the current rural change context demand the development of relations of mutuality and participation of diverse participants in a dynamic new constellation of communities of practice that bridges the current constellation of practices that is fragmented, localised, disconnected and misaligned. As Wenger argues, in such a case the key task is to 'institutionalise' a constellation of communities of practice and to support the formation of communities of practice around and across it (1998:260). A post-productivist platform for change then requires a site of integration that creates coherence, continuity and stability across current communities of practices, rather than within them; in other words, a site of integration that creates coherence at a different scale than that which is inherent in current communities of practice.

It is important to note here that I take issue with the notion of practice as a site of integration for a post-productivist platform for change; however, I do not challenge the argument made by Wenger and others that practice is the locus of learning, and that any platform for change therefore needs to be based on the premise that practice provides the pathway for change. Macadam et al.'s (2003) suggestion of communities of practice as building blocks for rural capacity building is therefore a useful one; however, it is not sufficient as a design principle for the construction of a post-productivist platform for change, as it does not and cannot provide the site of integration for such a platform.

6.5 Material substrate or object

The strength of Jacobs' (2001) thesis on co-operation for sustainability is that she retains a practice perspective, but recognises that practice does not provide the site of integration within which sustainability dilemmas can be resolved. Instead she focuses on an object, or material substrate as a site of integration that facilitates co-operation for sustainability. I compare her approach with that of Engeström (1999, 2000) who similarly argues for a focus on 'objects' albeit from a very different perspective.

In her thesis on co-operation for sustainability Jacobs (2001) explores what gives rise to continuity and coherence between practices. She argues that what is common does not inhere in people and knowledge. Knowledge is specific to a practice and a person may participate in
several practices, but does so with differing capacities. Consequently what is common must be material, a thing or an object, which she refers to as a material substrate (ibid.:7-8). She argues that people involved in different practices interpret this substrate differently and in the natural resource management context this results in sustainability dilemmas. These dilemmas then are located within the object and can be resolved through co-operation of the diverse practices that are associated with the material substrate.

In Jacobs' work the material substrate forms the site of integration around which co-operation for sustainability is facilitated. Jacobs (ibid.:123-124) illustrates her argument with an example of the way in which an American power company built a dam in the Columbia River to generate clean power. This dam prevented salmon from returning to the place where they spawned. Fishermen who caught salmon only after these had spawned and therefore contributed to sustainability, protested against this dam. The situation was resolved when people realised that the maintenance gate of the dam could be opened in order to allow the salmon to pass through. Initially the dam was understood as something that closed off the river; however, as a result of co-operation between practices it was interpreted to mean something different - something that is able to let the salmon through. In rejecting the constructivist position (ibid.:100), Jacobs emphasises that this is not a process of negotiation but an activity that involves interpretation through which people come to understand something differently. The material substrate provides the go-between for the interface between practices (ibid.:123-124).

According to Jacobs (ibid.:102) the hermeneutical process to deal with issues of sustainability involves three phases. In the first phase participants address the question of what the various interpretations of sustainable actions of the involved practices in a particular situation are. In the second phase it becomes clear what these interpretations relate to - the material substrate. The final phase involves the hermeneutical moment, a creative turning point, where a shared interpretation of the material substrate emerges among the diverse practices.

Aspects of the DSC Topcrop pilot can be described with reference to this concept of material substrate. One could argue that 'stubble' provided the material substrate around which the various practices co-operated. These included extension practice, fire management, environmental protection and production of building materials. All these practices involved different sets of values, different kinds of knowledge and capacities. What they shared was their association with stubble. In Chapter 5 I described how through their involvement with the Topcrop pilot, some participants reported they had changed their understanding of stubble from
considering it as a waste-product at the end of the production cycle, to conceiving of it as a resource for the production of building materials, or a source of nutrients for future production cycles.

However, the Topcrop pilot could also be described with reference to Engeström's (1999, 2000) model of expansive learning. Unlike Jacobs, Engeström advocates a constructivist approach to facilitate a process of 'local discursive construction' (1999:385) of a shared object. As discussed in Section 3.3.1, the literature review conducted for the DSC project proposed that its strategy be based on Engeström's model of expansive learning. This focuses on human activity systems which are seen as historically evolving collective activity systems. Engeström (2000:970) proposes a seven-step cycle in which the contradictions that exist around a shared object are explored and resolved. This model of expansive learning focuses on the 'object' towards which an activity system is oriented (Engeström in Cocklin et al., 2001:88). It is this object, and not the subject (participants) that defines the human activity system. According to Engeström, 'subjects' may change within a given activity system, while the object, although under constant re-construction, is what gives continuity and coherence to it. For example, Engeström applied his model of expansive learning within a children's hospital setting. He argued that the object of medical work (the human activity system) is the patient, as without the patient there would be no medical work. As dealings with patients involve multiple doctors, the subject position changes (Engeström, 2000:964).

The strength of Engeström's work is his emphasis on difference within a human activity system. Engeström and Miettinen (1999:11) criticise Wenger for perceiving innovation and learning as a one way movement from the outside or periphery to the inside, without giving adequate attention to inner contradictions of practice. As discussed above, in Wenger's account, the construction of difference and differentiation is located in processes of imagination and alignment that link people with forces beyond their community of practice, thus maintaining an inside/outside duality that equates with identification/differentiation. However, identification and differentiation are constitutive of one another. In the process of identification one also differentiates oneself from others and vice versa. Identification and differentiation are therefore simultaneously located in both internal and external relationships across a community of practice. This leads to differences and discontinuities within practices, but also within individuals. Engeström's model of expansive learning is useful in reminding us of the internal contradictions that exist, and provides us with a process to explore those. However, his account remains a modernist one, maintaining a vertical notion of difference, locating it between people
in a human activity system rather then *within* them. In the previous chapters the narrative approach has highlighted that differences intersect with people within a given context and are horizontally as well as vertically dispersed.

Furthermore, in the examples provided by Engeström (2000, 1999) he has applied his cycle of expansive learning within organisations. In this work, the human activity system itself is a given, as the boundaries of the activities in the hospital setting for instance, are relatively unproblematic. Similarly, the subject/object dichotomy is readily applied and stable within this setting. However, in the land management context it is the human activity system itself that is at issue and in need of reconfiguration. It is this need that drives the current shift towards community capacity and social capability building approaches. In fact, social capability building is about exactly that: developing and reconfiguring the networks and relationships that make up the human activity system in the natural resource management context. This involves inclusion of non-agricultural as well as agricultural interests in the rural development process. For an organisation like DNRE/DPI it is important to come to terms with its participation in an increasingly complex web of communities of meanings, where the organisation is no longer the locus of control of the agricultural change process in the way it was conceptualised through the prevailing transfer of technology paradigm. Instead the land management context is characterised by increasing interdependencies between the agency and other stakeholders that challenge the dichotomy between the agency and the broader community. This renders Engeström's subject/object dichotomy problematic. To facilitate the reconfiguration required to address issues of sustainability we need to transcend the subject/object dichotomy that currently prevails.

To operationalise Engeström's model in the natural resource management context then requires careful consideration of the configuration of the human activity system and how the 'object' affects this in order to ensure that the expansive learning that occurs can simultaneously facilitate a reconfiguration of the subject/object relations that prevail. Such reconfiguration occurred to some extent in the Topcrop pilot project. The emphasis of the RAAKS process on the diversity of participants that needs to be brought to bear on an issue ensured that diverse practices were recognised as 'subjects' in relation to 'stubble'. Stubble was no longer just a matter for science, extension and farming practice, but also for environmental protection, fire management and building material production. As discussed, Topcrop staff reported that through the implementation of the DSC approach they opened up to other stakeholders, rather than act as advocates on behalf of farmers. The first stage of the Topcrop pilot then created a
potential post-productivist platform that could facilitate the expansive learning process described by Engeström; however, only because specific attention was paid to the configuration of the system. Unfortunately though, subsequent activities in the pilot project failed to address the ambiguities and contradictions that existed; hence the expansive learning did not eventuate to the extent required to facilitate significant change in stubble management practices.

Jacobs' focus on a material substrate is quite different from Engeström's model of expansive learning. As mentioned above, for Engeström the configuration of the human activity system is unproblematic, given the relatively stable subject/object relations within the organisational settings in which he mostly operates. Jacobs' immediate concern, however, is with the configuration of practices and their co-operation for sustainability. Her emphasis on a material substrate or object is subsumed under an overall concern about the way in which diverse practices co-operate for sustainability, and the material substrate is her focus precisely because it facilitates co-operation between hitherto disconnected practices. While Engeström's notion of 'object' is one that provides integration within an existing setting or community of practice that nevertheless emerges and evolves through the process of expansive learning, Jacobs' material substrate facilitates integration across practices in a way that gives rise to new configurations of communities of practice.

However, even though Jacobs argues that the material substrate is dynamic and likely to change during the collaborative process (2001:102), it is nevertheless perceived as something that exists outside and independent of practice and the participative process. Wenger argues that a boundary object becomes meaningful only as an experience of participation in a community of practice or constellation and so emerge from the interaction itself. Engeström and Miettinen similarly quote Dewey (1916:334) to say that:

… the object of knowledge is not something with which thinking sets out, but something with which it ends. Thus the object of knowledge is practical in the sense that it depends upon a specific kind of practice for its existence (in Engeström, 1999:6).

Jacobs' identification of the dam as the material substrate that provided the interface between practices in the example highlighted above, could only be done retrospectively, once it was known that the outcome was to open the maintenance gate in the dam. The same could be argued for the Topcrop's focus on stubble. If the solution or pathway had been different the analysis would most likely have pointed to another material substrate. The material substrate
then is the analyst's retrospective construction. Moreover, if such an object or material substrate is selected in the early stages of a project, it is likely to constrain pathways for change.

Nevertheless, a focus on an object in a constructivist sense may be useful to facilitate identification and reflection. As discussed above many social capability building approaches facilitate identification by building relationships between people, emphasising what they share between them, such as values, knowledge and capacities. Relationships for collaboration are built through identification with one another. However, such an emphasis on similarity leads to exclusion, marginalisation and assimilation of differences. An object, on the other hand, facilitates identification with the object, not with people in the network directly. Relationships between people then are mediated through the object, allowing for differences to be maintained as there is no forced synthesis or assimilation through a process of identification between people. In fact, the emphasis on the object as the site of integration is premised on the differences between people and practices. An object then provides a site of integration that does not require integration of value systems or unity in the way it is often assumed in rural development approaches.

However, in contrast to Jacobs' material substrate, I propose that the object that provides a site of integration in a post-productivist platform for change is defined as that to which our activity is directed, rather than an object in the sense of material or artefact. Moreover, it is to be understood in Engeström and Wenger's constructivist sense as this creates a space for diversity to be expressed within a platform for change (cf. Flora et al., 1997:628, Kersten, 2000). Furthermore, it provides a site of integration for a platform for change that locates learning and change simultaneously within and across practices. Despite some of the shortcomings of the Topcrop pilot, it nevertheless succeeded in engaging a broad range of practices in the change process in a way that allowed for expression of their differences. The EBMP and FarmBis pilots on the other hand focused on a specific issue that was of particular interest to extension practitioners and the agencies themselves, and therefore these pilots were unable to engage a diversity of practices relating to catchment health or indigenous community development.

Overall, an object in Engeström's constructivist sense may provide a site of integration that mediates difference between people, as it is not premised on identification between people. However, it is important that an object focused platform for change is constructed in a way that gives rise to new configurations of communities practice. A change management program that combines some of the principles of RAAKS (a focus on the reconfiguration of relationships)
with Engeström's model of expansive learning (a focus on the ambiguities about an object in a constructivist manner) may be one way of achieving that.

6.6 Landscape

A final site of integration to be discussed in this chapter is landscape. Like communities of practice, landscape as an organising concept to deal with land management issues is gaining in currency in the Australian policy and rural development context. While no aspect of the DSC project was organised around landscape, DPI is currently framing its priorities around a Victorian government program entitled 'Our Rural Landscape' (ORL) (Department of Natural Resources and Environment, 2002). Several former DSC team members have been employed in projects within this program and will seek to further their work and learning on social capability and community capacity building within it. This program is partly informed by the work done in organisations like the Commonwealth Scientific and Industrial Research Organisation (CSIRO). This organisation's 'Integrated Catchment Management' program operates on a whole-of-catchment scale and facilitates collaboration with decision makers, land managers and communities in order to develop integrated landscape solutions (CSIRO Land and Water, 2004). Their 'Agricultural Landscapes' program similarly aims to develop integrated conceptual models that explain '… how a landscape (or catchment) functions from a biophysical, social and economic perspective' (Hajkowicz et al., 2003:95).

The increasing prevalence of the term landscape in land management discourse may be due to the fact that landscape is shared by all stakeholders in the land management context and hence makes it possible for a diversity of natural resource management stakeholders to imagine themselves as a community (cf. Anderson, 1991:6) in a post-productivist sense, without challenging their diversity. It provides a 'framework for a new consciousness' (ibid.:65) that could facilitate integration within a post-productivist platform for change.

In a paper presented to a co-operative research workshop on agriculture and ecosystem management, Paine and Beilin (2002) propose a methodology for learning that combines the notion of communities of practice with that of landscape. They argue that landscape is the 'interface where practitioners take action', while communities of practice are 'the centre of change and the sites of negotiation' (ibid.:262). While Paine and Beilin's proposed methodology provides only basic principles without any clear guidance on how to integrate and operationalise
them, the strength of an approach that combines these principles is that it implicitly recognises that while communities of practice are the locus of change and learning; they cannot provide the site of integration for a post-productivist platform for change.

Paine & Beilin (ibid.:270) propose that landscape is a 'uniting element in resource management', as landscape allows for a bridging of the social and technical or biophysical aspects of sustainable agriculture. They define landscape as 'the representation of the social activity within the biophysical world' (ibid.:263).

Within the land management context, landscape is conceived and operationalised in two different ways. In recent years there has been a surge of interest in geographic information systems, which has provided sophisticated high technology tools to map the landscape in terms of biodiversity, catchment and watershed areas and many other features including social aspects. Planning and policy development is increasingly underpinned by information provided through such tools. This conceives of landscape as an entity that exists outside and prior to the social relationships that construct it. As Beilin (forthcoming) argues, '[l]andscape is commonly understood as a backdrop, as in a theatre. In this context, the viewer stands outside the frame looking at the scene'. As I argued in Section 3.3.2, this approach reflects a positivist epistemology that translates into a linear change management program that is based on an ostensibly fully understood and mapped out landscape that provides the basis for future planning. Such a positivist concept of landscape as a 'container' of biophysical and social elements refers to landscape as a natural, bounded, essentialist and fixed entities, in a way that is problematic for the same reasons as those identified for 'community' in Section 6.2.

This positivist notion of landscape or space has been challenged. Halfacree (forthcoming) argues that rural space:

… does not somehow 'just exist', waiting passively to be discovered and mapped, but is something created in a whole series of forms and at a whole series of scales by social individuals.

In other words, '… we do not live, act and work 'in' space so much as by living, acting and working we produce space' (Smith (1984) quoted in Halfacree, forthcoming). Murdoch and Pratt (1997) critique the positivist approach to landscape that characterises government's orientation to it, by arguing that:
… while the rural is clearly 'performed' by mapping exercises these should be seen as only particular, partial and incomplete versions of what rural might be(come) … There is no essential rural condition, no point of reference against which rurality can be measured (1997:56)

Paine and Beilin (2002) define landscape in a constructivist fashion in a way that is reminiscent of both Engeström's notion of 'object' that is central to his model of expansive learning and Wenger's (1998:259) 'boundary object' that facilitates imagination beyond the immediate community of practice and alignment between different communities of practice. In fact, it could be argued that in Paine and Beilin's (2002) account, landscape provides an 'object' for collective discursive construction that facilitates learning and practice change. This is evident in the way in which they discuss one of their case studies, which focuses on two Landcare groups in Gippsland that operated on opposing sides of a creek. This creek represented a dividing line that separated one set of hillsides and township from another. The creek zone was infested with weeds and as a result of the lack of fencing, stock watered in the creek, which affected the soil profile and marine life. A Landcare and Greening Australia initiative saw the two groups come together to clean out both sides of the creek, to fence it out and to improve the landscape. Prior to this collaboration, people managed the sides of the creek independently, which severely limited the scope for long term rehabilitation of stream life. By working together the groups changed the creek landscape in a way that also connected the two communities. Paine and Beilin (ibid.:266) describe this process as one where 'people came together to imagine a different way of managing the creek'. Furthermore, 'the opportunity to imagine the creek not as a demarcation between two cultures (and two communities) but as a connector in a linked landscape facilitated an everyday change in practice'. The creek (or landscape) in this example can be understood as an 'object' that is reconstructed through collaboration between people. However, unlike Engeström's model of expansive learning that focuses on the contradictions that exist within a human activity system, landscape in this example provided an object that facilitated alignment between hitherto disconnected groups of people more like Wenger's boundary object. It gave rise to a new constellation of communities of practice.

Overall, landscape as object in a constructivist sense makes it possible to imagine a post-productivist community that brings together the disconnected and fragmented diversity of natural resource management stakeholders. It therefore provides a potential site of integration around which initiatives for sustainable land management may be organised. However, in order to create the narrative space for this diversity of stakeholders to perform their identities within such a platform, it is important that landscape is conceived of in a constructivist fashion that allows for negotiation of meaning, rather than as an a priori, objective and bounded entity that
provides the 'theatre' for change and innovation. Only then will 'landscape' be able to mediate relationships between the diverse stakeholders in a way that does not assimilate, marginalise or exclude difference.

However further development of landscape as a site of integration and the way in which this could be operationalised is required. As suggested, this should facilitate both alignment across communities of practice (cf. Wenger, 1998), but also exploration of contradictions about the object (landscape) that exist within the human activity system (cf. Engeström, 1999).

6.7 Conclusion

The aim of this chapter was to discuss ways to facilitate integration amongst the diversity of stakeholders in order to form a post-productivist platform for change. I highlighted how a search for cohesion within a post-productivist platform is a paradox that reflects tensions between a modernist search for unity and cohesion on the one hand, and the post-modern challenge of the possibility of cohesion, wholeness and unity, on the other. Yet I maintained that while post-modern theory sharpens the sword, I am committed to modernist aspirations to facilitate positive change. The search for sites of integration then is one that recognises that integration is always contested, incomplete and temporal.

In this chapter I explored the various sites of integration around which aspects of the project and other approaches are constructed in order to discuss how these facilitated integration within the project. The following conclusions were drawn:

- The notion of community per se providing integration and cohesion for a platform for change is problematic. It is based on the notion that community exists as an objective entity prior to the social dynamic that produces it, which means that cohesion within it must be premised on identification between people, demanding a focus on consensus, bonding and sameness at the expense of differentiation. This focus on identification obscures the processes of exclusion, marginalisation and assimilation that simultaneously construct community. Furthermore, I have argued that community as a site of integration raises questions about the mandate of a department like DNRE/DPI to construct a platform for change and hence the legitimacy of that platform.
In Section 6.3 I argued that a problem situation that is defined and redefined through interaction with an emerging system of stakeholders provides the site of integration for the RAAKS process. However, the way in which the EBMP and FarmBis pilots constructed their problem situation in hard systems' terms led to the exclusion and marginalisation of diverse stakeholders and their perspectives. I also highlighted how the RAAKS process diverges from Checkland and Scholes' (1990) soft systems methodology in that it does not manifest the same orientation towards an entity that is transformed. I argued that this allowed the EBMP and FarmBis pilots to further lose sight of their purpose and the transformation process with which they were ultimately concerned, which in turn excluded and marginalised important stakeholders.

In Section 6.4 I concluded that prevailing regimes of practice have become hostage to their productivist history and therefore do not and cannot provide the site of integration for a post-productivist platform for change. Moreover, to establish a post-productivist platform for change requires institutionalisation of a new constellation of communities of practice and this requires a site of integration that creates coherence across current communities of practice, rather than within them. It requires a site of integration that creates coherence at a different scale than that which is inherent in practice.

In Section 6.5 I argued that an object in Engeström's constructivist sense may provide a site of integration that mediates differences between people in a way that does not seek to synthesise or assimilate these, as an object oriented approach is not premised on identification between people. However, I stressed that it is important that such an object oriented approach is implemented in a way that gives rise to new configurations of communities of practice. To that end I proposed a combination of the soft systems principles of the RAAKS process with Engeström's emphasis on an exploration of the ambiguities that exist about the object.

In the final section of this chapter I discussed landscape as an increasingly prevalent site of integration around which natural resource management initiatives are constructed. I argued that only if landscape is operationalised as an object in a constructivist sense, can it provide a site of integration that brings together the disconnected and fragmented diversity of natural resource management stakeholders within a post-productivist platform for change.
It is important to consider carefully the site of integration around which a platform for change is constructed, as this has significant implications for the way in which diverse stakeholders can participate in and contribute to the change process. The following guiding principles emerge for the design of capacity building programs in the post-productivist land management context:

- A post-productivist platform for change demands a process that attends to and facilitates a reconfiguration and expansion of relationships in order to include diverse stakeholders. The site of integration around which a process is designed must be one that creates a space for the emergence of such new constellations of communities of practice or human activity systems.

- Sites of integration for post-productivist platforms for change need to be understood in a constructivist way that problematises and questions convergence. Sites of integration around which consensus, convergence or alignment are facilitated must be explicitly understood as contested and contingent, rather than as natural and inherently positive, if they are to create a space for difference to be expressed and embraced. This requires a process of expansive learning that focuses explicitly on the ambiguities and discontinuities within and across practices. By making the ambiguities a focal point, differences can be expressed.

In the following chapter I further explore how the reflexive performance of projects can be improved to better accommodate difference and diversity.
7

Reflexivity for a post-productivist platform for change

7.1 Introduction

In the previous chapter I discussed ways of improving capacity building methodologies. The focus for that chapter was on the way in which capacity building approaches achieve mutuality and convergence around substantive issues. However, the post-modern society we live in today demands that social researchers, physical scientists, extension officers and policy-makers no longer consider themselves as acting upon an external environment, but recognise their embeddedness within an environment where meanings are inherently contingent and contested due to the diversity of stakeholders involved. Reflexivity on the way in which we construct and enact meanings and how these are contested by others is critical if we wish to deal effectively with diversity and difference within a post-productivist platform for change. Only through reflexivity can we problematise our representations of the world in order to recognise the contingencies of these and hence make space for the 'other', for difference to be expressed. Hence, to embrace difference and diversity an explicit focus on ambiguities is required. In this chapter I discuss the way in which the reflexive performance within platforms for change can be improved by exploring the reflexive performance of the DSC project, and the role that I, as a social researcher, played within this context:

- In Section 7.2 I discuss the reflective practice of the DSC project.
• In Section 7.3 I reflect on the role I played within the project, the difficulties I faced in implementing an action research approach in the context of the PhD research process and the contribution I made to the reflective practice of the DSC project team.

• In Section 7.4 I summarise the implications of this research for ways to facilitate reflexivity within a post-productivist platform for change.

7.2 Reflective practice within the DSC project

As discussed in the preceding chapters, uncertainty and ambiguity characterised the project throughout its development and implementation. Furthermore, until its conclusion project team members struggled to tell a coherent story about the project and its approach. In Chapter 4 I explored why the project team struggled to make sense of the project and discussed how team members performed their identities and that of the project by simultaneously locating the project in competing productivist and post-productivist narratives. I also argued that the ability of the team to differentiate itself and to be innovative was subverted by the need for validation within the organisation. This tension between validation and differentiation prevailed throughout project implementation and resulted in a sense of discomfort and unease within the project.

Salomon and Engel argue that difference and ambiguity should not necessarily be seen as a negative:

… differences can be essential to a community's capacity to achieve innovation in its practices ... Rather than being suppressed, therefore, differences should be recognized and put to use in the debate on useful interpretations, interventions and accommodations among stakeholders (1997:42).

If differences and ambiguities are not explored or 'put to use', marginalisation, exclusion and assimilation of diverse stakeholders inevitably occur, which compromises the mutuality of stakeholders and could lead to further intractability of issues at stake, or simply to a lack of effective action by an important group of stakeholders. In the remainder of this section I discuss the reflective practice of the DSC project in order to explore how the team dealt with ambiguity and uncertainty.

Reflection within the DSC project was facilitated by regular one or two day long team meetings conducted during the course of the project. The team was spread throughout the state of
Victoria, and team meetings served to bring team members together to reflect on the progress of the project and to make decisions about subsequent steps. The importance of reflection was explicitly recognised. The team agreed early on that meetings would start with reflections by all team members on where they were at in relation to the project, what issues they were facing and what their priorities were at the time. This would set the tone for the meetings and allowed the team to highlight emerging issues. However, while this did allow for issues to surface, it was not a forum within which emerging issues were actually addressed. In fact, the purpose of these reflections was for individuals to state and raise issues. Further discussion was actively discouraged. The idea was that issues would be addressed during the course of the meeting.

In the Rapid Appraisal of Agricultural Knowledge Systems (RAAKS) resource box Engel and Salomon propose that at the end of each phase of the process, the project team stops to reflect on its activities, checks whether it is dealing with contrasting information and identifies the gaps in the information it is working with, in order to prepare for the next phase. A number of the RAAKS windows are designed to facilitate such reflection (Salomon and Engel, 1997:44-45). For example, at the conclusion of the first phase, which is designed as an iterative process of problem definition through interaction with the relevant stakeholders, the RAAKS kit urges teams to consider questions about the relevant actors in the system, the power relations within it, whether or not key actors are involved in the study and what the objective should be of the emerging system of actors. The purpose of such reflection is to identify the system that the particular study is working with (Engel and Salomon, 1997:windows A5/B6, A5/B8 and A5).

However, as discussed in Section 4.2.1, while the team conducted a large number of interviews with a broad range of stakeholders in this initial phase, a decision was made to outsource the analysis of the interviews. This meant that the team was not involved in reflection on the information collected through the interviews, and more importantly in the co-construction of knowledge, which is a definitive aspect of the constructivist RAAKS approach. Furthermore, as the report on the analysis of interviews was delivered late, I quickly collated the information generated by the interviews. The team discussion of this data had to occur at the same time as the planning for the next phase, which did not allow sufficient time to do the kind of analysis referred to above, let alone reflect on the emerging ambiguities about bigger issues such as the purpose of the project, its focus and stakeholders. As discussed in Section 4.2.2 this led to significant discontinuity between phase A (the interviews) and phase B (the focus group discussions).
The RAAKS kit suggests that at the end of phase B a project team synthesises the results from phase A and B, identifies the constraints and opportunities of the system of stakeholders and begins a preliminary identification of solutions to the problem situation (Engel and Salomon, 1997:Window B8b). This phase of the process works towards the optimal functioning of a system of stakeholders and facilitates reflection on differences between stakeholders and other constraints to this optimal functioning. These reflections are to be captured in a brief report.

As discussed in Section 4.2.2, focus groups provided the basis for phase B of the DSC process development phase. Once these were conducted, a team member and I co-ordinated the analysis of the information collected. In a team meeting we conducted a preliminary analysis of the focus groups with other team members, and this provided the basis for further in-depth analysis that the two of us conducted. At a subsequent meeting we presented the findings and our brief reports back to the team and these generated extensive discussion about issues that could provide focus points for potential pilot projects. However, as discussed in Section 4.2.2, the analysis was conducted without involvement of other stakeholders or potential pilot project stakeholders, and therefore the project team was in a position where it had to 'sell' the issues to potential pilot projects. This proved difficult to do, and while the project team was able to establish pilot projects, these were designed to address issues that had emerged within the partner projects, rather than those that had emerged from the DSC process so far. This created another point of significant discontinuity in the project.

Nevertheless, while it was a significant shortcoming that other project stakeholders were not involved in the analysis and synthesis of information, the project team itself did reflect in depth on the findings of the focus groups and experienced this as a moment of significant learning about social capability.

Overall, however, while the team was committed to a culture of reflection and report significant learning from the DSC project, there was also some frustration about our reflective practice:

> Sometimes I think that we go around in circles a bit too much. We're a little bit too … in the way that we do things, round and round. Sometimes I don't see where we're going with the endless list-making, that's a frustration that I have and I just think we seem to be making list upon list upon list … (Team member, second round interviews, July 2002).

This comment reflects the weariness felt by some team members about the extensive discussions and reflections on the project, and the fact that too often reflection served to surface
issues, without resolving them. This created an atmosphere that was not conducive to effective reflection within the team and this was exacerbated by the time pressures on the project. Team members report that they felt that the pressure to do things and deliver outputs compromised the ability to take time out for adequate reflection:

… the thing that I find … a little bit unsettling at the moment is that we're charging off doing good things, in the pilot activities, or the case study project and they're marching along to a timeline which is fairly urgent, but are we doing the right things, or is it the best use of our time, the way we're doing what we're doing, and we're not able to sit back because the steam train is heading off down the track for each of those three pilots in different directions (Team member, second round interviews, July 2002).

At the same time, however, it seemed difficult to reflect on questions, difficulties and ambiguities in depth without contributing to the discomfort and unease within the project team.

Furthermore, the tools used within the team to facilitate reflection were focused on consensus building rather than on making explicit the ambiguities and differences. The tool used most often for reflection within the project was the ORID discussion method (Spencer, 1989), which takes participants through a discussion that moves from an exploration of the facts of a situation ('Objective' phase), to reflections about people's associations and feelings about that situation ('Reflective' phase), to interpretation of the implications of this situation ('Interpretive' phase), and finally to make some decisions to progress the situation ('Decisional' phase). The ORID process moves a group towards consensus on an issue in order to make a decision and act. While there is scope in this method to open up the conversation and focus on and explore ambiguities in depth in the interpretive phase of the conversation, and while it begins by opening up the discursive space to ensure that all participants contribute to the building of a comprehensive picture of a situation, in practice it is often implemented in a way that moves towards the kind of closure, consensus and action planning that erases or glosses over differences and ambiguities.

I argued in Chapter 5 that the pilot projects similarly struggled to explore the tensions and ambiguities arising from the triple bottom line agenda. In the case of the Topcrop pilot I argued that in the workshop that was conducted to reflect on the findings of phase A of RAAKS, issues were discussed alongside each other. This workshop did not facilitate reflection on the differences between people's perspectives and the ambiguity resulting from the inherent tension between environmental and economic considerations of stubble management. In fact, the pilot project team skipped the reflective phase B of the RAAKS process altogether and moved from identification of issues to action planning (see Section 5.2.2).
As discussed in Section 5.3.1, the Environmental Best Management Practices (EBMP) pilot project team used the Open Space Technology (OST) workshop format to reflect on issues of catchment health. I argued that OST aims to generate a sense of community and coherence amongst workshop participants, and as a result issues in this pilot were once again addressed alongside one another, in a way that did not challenge people's sense of self and the way in which they made sense of the issues. The OST workshop failed to address the issues of misalignment, ambiguity, uncertainty and diversity that exist in relation to catchment management. As discussed, the OST design is unable to come to terms with the multiple and conflicting ways of making sense of a situation (Shaw, 2002:145). In fact, the OST process explicitly invites people to walk away from, or disengage from issues they feel uncomfortable about.

Overall, while the DSC project did reflect extensively on its activities, it failed to reflect adequately on the ambiguities and uncertainties that characterise the current context of change. It did not 'put to use' the uncertainties and differences as advocated by Salomon and Engel.

Within the technical rationality view of practice that prevails in organisations like DNRE, uncertainty and ambiguity are considered a threat or a sign of weakness (Schön, 1991:69). There is very little space within this model for uncertainties to be raised, and even less organisational, structural flexibility to address them. In the case of the DSC project, the team struggled with the contradictions that existed between the demands of the project management framework that forced the team to construct the project in linear terms on the one hand, and the soft systems aspirations for the project on the other. There was no space to challenge the project management framework, especially considering the team was located in the service delivery group which locates it at the practice and implementation end of a theory-practice and policy-implementation divide. Moreover, it was not possible for the project to be constructed outside this framework. Hence team members chose to pursue their own aspirations for the project, while simultaneously working within the confines of the technical rationality model of practice that prevailed within the organisation. A conversation about this issue during one of the team meetings (February 2003) between team members reflects the way they saw this tension:

Team leader
We just fall into line, 'cause that is where the power sits.

Team member
You fall into line, but underneath it you do your own stuff.
An outsider who was also involved in the project commented on this:

I constantly had the sense that they were perceived as being subversive in the organisation, or it was not understood and so therefore there was kind of a clandestine, secretive thing about it. So maybe, the issue was, if there had been transparency about what they were doing and how it was evolving, which was hugely risky I guess, 'cause somebody could have said, golly, you guys are just sitting around … wasting your time and it's costing us a lot of money … go and do some other job… (Conversation, March 2004).

Schön (1991:282) argues that the way in which the technical rationality model of practice obscures ambiguity and uncertainty leads to a mystification of practice, which is reflected in the above comments. It is also evident in the evaluation accounts of projects, which are mostly written by focusing on project achievements, while glossing over the ambiguities and uncertainties. Comments from team members indicate that the final report of the DSC project is constructed in that vein.

Argyris (1999) and Schön (1991) advocate an organisational learning approach that challenges this inability of practitioners operating within the technical rationality paradigm to deal with uncertainty and ambiguity. Organisational learning is based on reflective practice, which ensures that conflicts and contradictions can not be suppressed or circumvented, but are worked out. An organisational learning approach brings these to the surface in order to deal with them (Schön, 1991:254).

The DSC project represented an explicit attempt to move away from the kind of extension practices that are characterised by the model of technical rationality. In challenging the traditional model of extension, many DNRE/DPI staff members re-branded themselves as facilitators. However, in doing so, many of these people perform their identities as facilitators through the implementation of facilitation techniques and tools and remain trapped within the technical rationality model of practice. In light of this, it is interesting to note that facilitation methods or approaches are often referred to as 'technologies'. For example, the ORID discussion method is referred to as a 'Technology of Participation' (Spencer, 1989:emphasis added), and similarly, OST stands for Open Space Technology.

The DSC team leader was always keen to ensure that people engaged with the RAAKS process in terms of its principles and theories, rather than a 'recipe' or mere technique. She says:
… to me a recipe is something you pull off a shelf, you just follow it, you put in this, you do this, and this, and this, whereas what we’re doing is, here are some principles that give the framework. There are some principles you need to follow, but you can do this, that, or the other. You can skip bits of it altogether. It doesn’t matter if you don’t put the eggs and the flour in. You’re still going to come up with a product in the end that suits the situation. That’s why I reckon it’s not a recipe, just a framework and principles (Team leader, team meeting December 2002).

However, it was difficult for the team to escape the technical rationality model of practice. One team member states:

I found it difficult then too … we were anxious not to have a recipe, now we weren't going to give people our recipe, they weren’t going to go out and have interviews, whatever … So all of a sudden, while we weren’t going to have a recipe, we were following a recipe. So … you had this recipe book. It was just in conflict (Team member, team meeting December 2002).

While the rhetoric within the project confirmed the need to engage with the theories and principles that are constitutive of the processes the team was using, in practice team members related more to the steps and tools of the process in a way that was consistent with the technical rationality model of practice. This was evident in the way in which people involved with the project engaged with the Monash Regional Australia Project (MRAP) strategy, the RAAKS process and the participatory action research (PAR) method, but also in their lack of engagement with the concept 'social capability' and theories of knowledge and change (see Sections 3.3.3 and 4.3.2).

Schön suggests that ‘… there is no more vivid sign of the persistence of these ideas [of technical rationality] than the hunger for technique, which is so characteristic of students of the professions' (1991:288). Such hunger for technique and method aptly describes the way in which many DNRE/DPI people, who describe themselves as facilitators, continuously search to extend their repertoire of facilitation tools and techniques to enhance their practice, without adequately reflecting on the theories or narratives that are constitutive of this practice.

Schön (ibid.:288) suggests that the status of practitioners is generally constructed with reference to the very powerful ideas of technical rationality. Within DNRE these were pervasive. I argued in Chapter 4 that in seeking validation within the organisation, team members located the project within positivist, productivist project narratives that reflect the technical rationality model of practice. This organisational environment was not conducive to reflective practice (cf. Schön, 1991:338), which would purposefully expose the vulnerability and contingency of the DSC project to facilitate learning. Within a technical rationality dominated organisation, such
exposure was perceived as a threat. This was further exacerbated by the fact that several team members had been recruited from the pool of people within DNRE/DPI who are without a position. At the time of recruitment for the DSC project this group of people was particularly large, because a major program had been discontinued. The team leader was required to recruit from this group of people. While team members recruited from this group were not unsuited for the positions and all of them were very keen to become involved in the project, this group of unfunded people is a particularly vulnerable group within the organisation. No doubt these staff members were keen to be reintegrated into the organisation and to be validated as valuable staff to the organisation. This circumstance is not conducive to the kind of risk-taking, uncertainty-embracing attitude required to implement a reflective and innovative approach that challenges prevailing ways of doing things within the organisation, especially because all team members had to consider their future in the organisation beyond the short term life of the DSC project. A further factor contributing to the vulnerability of the project team was the fact that the project comprised people of relatively low rank within the organisation and that the project lacked explicit endorsement of senior management. This left the project team in a precarious position that was not conducive to reflective practice, learning and innovation.

Overall, as the team sought to be validated, the model of technical rationality prevailed in the project. Accordingly ambiguity and uncertainty were perceived as a threat. This was not conducive to reflective practice, which by design exposes people's vulnerabilities and uncertainties. In its final version, the formal story told about the project was one that glossed over uncertainties and mystified the practice of the project team, which impeded organisational learning and limited opportunities for differentiation and innovation (Department of Primary Industries, forthcoming).

So far I have discussed the limited effectiveness of the DSC project's reflective practice. In the following section I discuss how the narrative action research approach I implemented contributed to the reflective practice of the DSC project team.

7.3 Reflections on my role in the project

As discussed in Chapter 2, the action research approach is aimed at achieving practice change, rather than just theory development. However, Argyris (1999) has argued that action researchers often make claims about their effectiveness and the organisational learning that is facilitated as a
result of their intervention, without analysing their intervention with the appropriate standards of rigour:

Our point here is that the authors do not try, on the basis of their special knowledge of the case, to construct and test plausible alternatives to their 'organizational learning' hypothesis. Indeed, they do not treat it as a hypothesis at all but as an obvious interpretation of the data of the case … We are not arguing that their interpretation is mistaken but that a failure to seek out countervailing evidence leads too easily to a belief in the efficacy of organizational learning - in effect, to an ideology of organizational learning (ibid.:435-436).

The aim of this section is to examine my role as an action researcher in the DSC project and the contribution that I made to the project with reference to the practice interplay model developed by Gremmen (1993) and Paine (1997).

The interplay model explains the emergence and development of practices that result from interaction between different practices. The focus on practice as a pathway for change challenges the cognitive view of change that is based on the assumption that a change in the way we see things results in a change in the way we do things. Authors coming from a practice and action oriented perspective have critiqued the cognitive focused systems thinkers for their emphasis on debate, discussion and dialogue as central tenets of the change process (Gremmen, 1993, Jacobs, 2001, Paine, 1997, Wenger, 1998). The cognitive approach assumes knowledge and understanding constitute the pathway to change. However, as Weick (1995:27-28) has argued, knowledge does not precede action, but emerges from it, as sensemaking is a retrospective process where we make sense of a lapsed experience by attaching meanings to it that are coherent with our sense of self, values and norms. Paine (1997) argues that if we accept that knowledge does not precede action, but emerges from action, then a much stronger emphasis on action and practice as pathways to change is required.

In exploring these ideas further, Paine (ibid.:162) suggests that practice change and concomitant new knowledge emerges out of the combined activities of different practitioners in a particular setting. As these work together and make sense of their activities together, problem definitions are constantly refined and activities are mobilised accordingly to develop new shared practices. This is referred to as interplay between practices. In other words, practice change occurs as a result of different actors within the system working or acting together, making sense of this action together and aligning their practices.
The interplay model, developed initially by Gremmen (1993), considers practices to operate according to defining rules that specify the boundary conditions of a practice and define competence and other aspects that constitute a practice. Experience rules, or the rules of play, on the other hand, translate these rules of the game into activities. Paine (1997:164) argues that '[t]he rules of the game open the possibilities, whereas the rules of play process these possibilities in strategic activity'. Paine argues that interplay between practices can change the experience rules or the rules of play, but more significantly interplay between practices can change the defining rules of a practice (ibid.:46-47). The former allows for effective co-operation, which in turn sets the conditions for the latter, which involves the kind of double loop learning required to facilitate change in a post-productivist setting (ibid.:164).

I have some concerns about the interplay model and in particular with the emphasis of this modernist framework on the unity of practice. In the face of ambiguity, this unity is maintained by referring to the normative structure of a practice, whereby Gremmen analyses challenges to this unity as errors of practice (Gremmen, 1993:105-113). Gremmen (ibid.) argues that practice is an ongoing process where practitioners continuously encounter and deal with 'divergent' (ibid.:115) situations that challenge what he refers to as 'the unity of competent performance' (ibid.:114) within a practice. While referring to Schön, he argues that practitioners deal with these situations through reflection-in-action. Gremmen argues that '… reflection-in-action is the way in which technical practices evolve: it is indigenous rationalization' (ibid.:115). However, what Gremmen overlooks in his discussion is that for Schön reflection-in-action is desirable for practitioners, but certainly not inherent or prevalent in practice. As mentioned, Schön argues that ambiguities and 'divergent' situations are often ignored or obscured, which leads to a mystification of practice (1991:282) in order to maintain a notion of 'unity of competence'.

However, despite my concern that this model does not deal adequately with the contingencies and ambiguities of practice, it is nevertheless useful in describing and analysing the relationship between me and my supervisors on the one hand, and the DSC project team on the other. The collaboration that occurred can be described as interplay of practices, specifically between my university-based research practice and the change management practice of the DSC project team.

A key aspect of the interplay model is the notion of broker practice, which is a practice that possesses tools, routines and knowledge that allow it to link existing practices (Paine, 1997:49). Action research when implemented by university researchers is a broker practice that has
emerged to link the activities that occur in universities with those that occur in professional practice.

Overall, the interplay model is able to describe the interaction between researchers and practitioners and the collaboration between them and hence provides a suitable framework for analysing the collaborative research effort that resulted from the action research strategy that I implemented and the interaction of my supervisors and me with the DSC project team. Instead of taking for granted the effectiveness of the action research process that Argyris (1999) claims often occurs, I describe in this section how my supervisors and I performed this broker practice that is action research, the difficulties we experienced, and the effectiveness of the collaboration.

7.3.1 Establishing a working relationship

As discussed in Chapter 3, my principal supervisor became involved in the DSC project when he contributed to a submission to conduct a literature review on social capability in Victoria for the steering committee of the DSC project. He was familiar with the DSC team leader as he had worked with her on projects in the past and both were part of emerging conversations within the agricultural sector about the need to think radically differently about extension and change management. While the literature review was tendered out to another group, my supervisor was invited onto the advisory panel for the project and participated in regular meetings of the project. When I began my PhD research I was offered the opportunity to work with the DSC project, which would comprise one of my three case studies (see Chapter 2). Once I became involved in the project, my supervisor intended to withdraw from the project. However, in the beginning there were regular telephone conferences between the team leader, my supervisor and I and about once every couple of months the project team would organise a meeting with him to discuss progress. My second supervisor was also involved in some of these discussions. She was interested in taking on a role within the project. However, the team only ever related to her as my supervisor and hence her contribution to the project was limited.

My principal supervisor's withdrawal from the project left a vacuum that I could not fill. He was the person with in-depth understanding of and experience with RAAKS; he was the 'expert', upon whom the team leader was quite dependent for guidance. There was no one else in the project who had experience or even an understanding of RAAKS, not even the team leader
herself. However, because his association with the project was not remunerated, my supervisor could not justify further involvement with the project beyond the supervision of my research and the occasional telephone conversation or meeting.

The role I played within the project therefore was not an extension of his role. My supervisor had acted as expert advisor and consultant to the project, while I was slotted into the project hierarchy as one of the seven project team members who reported to the team leader. While people recognised and valued my background as a social researcher, I was nevertheless a voice amongst others within the team:

Lucia … wasn't viewed as the expert of RAAKS or anything like that, she was viewed as being a different discipline, and that's why it was a voice amongst other voices.  
(Supervisor, March 2004).

As a PhD student, the role of consultant was not available to me. Furthermore, while I had experience in and understanding of social research and theories of change, my level of experience with the issues and processes we were dealing with was similar to that of other team members, and my understanding of the substantive issues was minimal. As a result I was tentative in contributing and challenging the project in the early stages.

**7.3.2 Alignment of practices**

As time went on my confidence grew and I became increasingly vocal in questioning aspects of the project. I was often a key contributor to discussions and decisions about the broader strategic issues facing the project. At times the team leader would seek out my advice on these issues, and we regularly discussed progress of the project during telephone conversations. I also helped the team with specific tasks, such as the development of interview and focus group questions, conducting project interviews and focus groups, analysis of project data and report writing for the project.

However, as mentioned in Chapter 2, while I participated as a project team member, my PhD research practice extended well beyond the confines of the DSC project. I had my own research interest in processes of alignment and convergence and explored these with reference to theories of identity and sensemaking. While I did make these explicit, I did not want to interfere in or
distract the project with a complicated esoteric body of theory and so pursued this interest very much alongside my participation in the project.

In the beginning I found it quite difficult to align my overall research approach with my participation in what were then still two case study projects. I felt constrained by the need to align with emergent issues in two case studies while still maintaining a coherent focus for my PhD. Furthermore, I was at times frustrated by the fact that I was contributing quite extensively to the case study projects by conducting evaluation and research activities for them, yet often felt these activities were very time consuming without necessarily being immediately relevant to my research. Once I chose to pursue only the DSC project, it became easier to align my research with that of the project. I had more time to expend on participation in the project team and was able to hone in on the specific aspects of the project.

Towards the end of the project development phase, some DSC team members became attuned to my focus and adopted some of the theories I was working with to make sense of the project and its purpose. I had been able to draw on some of the literature I was reading in discussing aspects of the project with the team. For example, I used Weick's notion of sensemaking to discuss the way in which people in the information management focus groups expressed confusion in a world of too much information, rather than ignorance and lack of information (cf. Weick, 1995:27). I also discussed with the team how those people in the focus group discussions who asserted their identities explicitly (for example, the beef producer, or the hobby farmer) were better able to sort through the vast amount of information available to them, knew what information they needed, how to use it and where to obtain it from. Some team members really engaged with these ideas. For example, the team leader regularly drew on issues of sensemaking and identity construction to describe the project to others; these theories had become part of her narrative about the project. In talking about one of her presentations about the project she says:

I just talked about how in government we tend to just keep churning out information …[based] on the assumption that if someone knows something they will act on it and that it's really interesting to think about this in the sense of how people make sense of information and their own value systems and identity and so on and you know that puts a completely different slant on it and makes us rethink what our roles are, what we're doing … I mean I don't think I said it in those words but …(Second round interviews, August 2002).

However, not all team members engaged with these ideas, and so there was no comprehensive convergence around these emerging storylines. To some extent then these only enhanced the ambiguity, uncertainty and discomfort within the team, as they added additional storylines to the
plot. Furthermore, as discussed in Section 4.2.2, while the analysis of the focus group discussions contributed significantly to learning within the project team, the team was unable to integrate this learning into the pilot projects. Nevertheless, the above does highlight a degree of alignment and convergence of the project's practice and my research practice, and the mutuality of the relationship. Our work domains converged to an extent and there was some alignment of the 'rules of the game'.

7.3.3 Interventions in the project

In Chapter 2 I suggested that I considered it to be my role as an action researcher to facilitate dialogue within the field by highlighting issues and ambiguities emerging from ongoing analysis of the project. There were a number of specific instances where either my supervisor or I intervened in the project by highlighting and challenging the ambiguities that existed within it. For example, one ambiguity that I raised with the team was the tension between social research and evaluation. Through my in-depth analysis of the project narratives I had identified that evaluation activities subverted the post-productivist aspirations of the team. I also noticed that the team equated social research with evaluation and considered the project to be an evaluation project. The following comment by one team member is indicative of the way in which the role of evaluation was often discussed:

I think the whole project is an evaluative one, it's trying something and seeing how it works, the minute you're doing that it's evaluation (Team member, team meeting, February 2003).

In raising this issue with the team I asked questions about what they believed the differences were between evaluation and social research and tried to discuss the implications of the emphasis on evaluation for the project. One of the team members, who joined us a year into the project, shared my concern. Subsequently we discussed how evaluation questions arise from within a particular context, while social research moves the focus beyond the organisational horizon. After I had raised my concern about social research and evaluation, there was extensive discussion about it within the team. However, some people felt threatened by this discussion, as I was challenging the view that the project was about evaluation, yet there were significant opportunities for identity enhancement within the organisation by locating the project within an evaluation narrative. In accordance with Weick's conceptualisation of sensemaking, project team members made sense of the project by selecting those meanings that were consistent with
and enhanced their sense of self. In this case, evaluation narratives facilitated identity enhancement within the organisation.

Rappaport (2000:10) highlights how narratives that exist within a particular social setting can serve to either impede or empower people. He distinguishes between tales of terror and tales of joy. For example, he suggests that in some schools the dominant cultural setting is about order and discipline and this inhibits students' identification with school as a place of learning and success. What is required, according to Rappaport, is a new narrative that emphasises the talents, skills and abilities of students and their families, which creates a space for students to construct themselves as successful learners. Rappaport argues it is the job of researchers ‘… to try to reveal and uncover the tales of terror, and to support and encourage anyone who can imagine new tales of joy’ (ibid.: 10). It could be argued that in challenging the evaluation narrative (see Sections 4.3.4 and 4.3.5) I disempowered team members and impeded their ability to enhance their identity within the organisation. My critique contributed to the very uncertainty and discomfort that the intervention hoped to address.

The implications of the above are relevant not only for action researchers such as me, but also for extension and capacity building practitioners. The analysis of the focus groups conducted by the DSC project team indicates that the way in which some of these were constructed created a narrative space within which participants had opportunities for identity enhancement, while other setting narratives impeded identity enhancement. For example, the focus group discussion with land managers on water use was one within which land managers located themselves in narratives that constructed them as the people who are to be blamed for the water issues that society is facing today; they use the water, pollute the streams and their clearing practices have contributed to salinity. The dominant narrative in this discussion was not one that allowed for identity enhancement and did not provide land managers with an opportunity to positively engage with the issue. The focus group discussions about issues relating to the value chain, on the other hand, facilitated a discussion in which the land managers located themselves in business narratives that enhanced their identities as professional, educated managers of a business, which did provide land managers with an opportunity to engage positively with the issue. What is surprising is the extent to which land managers recognise the need to construct 'tales of joy' about farming, agriculture and rural communities in order to move forward. For example, they suggest:
… a number of people still do not, and again it’s a big social type perception, people don’t see themselves as being part of an industry, whether it’s the sheep industry, the wool industry, the beef industry, they see themselves as that generic farmer or land holders, small farmer, hobby farmer, but not as a specific … I would never describe myself as a farmer, I always put beef producer on forms, cause that centres you with the product … (Land manager, focus group on information management, 2002).

I think if we look at the fundamental problems it gets around … what the definition of what is agriculture as well and the lack of interest in it. Agriculture has become a very sort of un-sexy industry to be in, and I think it’s largely because as farmers ourselves we talk down for a long, long time… What you do [is] cringe about being a farmer, but you say to farmers, 'This is a supply of food' … and you start feel better about it, so really it is the fundamental change, the change in language is the first step, and then we can start to take care of some of the other issues (Land manager, Focus group on labour issues, 2002).

This discussion highlights the importance of providing the narrative space for identity enhancement, for telling positive stories that facilitate people's engagement. If we follow Weick's argument on sensemaking and Rappaport on the need for empowering narratives, then careful consideration is required of the way in which an action researcher's analysis contributes to the construction of empowering narratives. Highlighting the existence of ambiguities and explaining them is not enough. It is important that we understand reflective practice as one that involves sensemaking as described by Weick. It is not a rational cognitive process that requires cognition of the ambiguity, but a sense-making process that is grounded in identity construction and empowers people.

There were also other instances where my supervisors and I critiqued aspects of the project. As discussed in previous chapters, I critiqued the EBMP pilot project's use of OST for the design of the workshops; I critiqued the problem statement developed for the FarmBis pilot; and my supervisor questioned the way in which the project team's language had shifted from talking about their approach in terms of RAAKS, to talking about it as a PAR project more generally. All of our questions were reflected on - at times quite extensively - and this reflection contributed to the learning within the team. However, our interventions did not serve to reduce the uncertainty and discomfort within the project. In fact, much of our contribution increased the ambiguities, or at least made them more explicit, which increased the sense of uncertainty and discomfort within the team. While it is important to make ambiguities explicit, this has to be done in a way that attends to people's ability to manage them. As I discuss below, because our intervention was a critique only, it did not enhance the capacity within the project to manage the ambiguities.
In Chapter 2 I discussed the benefits of the narrative approach and the way in which this could be combined within an action research approach to contribute to reflexivity within the team. However, this approach did not fully emerge until quite some time into the research process. As discussed, in a grounded theory way, the narrative approach earned its way into this research. While I did highlight to the team some of the ambiguities that emerged from my analysis as part of ongoing discussions within the team, it was not until February 2003, six months prior to the conclusion of the project, that I presented the analysis of the competing project narratives, as described in Chapters 3 and 4, to the team for further discussion. Following my presentation we discussed the discontinuities and ambiguities within the project and how the team's need for validation within the organisation had led to a struggle to differentiate the project from prevailing ways of doing things. Team members acknowledged that sensemaking had occurred in a way that served to validate people's sense of self. For example, one team member said:

That fits in with that focus group discussion time and when I looked back over that … I found that everybody got to the stage where they started to um, to make sure that their own portfolio was represented in what you were doing … I could hear my voice saying, 'evaluation, evaluation evaluation'. I could hear your voice saying, 'communication, communication, communication' (Team member, team meeting, February 2003).

And another team member said:

I agree with you and it is about that … whether you say it is your identity or not, but it is, that's my construct, that's how I see things, from an evaluator’s perspective, therefore it enhances the way I see it... (Team member, team meeting, February 2003).

For some team members, outlining these narratives that competed within the project helped them understand their struggle to establish a coherent project narrative. It also helped them to identify strategies that would assist in developing a post-productivist project narrative. The person responsible for evaluation, for example, said that she felt validated to pursue other modes of evaluation next time, and felt vindicated about her earlier assertions to conduct evaluation activities that were more consistent with the organisational learning paradigm of evaluation. What my presentation highlighted to her was the need to conduct evaluation for accountability purposes alongside evaluation activities that facilitate learning, rather than trying to pursue one or the other.

Despite the positive response from team members, the presentation had little effect on the course of the project, in the same way that despite generating a lot of reflection within the project in its final months, our critique of the shift towards PAR, the use of OST and the focus
for the FarmBis pilot did not contribute to a more inclusive post-productivist platform for change. As mentioned earlier, the effect of our critique was to increase the ambiguity and uncertainty within the project. In narrative terms, our critique just complicated the plot. It added another storyline that had to be resolved within the plot.

By the time I did the presentation on my emerging analysis of the competing narratives, the project team was seeking closure. The team was not in a position to indulge in further and greater complexity, ambiguity and uncertainty. Team members had their futures to consider in an organisation dominated by the technical rationality model of practice.

However, the encroaching deadline was not the only factor that contributed to the team's inability to come to terms with the ambiguities. Roe (1994) argues that critiques are non-stories without beginnings, middles and ends, that '… tell us what to be against without completing the argument as to what we should be for' (ibid.:53). In his analysis of intractable policy controversies, he concludes that because a critique is such a non-story that serves to de-stabilise and undermine prevailing narratives, it increases the uncertainty associated with the controversy (ibid.:69). A critique challenges the narrative setting without creating an alternative narrative space in which people can place themselves. I have argued above that this does not provide opportunities for identity enhancement; in fact it challenges people's sense of self and the investment they have made in constructing an identity within prevailing narratives, without offering alternative identity narratives. This impedes engagement with the critique. The implication for the narrative action research approach is that it should not only identify and make explicit the narratives and ambiguities that exist within a particular setting, but also facilitate the construction of new narratives that provide a space for people to perform and enhance their identities within a context of change. However, it is important that this occurs in a way that nevertheless maintains an ongoing focus on making differences and ambiguities explicit.

Overall, my narrative action research approach was based on narrative analysis; in other words, on the identification of the divergent project narratives that operated within the project. While this served to open up the project to its inherent ambiguities, which is necessary in order to embrace difference and diversity, it was not enough to help the team to better manage the ambiguities inherent in an emerging post-productivist platform for change. Two key points have emerged from this section in relation to a narrative action research approach:
Reflective practice must be recognised as a process of sensemaking rather than cognition, where sensemaking is defined in Weick's (1995:27-28) terms that emphasise it as a retrospective process, where people make sense of a lapsed experience by attaching those meanings to it that are consistent with and enhance their sense of self. This means that any method to facilitate reflective practice must provide opportunities for identity enhancement.

A narrative action research approach must involve more than just the identification and critique of prevailing narratives, but the construction of a new narrative that integrates the critique. The latter approach will enhance the capacity of people to understand and manage the inherent ambiguities of an emerging post-productivist platform for change. Further research and development of such an approach is required.

### 7.3.4 Challenges of a broker practice

Our association with the DSC team did not help it to resolve or address the ambiguities more effectively. One of my supervisors said she:

… had the sense that we had really failed them [the DSC team], because they didn't have a theoretical perspective, they didn't know where they were going, and we were the 'experts' … they were dependent on us to change their program and they felt that dependence …

So I felt, I think I could have played more of a role there … I could have said to her [the team leader], 'you need to do something more active', because they swam around in the dark for a long time and we all watched.

In this section I argue that the kind of interplay that emerged from my interaction with the DSC project was one where I became fully enmeshed in the ambiguities of the project, which limited the effectiveness of the interplay.

My supervisors and I represented and advocated a constructivist PAR practice that was consistent with the aspirations of the project team. In that sense our practices aligned with those of the project team. However, as discussed, the project team's practice was not a coherent, singular practice that is distinguished by a single set of rules of play and rules of the game. Their constructivist RAAKS or PAR practice was subverted by simultaneous productivist,
positivist evaluation and project management practices. There was no integration of practice within the project.

Our action research practice became caught up in the tension between the competing project narratives, which impeded the possibility of making a significant contribution to the project. The interplay within the project was between two competing practices, each with their own rules of play and rules of the game - the practice of evaluation on the one hand, and the practice of social research on the other. Initially both of these were represented within the team, as a social researcher was recruited as part of the project team. However, he left early on in the project and was never replaced. No other team member had experience in social research; however, all were familiar with evaluation techniques and in particular with Bennett's hierarchy. My supervisors and I were the only social research practitioners associated with the project.

As discussed in Section 4.3.2 social research was to differentiate the project from other projects in the organisation. It provided the team with opportunities for differentiation. As one team member argues:

I probably thought that what we were trying to do … was actually build up the department's capability to do … social research, like to incorporate social science, social research, social issues and tackling social issues within our work as natural resource managers … So it was building up the department's capabilities to … do that triple bottom line stuff, like we've got economists and we've got lots of biophysical scientists but it was that social side that we are probably missing within the department (Team member, second round interviews, July 2002).

As discussed, most team members conceived of the PAR process as an evaluation approach. In DNRE/DPI staff were provided with in-house evaluation training, and in recent years significant effort has gone into building the organisation's evaluation capacity. Evaluation was something that the team really connected with and most team members equated evaluation with social research. I have argued in Section 4.3.5 that evaluation activities displaced the RAAKS process. Increasingly, the project became expressed in evaluation terms. It was the process that was most inclusive of all team members. Yet, it was also evaluation activities that reconstructed the project in productivist, linear terms. Social research practice, on the other hand, was something the team felt less comfortable with. Moreover, meetings with my supervisor often included only the team leader, one other team member and me, and therefore social research practice was not inclusive and did not facilitate integration towards an emerging social research practice, as is evident from the following statement made by one team member who was not invited to participate in the meetings with my supervisor:
Another factor that constrained convergence and integration around social research stems from the very presence of a broker practice with an established identity in that area. On a number of occasions project team members were hesitant in claiming social research as their practice, deferring to my responsibility and identity within the team. The following interaction in an interview with a team member shows how she implicitly asked for my permission to claim social research as something that the entire team does:

LB
I’d like to know what you think about social research within this project?

Team member
So who do you think is doing the social research? Are you speaking about your role?

LB
I’m just talking about social research in general at this stage. Social research is often a fairly loosely used term. People say we’re doing a social science approach and social research is really important. I just want to get your view of what you think the role of social research is in this project?

Team member
I would like to think we all have some input in the social research, that’s what I would see.

My performance as a broker did not necessarily facilitate the adoption of social research as part of the team's practice. At times it stopped other team members from claiming this as their role. As a broker my presence impeded 'insiders' (team members) from moving 'out'. The presence of a broker then does not necessarily facilitate differentiation; as my experience shows, it can impede it.

On the whole, the project did not converge around social research practice, which provided opportunities for innovation and differentiation. The contested nature of the project's practice did not allow for comprehensive alignment of the rules of play that could facilitate integration between interplaying practices. In fact, my participation in the project became fully enmeshed within the sensemaking contest that was the DSC project.

Wenger argues that brokers must simultaneously avoid becoming full members, as well as being rejected as intruders:
… their contributions lie precisely in being neither in nor out. Brokering … requires an ability to manage carefully the co-existence of membership and nonmembership, yielding enough distance to bring a different perspective, but also enough legitimacy to be listened to (1998:10).

I was successful in becoming a member of the project team, but it could be argued I was potentially too successful. As discussed, I occupied the position of social researcher within the team, which prevented others from taking on that role. Moreover, as argued, I was slotted into the project hierarchy to the extent that I felt I would compromise my position within the team if I discussed the project with senior people outside the team. As a result my analysis and voice came from within, even if it represented a different practice. In other words, I had been assimilated into the project in a way that compromised my ability to be a different voice and an effective broker.

I have argued that because the project was located in the service delivery side of the organisation, it was unable to be fully reflexive as it was not in a position to challenge organisational structures and regimes of practice. The fact that I had positioned myself entirely within the team meant that I was unable to contribute to reflexivity within the broader organisation. As my principal supervisor argues, there was no 'ground-truthing' of the DSC project with reference to the broader organisational context and beyond. Such ground-truthing may have assisted the team in dealing with the ambiguities, which may have contributed to the development of a 'meta' narrative within which the project could be located and the ambiguities addressed.

The above discussion suggests that it is important for a broker to operate at the boundaries of a platform, in this case as an interface between a project and its broader constituency. This needs to be considered and made explicit at the time that a researcher's role within a case study project is negotiated.

Overall, my contribution to the DSC project became enmeshed in a tension between productivist regimes of practice and emerging post-productivist practices. The interplay between the DSC project team and me did not lead to new shared practices, or what Gremmen refers to as 'unity of competent performance' (1993:114). It also did not mobilise activities towards a unified and shared understanding of the problem domain we were dealing with (cf. Paine, 1997:166), as ambiguity prevails to this day as to whether we were addressing issues of organisational capacity, community capacity or both.
Before I conclude this chapter, it is important to note that while the DSC project team struggled in developing and implementing a new approach within DNRE/DPI, there was nevertheless significant learning and practice change as a result of people's participation in the DSC project. While their learning may not have resulted in new shared practices, and while the technical rationality model continues to prevail in DPI, a number of people report that they are doing things differently in their new roles as a result of their involvement with the DSC project. While the DSC project has been unable to transform extension practice significantly, even within its partner projects, it has nevertheless marked a space within the organisation from which to assert other ways of doing things (cf. Pathak and Rajan, 1992:260). The project serves as a reference point that makes explicit and visible the challenge to the prevailing model of technical rationality.

Furthermore, I would like to argue that no amount of reflective practice would have allowed the team to escape the productivist regimes of practice. To do that would have required much greater flexibility within the organisation, and access to, support from, and alignment with stakeholders in the purchasing section of the organisation. Reflexivity for a post-productivist platform for change requires attention to the structures and practices that prevail, within which meanings are embedded, as well as the discourse through which meanings are negotiated.

### 7.4 Conclusion

In this chapter I have discussed the reflective practice of the DSC project. I have argued that the project team reflected extensively on project activities, however, without 'putting to use' the ambiguities and differences that existed within the project. An explicit focus on ambiguity and difference is inconsistent with the technical rationality model of practice that prevailed within the organisation, yet it is critical if we want to embrace the diversity of stakeholders that characterise the post-productivist rural context.

I have also reflected on the contribution I made to the project as an action researcher. In my PhD research I trialled an action research approach that included narrative analysis. This allowed me to explore convergence within the context of the DSC project without losing sight of the ambiguities and differences that characterised it. Furthermore, it allowed me to link theory with practice as the narratives provided a tool to discuss with the team where, why, how
and by whom certain stories were told, with reference to theories of identity, sensemaking, change, knowledge and social capability.

The way in which I have integrated narrative analysis within an action research strategy is reminiscent of Schön's reflective research approach that is based on frame analysis. It differs from this in three key respects:

- A narrative approach allows for analysis of the way in which people place themselves, as *actors*, while the word frame implies something that is prior to action. In other words, a narrative is lived and located in action, while a frame is not.

- Frames are referred to in general terms and transcend specific settings, while the narrative locates people in specific relational settings.

- While frame analysis allows for an exploration of the way meanings are constructed, narrative analysis attends to meanings (discourse), practices (action) and structures (space). As this thesis has highlighted, a platform for change is constructed not only discursively, but also through regimes of practice and prevailing organisational structures. Attention to these aspects of an emerging platform for change is critical.

An examination of the competing project narratives provided insights into who was included within an emerging platform for change and what role they played. It revealed how different stakeholders were included, marginalised, assimilated or excluded from the process.

However, from the analysis of the reflective practice of the project and the role that I played, the following key points emerge that need to be addressed to improve what I refer to as the narrative action research approach:

- If action research is to contribute to the effectiveness of emerging platforms then reflective practice must be facilitated in a way that conceives of it as a sensemaking process, as described by Weick (1995), rather than one that facilitates mere cognition of the situation and its inherent ambiguities. This means that any approach to facilitate reflective practice must provide opportunities for identity enhancement.
A narrative action research approach must involve not only a critique of prevailing narratives, but the construction of new narratives that integrate the critique. It is important to note however, the importance of doing this in a way that nevertheless maintains an ongoing focus on making explicit contingencies and ambiguities, to prevent assimilation, marginalisation and exclusion of difference. The capacity to manage such an ongoing process is critical within a post-productivist platform for change.

It is important for an action researcher to operate at the boundaries of a platform, in this case as an interface between a project and its broader constituency. This needs to be considered and made explicit at the time that a researcher's role within a case study project is negotiated.

Overall, the narrative approach holds promise as a methodology to improve reflexivity for a post-productivist platform for change, because it:

- makes explicit where and how convergence occurs, without losing sight of the ambiguities and differences that are constitutive of the process of convergence
- attends to the way a platform is constructed not only through discourse, but also through practice and structure
- allows the researcher to integrate theory and practice
- provides the researcher with a tool to facilitate dialogue and reflection with practitioners in the research setting
- constructs reflective practice as a sensemaking process that is grounded in identity construction and links cognition and action.
- offers the opportunity to move from critique to narrative
allows action researchers to come to terms with the implications of the post-modern context of change and the inherent fragmentation and discontinuity, while simultaneously remaining committed to the modernist project of change management and its ideals.

As it holds promise as a methodology that improves reflexive capacity in a post-productivist platform for change, the narrative action research approach warrants further research and development.
8

Conclusion

8.1 Introduction

It has been a year since the conclusion of the Developing Social Capability (DSC) project. Team members are currently employed in various projects in either the Department of Primary Industries (DPI) or the Department of Sustainability and Environment (DSE). Many of the people involved in the pilot projects have also moved on to other projects within these departments.

As discussed in this thesis, the journey of the DSC team was one fraught with challenges, difficulties and ambiguities. Nevertheless, the learning and change that resulted from people's involvement in this project must not be underestimated. While there was no comprehensive or even significant transformation of extension practice within the pilot projects beyond the life of the DSC project, several team members are now in roles where they draw from their experiences in the DSC project. Even though they are again in positions where they operate within prevailing productivist regimes of practice, they simultaneously perform their identities from the space that was marked by the DSC project. They challenge the technical rationality model, the productivist regimes of practice that dominate the organisational context, and the linear, dichotomous relationship between government and its stakeholders. Stenson and Watt (1999:200) refer to the kind of change affected by the project as ‘… the development of hybrid logics and practices of government’, where ‘… narratives of the social operate in shifting relationships with other discourses and logics of government in the evolution of government repertoires'. I would like to add that such evolution must be understood as consisting of multiple and discontinuous pathways of change and transformation.

Overall, the strength of post-modern theory is that it describes the conditions and imperatives of the post-productivist era very well. Moreover, analysis inspired by post-modern theory makes
visible the space of the 'other'; it makes explicit ambiguity, discontinuity, fragmentation and
diversity, as it problematises the modernist emphasis on unity and universality that
compromises the diversity of the current context of change. Therefore I argued that even though
we should not abandon our modernist ideals, it is important to use post-modern theory to
improve the reflexivity of our change management practices in order to better manage the
diversity that characterises the post-productivist land management context.

In this research, post-modern theory and the use of the narrative approach has made explicit and
visible the discontinuities within the DSC project. The way in which I focused on narratives
brought into view the fragmentation of emerging platforms for change, but also the way in
which platforms are constructed not only through discourse, but also in practice (for example
through evaluation and project management) and structure (for example, the purchaser-provider
model, and the linear configuration of relationships between government and other
stakeholders).

In this concluding chapter I summarise the research findings that have emerged in the preceding
chapters with reference to the research questions. I also discuss the implications of these
findings for social researchers, land management agencies and the role of government.

8.2 Diversity and convergence in a post-productivist platform for change

The modernist emphasis on unity and universality has translated into change management
practices that largely focus on consensus building. I too started this thesis with the assumption
that convergence was inherently positive and desirable, and I also assumed that processes that
aim for and focus on such convergence provide the pathway for change. As discussed I set out
to explore how convergence was facilitated in the context of the DSC project. Two key points
emerged from my analysis:

- Convergence was always partial, as it occurred around competing project narratives.
  Therefore, when convergence occurred, it was simultaneously contested, and hence not
  inclusive or comprehensive.
• Convergence was the result of assimilating, marginalising or excluding diverse interests and activities. The post-productivist aspirations of the project team were subsumed within the productivist regimes of practice. As a result the project always operated within the parameters of government, and hence the project was unable to create a space for other stakeholders to also perform their identities and become lead characters in the change process. Similarly, in the pilot projects, the project teams converged around problem definitions that were identified in hard systems terms as is consistent with the technical rationality model of practice that prevails in the organisation. As discussed in Chapter 5, this led to exclusion and marginalisation of diverse stakeholders and their perspectives and ways of doing things.

Consequently, while community based approaches often focus on consensus and coherence as an ultimate outcome of the change process; this thesis posits that it is equally important for platforms for change to be constructed through processes of differentiation in order to avoid the above-mentioned processes of marginalisation, exclusion and assimilation.

There is a need to reconceptualise diversity and challenge the modernist theoretical frameworks that underpin much of the current community based approaches to change. Rather than conceiving of change as a process that aims to transcend diversity and difference whereby these are considered as threats, errors or anomalies; it is important that diversity is recognised as an inescapable opportunity for differentiation and innovation. The pathway for change should therefore emerge from a focus on ambiguity and difference, rather than from a focus on what is shared and common within a particular context (cf. Bawden, 1997:4). In other words, innovation, change and learning are as much about constructing identity, as they are about simultaneously escaping positions and identities. In fact, they derive from the dynamic tension between identification and differentiation. In the following section I summarise how this thesis contributes to the identification of ways to improve the capacity of co-operative approaches to deal with diversity.

8.3 Dealing with diversity

The findings of this thesis suggest that the capacity of co-operative approaches to deal with diversity can be improved by addressing two aspects of methodologies for change, which
comprise sites of integration around which approaches are designed, and processes to facilitate reflexivity.

### 8.3.1 Sites of integration

Although I advocate a greater emphasis on diversity and difference, platforms for change can nevertheless only be effective if there is some sense of integration and mutuality. Without this collaboration is impossible. However, as discussed in Chapter 1, the basis for this integration that existed within the productivist era no longer provides the foundation for collaboration in a post-productivist platform for change.

In change management practice very little attention is paid to the sites of integration that underpin the various approaches, and how these affect participation of different stakeholders. In Chapter 6 I discussed a number of sites of integration around which aspects of the project and emerging approaches are constructed in terms of their implications for the way in which diverse stakeholders are included in the land management process.

It became clear that the current emphasis on community *per se* as a site of integration for a platform for change is problematic. It is based on the notion that community exists as an objective entity prior to the social dynamic that produces it. This emphasis on community as a natural bounded entity obscures the processes of exclusion, marginalisation and assimilation that construct community.

Similarly, while many authors advocate a focus on communities of practice as a site of integration, I have argued that a post-productivist platform for change requires integration across current communities of practice, rather than within them, and hence require a site of integration of a different scale than that which is inherent in communities of practice.

Instead, I argued that an object in Engeström's constructivist sense may provide a site of integration that mediates differences between people in a way that does not seek to synthesise or assimilate these, as an object oriented approach is not premised on identification between people, but on identification with the object. However, it is important that such an object oriented approach is implemented in a way that gives rise to new configurations of communities of practice. To that end I proposed a combination of the soft systems principles of the Rapid
Appraisal of Agricultural Knowledge Systems (RAAKS) process that focuses on the social organisation of the change process, with Engeström's emphasis on an exploration of the ambiguities that exist about the object.

I further suggested that landscape may be useful as a site of integration, as it is shared by all stakeholders in the land management context, and this facilitates integration without this being premised on similarity and sameness. However, I argued that only if landscape is operationalised as an object in a constructivist sense, can it provide a site of integration that brings together the disconnected and fragmented diversity of land management stakeholders within a post-productivist platform for change.

Overall, I identified two design criteria for sites of integration around which a post-productivist platform is to be constructed:

- The selected site of integration must challenge and expand the prevailing configuration of communities of practice in the land management context.
- The site of integration must be understood in a constructivist way that simultaneously constructs and problematises convergence in order to create a space for difference to be expressed and embraced.

### 8.3.2 Improving reflexivity

A second aspect of community based approaches that can be improved to enhance their capacity to deal with diversity concerns processes that facilitate reflexivity. In relation to this I made the following points in this thesis:

- It is critical that reflective practice is focused on the exploration of differences and ambiguities, if we are to provide a space for other views and practices to be included in a post-productivist platform for change.
- It is important to develop tools and methods that not only attend to the way in which meanings are constructed, but also to the way in which practices and structures affect a platform for change.
I argued that the narrative action research approach holds promise as a methodology to achieve the above. It allowed me to explore convergence within the context of the DSC project without losing sight of the ambiguities and differences that characterised it. In fact, as discussed in Chapter 2, the narrative approach earned its way into the thesis, as it provided me with the tools to deal with the discontinuity that emerged from my analysis of convergence in the project. Furthermore, it allowed me to link theory with practice as the narratives provided a basis for dialogue with the team about where, why and by whom stories were told, with reference to theories of identity, sensemaking, change, knowledge and social capability. Finally, the narrative approach allowed for an analysis of people as actors; the narrative is lived and located in action and it locates people in specific relational settings. It allowed for attention to be paid to the way in which meanings, as well as practices and structures construct a platform for change.

However, my narrative action research approach was based on narrative analysis as I focused on the identification of the divergent project narratives that operated within the project. While this did serve to focus on and make explicit the ambiguities in the project, it was not enough to help the DSC team to better manage the ambiguities inherent in an emerging post-productivist platform for change. My analysis did not create opportunities for identity enhancement, and as it took the form of a critique, it threatened the investment people had made in prevailing ways of doing things, without offering alternatives. I made the following two points about the way in which the reflexive performance of co-operative projects can be improved in order to better manage diversity in a post-productivist platform for change:

- Reflective practice must be facilitated in a way that conceives of it as a sensemaking process, as described by Weick (1995), rather than one that facilitates mere cognition of the situation and its inherent ambiguities. This means that any approach to facilitate reflective practice must provide opportunities for identity enhancement.

- A narrative action research approach must involve not only a critique of prevailing narratives, but the construction of new narratives that integrate the critique. I argued that this has to be achieved in a way that nevertheless maintains an ongoing focus on contingencies and ambiguities for reasons outlined above.

Overall, I argued that the narrative action research approach holds promise as a methodology to improve reflexivity for a post-productivist platform for change. In the following section I
discuss the role of social researchers such as myself in facilitating such a narrative action research approach.

### 8.4 Implications for the social researcher

In this thesis I critiqued proponents of action research who privilege practice over theory. I argued that a singular emphasis on local knowledge and practice does not allow action researchers to make sense of broader processes, structures and power relations that connect people's experiences across practices. Hence I suggested that while we must recognise the limitations of theory, we should nevertheless use theory strategically to intervene in our practice and to question what we do. I argued that social researchers can play a specific role in this process, as they have skills and strategies at their disposal that allow them to challenge everyday practice. The researcher can highlight and provide alternative and competitive accounts that facilitate dialogue within the field. As discussed, I trialled the narrative action research in order to integrate theory and practice and highlight to practitioners where, why, how and by whom particular accounts of the project were produced.

I argued that the social researcher is a broker in the action research process who links activities within universities with those that occur in professional practice. This role is one that is precariously balanced on the 'co-existence of membership and nonmembership' (Wenger, 1998:10). In reflecting on my own experience, I argued that it is important for a broker or social researcher to operate at the boundaries of a platform, rather than entirely from within, as is advocated by many action researchers. As I had positioned myself entirely within the team, I was unable to contribute to reflexivity within the broader organisation through the kind of 'ground-truthing' that my supervisor alluded to.

I propose that social researchers involved in action research deliberately position themselves as brokers at the boundaries of a practice or platform, where they are both operating from within the research setting, but also from a position that transcends it. Such positioning enhances reflexivity within projects, practices or platforms, as it facilitates alignment with forces beyond their context. However, it is a precariously balanced position that would benefit from being carefully considered and negotiated at the outset of a project.
So far I have discussed the implications of this research for the design of community based approaches and for people involved in implementing them. However, this research also has broader implications for the agencies involved and the role of government.

8.5 Implications for land management agencies

A key issue that is currently on the agenda in land management agencies such as Dairy Australia and DPI, concerns the effectiveness of service delivery frameworks and the role of extension within that. Furthermore, land management agencies are concerned about ways to engage a greater diversity and larger number of people in change programs, in order to more effectively achieve triple bottom line objectives. A final issue that is emerging concerns the way in which governance arrangements will allow organisations to deal with the complexity of issues it currently faces (eg. Petris, forthcoming)

This thesis has significant implications in terms of the way in which these issues are framed and addressed:

- In terms of the service delivery frameworks and the role of extension, the findings of this thesis suggest that the current separation of policy and project development (purchaser), service delivery (provider), and client, and the linear change process that this structure allows for, is unable to deal with the inevitable interdependencies between the various players in the rural context. The interdependent nature of the relationships that is inherent in the post-productivist context of change requires a deconstruction of the dichotomy between government and other stakeholders, between purchasers and providers, and between service providers and clients. This challenges the boundaries and scope of current service delivery frameworks and extension practice.

- The findings of this thesis suggest that in order to engage a greater diversity of stakeholders in capacity building and change programs, it is important that these programs create a space from which these diverse stakeholders can perform and enhance their identities; from which they can express their different views and perspectives; and where their ways of knowing and doing are validated. This thesis has identified issues that need to be addressed to develop this capacity (see Section 8.3).
• This thesis has highlighted the importance of addressing issues of governance. It has made explicit the ambiguities that result from implementing a co-operative approach within the context of prevailing positivist approaches to public administration, and organisational structures. What this means is that organisations such as DPI and Dairy Australia have to come to terms with the fact that their organisational structures are constitutive of the social organisation of the change process and hence critical to the success of the engagement process and their programs more broadly. I have argued that it is important to diagnose where the tensions between prevailing positivist organisational structures compromise the construction of inclusive platforms for change that create a space for diverse stakeholders to participate.

• Organisational alignment for community-based approaches requires not only alignment of organisational structures, but also of organisational practices, such as evaluation and project management.

Overall, co-operative approaches are often implemented in a way that constructs the relationship between agencies and other stakeholders in terms of a dichotomy, where agencies are conceived of as dealing with an external environment. This thesis suggests that this dichotomy needs to be deconstructed, that agencies need to become reflexive about their role and contribution to the change process, in order to facilitate the significant organisational alignment that is required to successfully develop post-productivist platforms for change.

8.6 Implications for government

In Chapter 6 I argued that the co-operative approach raised questions about the mandate of DNRE/DPI to construct a platform for change to deal with issues emerging within the communities it sought to work with. To discuss the implications of this thesis for the role of government I would like to discuss a possible scenario that is framed around the FarmBis pilot conducted by the DSC project team, as this provides a very telling and challenging example of the dilemmas for government that derive from the complexity of the current context for change.

If we imagine that this pilot project had implemented the Rapid Appraisal of Agricultural Knowledge Systems (RAAKS) process in combination with Engeström's model of expansive learning and allowed the relevant human activity system as well as the problem statement to
emerge iteratively from the interaction between the diverse stakeholders, then what could have happened is the following: The process would have started with the problem statement generated from within the FarmBis program, that is, the lack of participation of the Koori community in aquaculture training programs. The assumption that underpins this problem statement is that it is of benefit for the Koori community to become involved in the FarmBis program. If this problem statement had been discussed with other stakeholders, this assumption may have been challenged. Had the pilot team reflected on the transformation process with which it was concerned, it may have identified its 'object' as Koori community well-being. In exploring this further, Koori people or other stakeholders may well have argued that the problem from their perspective is very different, and not one that is resolved through involvement in aquaculture (a practice that is controversial in environmental terms). This may have led to an entirely different problem statement that revolves around other issues relating to Koori community well-being, say for example, health issues. If the DSC project pursued this redefined problem statement and identified further stakeholders that related to it, it may have found that FarmBis project staff is not relevant to the problem statement, and more significantly, neither is DPI staff and therefore the DSC project.

It is these kinds of complexities that the debates on governance and the whole-of-government approach that is currently advocated, need to focus on. How can government respond to such challenges? What are the structures of governance and funding arrangements that allow for issues to be dealt with in this fluid and flexible way? In fact, what this scenario highlights is that co-operative approaches challenge not only the dichotomous structures within government agencies, but also the separation between government departments. What this suggests is that the development of effective co-operative approaches is an issue of joint-up-government.

8.7 Conclusion

In this chapter I have summarised the findings presented in this thesis and discussed the implications for the design of co-operative approaches, for the role of the social researcher, for the agencies involved and for the role of government. To conclude this thesis I would like to revisit and expand the definition of social capability building discussed in Chapter 1.

From this research it is clear that social capability can be developed in a constructivist as well as a positivist way, where the former is more likely to serve the ideals of community
empowerment often held by staff involved in projects, while the latter is more likely to serve the needs and priorities of government. I propose that a constructivist definition of social capability is required in the post-productivist land management context and hence define social capability building as the process that creates fluid and flexible platforms for collective action that bring together a diversity of stakeholders to address land management issues. Social capability is constructed through and inheres in social relationships, discourse, practice and organisational structures. To develop social capability requires an approach that attends to these four dimensions of social capability, it requires opportunities for identity enhancement for stakeholders involved, and it requires reflexivity on the part of the participants and organisations involved in the platform.

Overall, through this research I have attempted to contribute to emerging conversations about capacity building and co-operative approaches within government and other agencies. Further (action) research is required to translate some of my findings into practical methods to develop social capability in the land management context.
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Appendices

Appendix 1: Previous publication of material from thesis


Appendix 2: RAAKS windows and tools

Phase A: defining the problem

Windows
A1  Problem definition exercise
A2  Identifying relevant actors
A3  Tracing mission statements
A4  Environmental diagnosis
A5  Synthesis/problem situation

Tools
A1  Problem definition exercise
A2  Actor identification exercise
A3  Actor objective sheet
A4  Environmental limits checklist
A5/B6  Prime mover septagram
A5/B8  Approximation exercise I
A5  Approximation exercise II

Phase B: Analysing constraints and opportunities

Windows
B1  Impact analysis
B2  Actor analysis
B3  Knowledge network analysis
B4  Integration analysis
B5  Task analysis
B6  Coordination analysis
B7  Communication analysis
B8  Synthesis/social organization
Tools
Bi Impact analysis sheet
B2 Actor analysis checklist
B3/a Info-source-use exercise
B3/b Communication network sheet
B3/c Source-intermediary-user sheet
B4/1 Linkage matrix
B4/b Linkage mechanism checklist
B5 Task analysis sheet
B6 Basic configurations
B7 Communication analysis exercise
B8/a Windows reporting sheet
B8/b Understanding the social organization of innovation

Phase C: Strategy/Action planning

Windows
C1 Knowledge management
C2 Actor potential analysis
C3 Strategic commitments

Tools
C1 Knowledge management analysis exercise
C2 Actor potential checklist
C3/a Defining possible actions
C3/b Strategic commitments
Appendix 3: Interview schedules

Interview schedule for round one semi-structured interviews with DSC team members

Below are the questions I developed to conduct semi-structured interviews with DSC team members between part one and two of the induction course for the project in September 2001:

1. How do you see the DSC project in terms of what it is trying to achieve and where it fits into the broader context of natural resource management? Where do you see the opportunities? Constraints?
2. What do you see as the key challenges for the project?
3. What do you believe are some of the critical tasks and priorities for the project at this point?
4. Has your view about the project changed at all since you have been appointed to this role? If yes, how and why? What are the implications of that learning in terms of the way in which the project is developed?
5. Who do you believe are the key stakeholders in this project and why?
6. How and why did you become involved with the DSC project?
7. How do you see your role within the DSC project?
8. Where do you see your personal contribution to the DSC project and how are you going to prepare yourself for it?
9. What do you see as the main priorities in terms of your own role and activities within the project at this point?
10. Has your view about your role changed at all since you have been appointed to this role? If yes, how and why? What is important about that learning experience? What are the implications of that learning in terms of your contribution to the project and your dealings with others on the project in the future?
11. What other people or networks do you think you will need to engage in, in order to perform your role effectively?
Interview schedule for second round semi-structured interviews with DSC team members

Below are the questions I developed, which guided the semi-structured interviews I conducted with DSC team members during the transition from the process development phase to the pilot implementation phase in July 2002:

1. How do you see the DSC project now in terms of what it is trying to achieve and where it fits into the broader context of natural resource management? Where do you see the opportunities? Constraints?
2. In reflecting on the process to date, i.e., the identification of stakeholders, the interviews, the focus group discussions and subsequent interaction with case studies, what have been some of the successful activities of the project and why?
3. What have been some of the less successful activities of the project and why?
4. Has the process achieved our goals?
5. How do you know it has?
6. What signs alert you to problems in the process?
7. What have we learnt as a team since August?
8. How has the process so far changed your view of the project and your role within it?
9. Do you feel that the approach taken so far is the way to achieve the project goals?
10. What are the implications of this learning about the process to date in terms of the way in which the project is developed in future?
11. Who do you believe are the key stakeholders in this project and why? What are their roles? Did we go wide enough? How well did we define the system?
12. How well has the project established relationships with these stakeholders? (Quality of interaction with stakeholders).
13. Are there areas where you think stakeholders have different views about the project? What are they? What does that mean for the project?
14. How do you see the team working together within the project? Challenges? What works well?
15. Has the way the team works together changed at all since the start of the project?
16. In thinking about this, what does that mean for the way in which the team will work together in the future?
17. Where do you see your role/personal contribution to DSC project?
18. How is this role different/similar to your role within NRE before this project?
19. Where do you see opportunities for your personal development in this role, if any?
20. What are some of the things that impact on your role and activities within projects?
21. Has your view about your role changed at all since you have been appointed to this role? If yes, how and why? What are the implications of that learning in terms of your contribution to the project and your dealings with others on the project in the future?
22. What other people or networks do you think you’ll need to engage in, in order perform your role effectively?
23. What role do you think does social research play in this project?
24. How effective do you think is social research integrated into the project?
25. What do you believe has been the impact of my participation on the team?
26. How could social research be better integrated into the project?

DSC Interview schedule for interviews with DSC project stakeholders, conducted by DSC team members

Below are the questions developed by the DSC team to guide the semi-structured interviews the DSC team conducted with project stakeholders in October and November 2001:

1. What are some of the exciting things or events that are happening in your area/industry now?
2. Within Victoria, what do you think are the significant issues resulting in change for people involved in agriculture and the environment?
3. Following on from these issues, what needs to be addressed or improved to equip people to manage successfully in a changing environment?
4. What opportunities do you think exist to improve the capability of people to manage successfully in a changing environment? What do you see as some of the critical first steps or priorities in enhancing the capability of people in the food & agriculture sector?
5. What are some of the most effective projects, in terms of improving the capability of people to manage change successfully, that you have been involved in? What were the success factors of these projects? What learning from this can be applied to other projects?
6. Think of some projects that have struggled to help people manage or implement change. Why did they struggle? What lessons are in that for other projects?
7. Who would you class as leading change agents in your industry? Why? How do they operate to give them a leading edge?
8. What does the term social capability mean to you?
9. What role does your organization/project play in enhancing the capability of people in the food & agriculture sector to manage change?

10. What are some of the constraints in achieving your ‘social capability’ objectives?

11. Who do you believe are important participants in joint approaches that aim to address the ways in which we develop social capability? Why?

12. What do you see as some of the reasons for you to become involved in joint approaches to developing social capability? What would motivate you to become involved?

13. Is there anything that constrains you in terms of becoming involved in joint approaches to improve the capability of people to manage successfully?

14. How can the DSC project be of benefit to you and your organization/project?

15. Is there anything else that you believe is very important in terms of building social capability, which we have not discussed in this conversation?

**Interview schedule for first round semi-structured interviews conducted with team members from the EBMP and Topcrop pilots**

Below are the questions I developed with the DSC team, which guided the first round semi-structured interviews I conducted with pilot project team members in October 2002:

1. From your experience in the Topcrop/EBMP program/project, what do you understand to be the key issues relating to stubble management/community involvement in catchment health?

2. What changes in practices/community involvement is your program/project trying to achieve?

3. What has been the approach of your program/project in the past to dealing with this issue and changing the way people do things?

4. What are some of the issues your program/project is facing in trying to deal with stubble management/community involvement in catchment health? Prompts: What have been some of the difficulties, stumbling blocks or questions?

5. What do you believe can the DSC project contribute to your program/project? What do you believe the approach that is advocated by the DSC project could contribute to your program/project? What do you hope to achieve through the joint project? (Focus on process here).

6. What do you think could be some of the limitations of the DSC approach? What are your concerns about the DSC approach, the joint project?
7. Who do you believe the joint pilot project needs to involve in order to achieve its goals?
8. How do you see your role/key tasks/priorities within the joint project? How is this role similar/different from your role before this project/in other projects?
9. What strengths do you bring to the project and where do you see opportunities for personal development through the joint project? Do you feel you need further training, skills, knowledge in order to perform your role within the joint project?
10. What does the term social capability mean to you?
11. Is there anything else you would like to mention in relation to your involvement with the joint project?

**Interview schedule for second round semi-structured interviews conducted with team members from the Topcrop and EBMP pilot projects**

Below are the questions the DSC team developed, which guided the second round semi-structured interviews DSC team members conducted with pilot project team members in June 2003:

1. What do you understand to be the issues relating to stubble management/community involvement in catchment management?
2. How has your understanding of this issue changed since the beginning of the pilot project?
3. What has been your role in the project?
4. How has your role changed over time?
5. Has this role been different to your role in other projects?
6. What have you gained personally from being involved?
7. How has the project contributed to the development of your skills and knowledge?
8. What strengths do you think you have brought to the project?
9. What have been the challenges to you personally?
10. What skills/training/support would help you to meet the challenges in the future?
11. Is there anything you are doing differently in your work as an extension officer (or will do differently in the future), as a result of being involved in the stubble management/EBMP pilot?
12. Do you think you would have the confidence to use the DSC approach again, if you thought the situation was appropriate?
13. How has your understanding of the DSC approach changed compared to the beginning of the pilot project?

14. What do you see are the differences in the DSC approach, compared to the way you interact with stakeholders in other projects/parts of your work?

15. How has the approach taken in the pilot project helped the Topcrop/EBMP project to develop some pathways to improve stubble management/community involvement in catchment management?

16. In what type of situations do you think the DSC approach would be appropriate to use in the future?

17. What are the challenges for using the DSC approach more widely in agriculture and NRM projects?

18. How do you think other participants (outside of the team) perceived the pilot project?

19. What have been the strengths and benefits of working in this partnership?

20. What have been the challenges?

21. What does the term social capability mean to you now?

22. Has your understanding of the term changed since the beginning of the project?

23. How do you think the pilot project helped develop social capability around the issues relating to stubble management/catchment management?

24. What do you think were the key elements/parts of the process that helped develop social capability on the stubble management issue/issues relating to community involvement in catchment management?

25. Is there anything else you would like to add about your involvement in the pilot project?

**Interview schedule for semi-structured interviews with stakeholders in stubble management for the Topcrop pilot project**

Below are the questions the Topcrop pilot team developed, which guided the semi-structured interviews Topcrop staff conducted with stakeholders in stubble management (Topcrop Victoria. Department of Primary Industries, 2003:17):

1. What is your interest in stubble management?
2. How do you see current stubble management practices?
3. What do you think are some of the issues associated with stubble management? Prompt, positive or negative effects of stubble management?
4. Who is affected by these practices?
5. What opportunities do you see to improve stubble management practices?
6. What approaches are you taking to improve stubble management practices?
7. What is working/not working in your approach?
8. What opportunities do you see for further improving your approach to stubble management?
9. What issues do you face in further improving your approach to stubble management?
10. What do you believe others could do to assist you? DPI in particular?
11. Who do you think are the important stakeholders in this issue?
12. Who else should we be speaking with?
13. Who do you think has a different view from you on stubble management?
14. Is there anything that you believe is very important in terms of stubble management that we have not yet discussed?

**Interview schedule for semi-structured interviews with land managers with a stake in catchment management for the EBMP pilot project**

Below are the questions the EBMP pilot team developed to provide a guide for interviews with land managers with a stake in catchment management conducted by EBMP pilot project team members in January 2003

1. How/Are you involved in catchment management activities?
2. What triggered your involvement in these activities?
3. What keeps/kept you involved?
4. If you can think back to projects and activities you are no longer involved in, what are some of the reasons you are no longer involved?
5. For catchment management activities that are working well, or have worked well in the past, how have people been involved? How have people been supported in their actions?
6. Have there been some things that have really frustrated you when you have become involved in catchment management projects?
7. Have there been some things that have really inspired or motivated you to become or stay involved?
8. From your point of view, what would be the key features of a good process to involve people in catchment management?
9. From your experience, what are the main factors that impact on people becoming involved?
10. What opportunities do you see to further involve people in catchment management action?
11. Is there anything else you think is very important to tell us about people's involvement in catchment management?

Interview schedule for semi-structured interviews with agency and industry personnel with a stake in catchment management for the EBMP pilot project

Below are the questions the EBMP pilot team developed to provide a guide for interviews with agency and industry personnel with a stake in catchment management conducted by EBMP pilot project team members in January 2003

1. Can you tell me a bit about your job and how you are involved with the community and catchment management?
2. What do you think are the main issues influencing community involvement in catchment management?
3. If you think back on your experiences working with people in the community, how and when have people become involved?
4. What triggered people's involvement? What do you think motivated them to become involved?
5. What do you think keeps people involved?
6. What do you think prevents people from or causes people to stop being involved?
7. In your work, what do you personally get out of being involved with people in the community?
8. What do you think your organisation gains from community people being involved in its programs?
9. For catchment management actions you think are working well, or have worked well in the past, how have people been involved? How have people been supported in their actions?
10. Why do you think some people have chosen not to become involved in these activities, or have chosen not to continue to be involved?
11. Have there been some things that have really frustrated you when you have become involved in community based catchment management projects?
12. What types of things do you think really frustrate community people in relation to becoming involved or being involved in catchment management action?

13. Have there been some things that have surprised or inspired you when you have been working with community people?

14. What type of things do you think really encourage community members to become involved?

15. From your point of view, what would be the key features of a good process to involve people in catchment management?

16. From your experience, what are the issues that impact on your organisation's ability to involve people in the community?

17. What opportunities do you see in your organisation or elsewhere to improve approaches to community involvement?

18. Is there anything else you think is very important to tell us about people's involvement in catchment management?
Appendix 4: Focus group questions

DSC Focus groups with service providers and policy staff

The following questions were developed by the DSC team to provide a guide for team members to conduct the four focus group discussions held with service providers and policy staff on the issues of community viability, water use, information management and the value chain in March and April 2002.

1. From your experience, how would you describe current practices in the areas of (water use/information management/positioning within the value chain, community viability)?
2. What are the implications of these practices?
3. What changes in (water use/information management/positioning within the value chain/community viability) are you trying to achieve or would you like to achieve?
4. What approaches are you taking to make those changes happen?
5. What tells you that that approach is working?
6. What are the difficulties, the things that get in the way, of achieving the changes you are trying to achieve?
7. What opportunities do you see for improved approaches?
8. How could we (the DSC team) help changes in (water use/information management/positioning within the value chain/community viability) to occur?
9. What other people or networks could you work with that would help you take advantage of these opportunities and make the approaches more effective?
10. What specifically could NRE do to assist this to happen?
11. Our project plan is to initiate an activity piloting a different approach to work with stakeholders on this issue. From today’s conversation, what do you think could be the basis for a pilot?

DSC Focus groups with land managers and community stakeholders

The following questions were developed by the DSC team to provide a guide to team members to conduct four focus groups with land managers and community stakeholders on the issues of community viability, water use, information management and the value chain in March and April 2002.
1. How would you describe current practices in the areas of (water use/information management/positioning within the value chain/community viability)?
2. What are the effects (negative or positive) of those practices?
3. What are some of the issues or challenges you face in relation to (water use/information management/positioning within the value chain/community viability)?
4. What influences you in your approach to (water use/information management/positioning within the value chain/community viability)? Prompts, networks, neighbours, other?
5. What opportunities are there to improve your approach to (water use/information management/positioning within the value chain/community viability)?
6. What other people/networks could you work with that would help you take advantage of these opportunities?
7. What specifically could NRE do to assist this to happen?
8. Our project plan is to initiate an activity piloting a different approach to work with stakeholders on this issue. From today’s conversation, what do you think could be the basis for a pilot?

**DSC focus groups with the DSC team**

Below are the questions developed by the DSC project team to provide the basis for two focus group discussions with the DSC team conducted in September 2002 and March 2003:

1. What significant shifts or changes have happened in the core project?
2. What parts of the process/activities in the implementation leg [process development phase] were successful?
3. What parts were less successful?
4. How has the way the core team worked together changed over time?
5. What parts of the process in the (pilot) projects were successful in your view?
6. What parts were less successful?
7. Who are the stakeholders in this part of the project and have you been able to engage them effectively?
8. Did you achieve the diversity of participants/stakeholders you were looking for?
9. What significant shifts or changes have happened/have you observed in the (pilot) project(s) and the team members?
10. How has the way the pilot team worked together changed over time?
11. How have your roles in the project changed over time?
12. What new knowledge and skills have you gained through this project?
13. Has there been a change in your attitude towards your practice as an extension/community engagement officer?
14. What changes have you made to your practice as an extension/community engagement officer as a result of this project?
15. Have there been any other KASA [Knowledge, Attitudes, Skills and Aspirations] changes you think are significant?
Appendix 5: EBMP workshop sessions

During the Open Space Technology workshop on collective action in catchments, conducted by the EBMP pilot project, participants initiated and took responsibility for the following sessions:

- Community needs
- Protective native vegetation
- Communication and consultation
- Ethics of land management
- Living in the bush
- Productive farms and corporate involvement
- Shared vision for landscapes
- Water management
- Passing knowledge to the younger generation
- Changing mindsets
- Maintaining groups and volunteers
- Weeds
- Integrating agencies
- Closing session
Appendix 6: FarmBis 'Walk & Talk' questions

Below are the questions developed by the pilot project team that guided the 'Walk&Talk' sessions conducted by the pilot project team with stakeholders in the FarmBis pilot project in January 2003:

Questions for aquaculture industry stakeholders and a local politician:

1. Could you tell me a little about your business and the aquaculture industry in your area? (Prompt for viability, environmentally sustainable, social aspects, history & context eg. Koori involvement.)
2. What are the issues which affect the way you run your business?
3. What are some of the difficulties you encounter in running an effective business? What hasn't worked so well for you? What would you like to do differently?
4. What are the challenges for this industry in your area? What are some of the difficulties/issues in establishing sustainable and viable aquaculture businesses in this community? (Explore for broader issues, eg. viability, ecological issues, but also community issues that hinder involvement).
5. Given some of these issues, what changes in this industry would you like to see locally? What changes in the ways in which your local (Koori) community is involved in this industry would you like to see/achieve?
6. What would need to happen in this area to make some of these changes occur?
7. What opportunities do you see for establishing sustainable and viable aquaculture businesses in this community? What opportunities do you see for involving the local (Koori) community in this? What people/networks could you work with that could help you take advantage of these opportunities?
8. What role do you think you can play in this?
10. Where do you get your production information? Or how do you learn about aquaculture?
11. What other people/networks do you think we should be working with?
12. What specifically could the FarmBis program do to contribute this? Prompt for skill development, capability building. How do you ensure the people who work for you
have the knowledge and skills necessary to do their jobs? What do you see as some of the critical first steps to enhance their capability?

13. Is there anything else that you think is important, which we haven’t discussed?

**Questions for people employed in the aquaculture industry**

1. What do you like about the job?
2. What would you like to see happening with aquaculture? Are you interested in staying in the aquaculture industry?
3. How did you learn to do your job? What other ways did you learn? What do you think worked best?
4. Is there anything else that would help you to do your job better? What else would need to be in place for this to happen?
5. What do you see yourself doing in the future?
6. How would the skills you are developing help with this?
7. Is there anything else which you think is important that we haven’t discussed?
8. Who else do you think we should be talking to? Do you know any other aquaculture businesses?

**Questions for the manager at the Koori community centre:**

1. How would you describe current business involvement/practices/activity in the [...] community? What about aquaculture?
2. What would you like to achieve from a business perspective?
3. What approaches are you currently taking to make those changes happen?
4. What are some of the difficulties/issues that you are facing in terms of establishing viable, sustainable business activity in the community? (Prompt for aquaculture if it isn’t mentioned).
5. How do you see your role in that?
6. What other networks/people could you work with that would help make those changes?
7. What can you tell us about the last time aquaculture was practiced at [the Koori community]? Was it successful overall? In what way was it a success or not? What did people think about the experience? What lessons could be learned from that experience?
8. Are there people who you think would be interested in aquaculture? What do you think would interest them about becoming involved in aquaculture? Who should we talk to? Is there anything we should keep in mind when we talk to them?

9. What do you think FarmBis could do to contribute to this?

10. Is there anything else which you think is important that we haven’t discussed?
Appendix 7: Plain language statement

To comply with the requirements of the University of Melbourne Human Research Ethics Committee, the following statement was provided to participants in interviews I conducted as part of my PhD research:

[Plain language statement]

INVITATION FOR AN INTERVIEW

Research Project: Change management - Facilitating shared identities

You are invited to participate in the above research project, which is being conducted by Dr Mark Paine (supervisor), Dr. Ruth Beilin (supervisor) and Ms Lucia Boxelaar (PhD student) of the Institute of Land and Food Resources at The University of Melbourne. Your name and contact details have been provided to us by project members of NRE’s Developing Social Capability project. This project will form part of Ms Boxelaar’s PhD thesis, and has been approved by the University of Melbourne Human Research Ethics Committee.

The project is funded through the Dairy Research and Development Corporation and aims to investigate the processes by which positive change within the agricultural sector is facilitated by NRE’s project, Developing Social Capability.

If you agree to participate in the interview you will be asked about your experience in relation to the aims and activities of this project. The interview will last approximately 1.5 hours. You may also be asked to participate in one or more follow up interviews so that we can develop a better understanding of your involvement with the project over time. With your permission, the interview will be tape-recorded so that we can ensure that we make an accurate record of what you say. When the tape has been transcribed, you will be provided with a copy of the transcript, so that you can verify that the information is correct and/or request deletions.

We intend to protect your anonymity and the confidentiality of your responses to the fullest possible extent, within the limits of the law. Your name and contact details will be kept in a password-protected computer file that is separate from any information that you supply. This
will only be able to be linked to your responses by the researchers, for example, in order to
know where to send your interview transcript for checking. In the final report, you will be
referred to by a pseudonym. We will remove any references to personal information that might
allow someone to guess your identity. However, because of the small number of people
involved in the projects, it is possible that someone may still be able to identify you.

Once the thesis arising from this research has been completed, the results will be presented at
conferences and reported in academic journals and elsewhere. The data will be kept for five
years from the date of publication, before being destroyed.

Please be advised that your participation in this study is completely voluntary. Should you wish
to withdraw at any stage, or to withdraw any unprocessed data you have supplied, you are free
to do so.

If you would like to participate, please indicate that you have read and understood this
information by signing the accompanying consent form and returning it to us in the envelope
provided. We will then contact you to arrange a mutually convenient time to conduct the
interview.

Should you require any further information, or have any concerns, please do not hesitate to
contact any of us: Lucia Boxelaar: 8344 [xxxx]; Dr Mark Paine: 8344 [xxxx]; Dr. Ruth Beilin:
9250 [xxxx]. Should you have any concerns about the conduct of the project, you are welcome
to contact the Executive Officer, Human Research Ethics, The University of Melbourne, on ph:
8344 7507, or fax: 9347 6739.
Appendix 8: Consent form

To comply with the requirements of the University of Melbourne Human Research Ethics Committee, the following statement was provided to participants in interviews I conducted as part of my PhD research:

THE UNIVERSITY OF MELBOURNE
INSTITUTE OF LAND AND FOOD RESOURCES

Consent form for persons participating in research projects

PROJECT TITLE: Change management: Facilitating shared identities

Name of participant: [participant name]

Name of investigator(s): Lucia Boxelaar, Dr. Mark Paine, Dr. Ruth Beilin

1. I consent to participate in the project named above, the particulars of which - including details of the interview - have been explained to me. A written copy of the information has been given to me to keep.

2. I authorise the researcher or his or her assistant to use with me the interview process referred to under (1) above.

3. I acknowledge that:

   (a) the possible effects of the interview process have been explained to me to my satisfaction;

   (b) I have been informed that I am free to withdraw from the project at any time without explanation or prejudice and to withdraw any unprocessed data previously supplied;

   (c) The project is for the purpose of research and is funded through the Dairy Research and Development Corporation.

   (d) I have been informed that the confidentiality of the information I provide will be safeguarded subject to legal requirements.

   (e). I have been informed that the interview may be audio-taped, that copies of transcripts will be returned to me for verification, and that I will be referred to by pseudonym in any publication arising from the research. However, I have also been informed that due to the small number of people involved, it may be possible to be identified.

________________________________________________________________________________________

Signature Date

(Participant)

Please return to:

Lucia Boxelaar, Institute of Land and Food Resources, University of Melbourne, Parkville 3052

Thank you.
Author/s: Boxelaar, L. H. G. J.

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