Cultural Icons and Cash Commodities:
The Two-World Story of Australian Bush Foods

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for the Degree of Doctor of Philosophy in the

Centre for Regional Engagement
University of South Australia, 2013

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GLOSSARY

ABC	Australian Broadcasting Corporation
ANBIC	Australian Native Bushfood Industry Committee
ANFIL	Australian Native Foods Industry Limited
ANU	Australian National University
BPDA	Bush Products from Desert Australia
CAHREC	Central Australian Human Research Ethics Committee
CCF	Community Capitals Framework
CGT	Constructed Grounded Theory
CRC	Cooperative Research Centre
CRCREP	Cooperative Research Centre for Remote Economic Participation
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DKCRC	Desert Knowledge Cooperative Research Centre
FaHCSIA	Families Housing Community Services and Indigenous Affairs (Department of)
FSANZ	Food Standards Australia and New Zealand
GT	Grounded Theory
HACCP	Hazard Analysis Critical Control Point
HEM	Hybrid Economy Model
HREC	Human Research Ethics Committee
I = P	Information Equals Power
IAF	Indigenous Australian Foods
IEK	Indigenous Ecological Knowledge
LARC	Land Actions Relationships Commodities
NA	Network Analysis
NCA	Netchain Analysis
NT	Northern Territory
NTER	Northern Territory Emergency Response
PAR	Participatory Action Research
PBR	Plant Breeder's Rights
PIRSA	Primary Industries and Regions South Australia (Department of)
PO	Participant Observation
Qld	Queensland
RIRDC	Rural Industries Research and Development Corporation
SA	South Australia
SCA	Supply Chain Analysis
SLF	Sustainable Livelihoods Framework
TK	Traditional Knowledge
UKDfID	United Kingdom Department for International Development
UNDP	United Nations Development Programme
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UniSA	University of South Australia
UQ	University of Queensland
VCA	Value Chain Analysis
WA	Western Australia
WWII	World War Two

SUMMARY

Uniquely Australian flora and fauna, known as 'bush food[1]' or 'bush tucker' plays an important role in the daily lives of many Aboriginal peoples, particularly those living in remote Australia. Bush food provides a valuable contribution to diet, is used as a mechanism for passing on traditional knowledge about caring for country and being part of country. Specific plants and animals intrinsically linked to particular locations are thus culturally important to Aboriginal peoples and their country, from which place-based identity is derived.

Products derived from bush foods also form the basis of the Australian bush foods industry where a growing domestic and international market is creating increased demand for raw supply from both wild-harvest and cultivation of many species of plants and animals.

This research explored the nature of participation of remote Aboriginal peoples in the bush foods industry, and their positions in bush foods value chains. The study further explored the ways in which participatory action research (PAR) might be used as a vehicle for engagement of Aboriginal peoples in ongoing development in remote Australia.

The research found that considerations of what constitutes 'value' in relation to bush foods might differ, according to worldview. Remote Aboriginal peoples attribute both socio-cultural and economic value to bush foods. These multiple considerations of value are important, in that they impact upon the ways in which remote Aboriginal peoples are engaging in the bush foods industry and the manner in which they may engage in the future. This finding may also have

[1] The term 'native foods' is also used, primarily in Western, industry representations of bush foods. Except where this term specifically refers to the name of an agency or organisation, it is not used in this thesis. Many remote Aboriginal peoples with whom the researcher has worked have expressed a preference for the terms 'bush food' or 'bush tucker' and this term is used throughout the thesis.

implications for other industries in which remote Aboriginal people are engaged, e.g. the art and tourism sectors. The research makes a unique contribution to developing new knowledge through the development and articulation of a framework that incorporates the domains of land, actions, relationships and commodities (LARC) in the construction of value. The LARC Value framework enables considerations of both economic and non-economic value representations in bush foods value chains.

The structure of this thesis reflects the research journey undertaken in its production. The thesis highlights what it means to walk a new research path. This journey involved moving from a place of familiarity to one that has required a shift in thinking about what it means to 'do' research. The remainder of the summary provides the reader with an overview of the thesis so that it may be read with this important point in mind - that the research journey itself along with the research undertaken - is presented as part of the thesis.

In the first instance, the investigation began from the place of the researcher's own knowledge and the ways in which she understood the world. This worldview embraced the value of academic knowledge (and still does). However, this worldview perhaps privileged academic knowledge above other forms of knowledge and the ways in which those other forms of knowledge are acquired. As the research journey continued, the value of embracing different ways of knowing became clearer, and especially, the ways in which we can use different ways of knowing to undertake research. Learning about, and then embracing these different ways of knowing became an integral part of the research itself. New understandings of knowledge and the ways in which it can be shared also presented the challenge of how to marry these two aspects of 'research' and 'research journey' in a doctoral thesis. The 'research journey' being referred to here, is much more than simply describing the methodological approach one might utilise to undertake research. Bringing both the research and the way in which the process unfolded together has been achieved by presenting the research as a series of emergent case studies, and in the use of critical

reflection. Where this reflection occurs, it is a reflection on the researcher's personal research praxis, and is thus written in the voice of the first person. Presenting the work in this manner has enabled the 'back story' of the unfolding learning journey to be incorporated as an integral part of the thesis itself. This approach is entirely consistent with both the constructionist methodology chosen initially to undertake the study, and the subsequent participatory action research approach that the researcher has come to embrace for her ongoing praxis.

The structure of the thesis also reflects the exploratory nature of the research. Three case studies are presented, with the first of these providing the foundation upon which the second and third have emerged.

The first case study analysed the generic wild harvest bush tomato and wattle seed value chain in operation in Central Australia, using the Netchain Analysis (NCA) Framework (Lazzarini et al., 2001). The purpose of this work was to determine where in the value chain Aboriginal peoples were operating as participants in the bush foods industry and how this was occurring. NCA was chosen as a tool to undertake this research because of the promise it held in being able to simultaneously consider both horizontal and vertical relationships within the value chain as part of the analysis. However, value chains in the bush foods industry are inter-cultural, and the worldviews of the various participants within them are very different to each other. These differences impact on the ways in which remote Aboriginal harvesters participate in the bush foods industry currently. Worldview also impacts on perceptions that those external to the value chain might hold. Thus, while NCA was able to uncover value in the value chain, this value was limited to economic value. The case study raised a number of further questions related to the nature of alternative value that was hinted at but not able to be fully represented using NCA. In this way, the case study provided the starting point for subsequent research, in order that subsequent questions might be addressed. These questions related to the nature of 'value' and the ways in which we might consider it and represent it.

It became apparent that the participation of remote Aboriginal peoples in the bush foods industry was more complex than could be understood through examining the value chain using conventional chain analysis methods. This complexity related to the notion of 'value' and how this was understood and represented from within differing worldviews. Differing worldviews provide multiple perspectives and thus representing these differing perspectives challenged the underpinnings of the existing tools and frameworks for value chain analysis.

A second case study was generated, which sought to examine 'value' and 'value creation' from the perspective of Aboriginal participants in the bush foods industry. Case Study Two involved working with remote Aboriginal peoples in three locations for the explicit purpose of better understanding the nature of value related to bush foods, beyond the economic forms that could be represented using conventional value chain analysis tools and metrics. This case study generated the development of the 'LARC' Value Framework, as a new way of representing both economic and non-economic value that could be found in value chains in which remote Aboriginal peoples were participating. In terms of the 'back story' of the research journey also being told in this thesis, this work was also personally transformative, in that it enabled the researcher to recognize that different ways of looking at the same 'object' might result in differing representations of what was observed. Case Study Two with its focus on regimes of representation also provided the impetus for thinking about different ways of undertaking research. The researcher began to question the impact of worldview differences in research – not just in research practice, but also the ways in which research might be conceived and imagined, created, structured and undertaken.

What became apparent from Case Study Two is that 'fact finding' is not value-neutral. Rather, fact-finding is value laden, and better understanding the impact that this might have on research practice became an important part of the study itself. In this way, it also became apparent to the researcher that her own critical reflections on her research practice were necessary, in order to determine the

impact of that practice on the research itself. This perspective led to the generation of Case Study Three – Participatory Action Research (PAR), and the formation of a view regarding how further research in the bush foods industry (and in development research more broadly) might be conducted with remote Aboriginal peoples and the rationale for this position.

Similar to the second case study, Case Study Three is also presented in two parts, in Chapters Seven and Eight. This third case study firstly explores the literature associated with PAR to ground and critique it as a 'two-world' research approach and its effectiveness in an inter-cultural research context. The case study then examines and reflects upon a research activity in which the researcher had previously participated. A new perspective, brought about by an enhanced worldview is developed from this reflection. Case Study Three Part II highlights in a very practical way the value of PAR as an approach to uncovering complexity that may not be immediately apparent from within a singular worldview.

PAR is perhaps best described as co-researching and co-learning, where social 'reality' is not pre-determined or defined, but rather co-created by those engaged in the research process (Breu & Hemingway, 2005). Knowledge acquisition and application (the 'action' component of PAR) is thus attained through collaborative inquiry (Reason, 2003). In this way, PAR centres researcher and participant values (Kidd & Kral 2005) and enables the 'coming together' of differing worldviews and ways of knowing in a safe environment created through trust-based relationships. PAR is then promoted as a research approach through which an understanding can be produced of what the aspirational future might look like for remote Aboriginal participants in the bush foods industry, and of developmental trajectories more broadly.

Finally, the thesis concludes by exploring what it is we might need to know to develop models of development that fit the socio-cultural needs of remote Aboriginal peoples. Through its examination of the bush foods industry, the

thesis finds that cultural differences and their sometimes differing worldviews are an important consideration in developing models of economic participation featuring intercultural exchange. Existing developmental models are constructed largely from within understandings derived from 'western' worldviews that valorise economic value. Developing new models of participation should be undertaken from a position that can consider multiple understandings of value. These understandings need to move beyond purely economic considerations of what constitutes 'value.' Representing multiple worldviews also has implications for research activity directed towards further development with remote Aboriginal peoples. The thesis concludes that PAR approaches hold promise as a means of pursuing development that can incorporate the ideals, needs, aspirations and challenges of representing multiple worldviews.

DECLARATION

I declare that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university, and that to the best of my knowledge it does not contain any materials previously published or written by another person except where due reference is made in the text.

Jennifer Ann Cleary 4 August 2013

ACKNOWLEDGEMENTS

Writing this thesis has been a journey of discovery that began more than 20 years ago when I began to think of myself as a 'life-long learner.' Coming to that realisation equipped me with the courage to pursue a dream. My thanks to you, Ms Heather Gordon for helping me to discover the value of learning and your unwavering belief that I could achieve much more than I ever thought possible. I am grateful for your ongoing support as cherished friend and mentor.

To Professors Murray McGregor and Brian Cheers my gratitude to both of you for your encouragement to pursue a PhD and subsequent support in my enrolment to candidature. Whenever I doubted my ability, capacity and tenacity, I would re-read your letters of support and keep going.

To my friend and colleague Professor Anthony Hogan, I thank you for helping me to understand that I don't have a disability – I just hear differently. Without that support, I would have doubted my capacity to undertake the many interviews that are such an integral part of what I have produced. You encouraged me to push my capacity to the limit, and helped me to find the ways to overcome the challenges of hearing differently to others. Without that support, I would never have found the courage to accept, and then revel, in that difference.

For their early input into my progress, I thank my initial supervisory team at the University of Queensland, Associate Professor Kim Bryceson, and Dr Annie Ross.

For their support in helping to make 'pretty maps' and showing me the ropes with drawing programmes, I thank Drs Chris Raymond and Simon McDonald. My thanks also to Dr Karen Cosgrove, Professor Dean Carson and Dr Doris Carson for the many conversations and their patience in listening to my many (and varied) ideas and tangents!

I gratefully acknowledge the Desert Knowledge Cooperative Research Centre for both their financial support of part of my fieldwork and for providing the opportunity to work within a great project team from 2007-2009, during which some of the research articulated in the thesis was undertaken.

I owe a huge debt of gratitude to my supervisory team at the University of South Australia. Firstly, to Professor Guy Robinson, thank you for your guidance as both supervisor and line manager. Your knowledge, experience and wisdom have been invaluable in helping me to identify the main road, the detours and pit-stops along the path I have travelled, and in helping to meet the milestones and journey markers along the way. Thank you also for your support in making the transition from the University of Queensland to the University of South Australia a smooth one. To Dr Susan Robinson, my heartfelt thanks for your guidance and support especially in listening to my ideas, getting to the heart of what I was trying to convey and then in helping me to map the journey and write about it coherently! Your encouragement, commitment and friendship have been a lifeline. To Associate Professor Peter Munn, my sincere thanks for helping me to find and then avoid the potholes, and for your frank and fearless feedback. To all of you, I would never have managed the journey without you and this work is so much better for your wonderful guidance.

To my family: My husband Anthony – your love, encouragement and support mean the world. Quite simply, I could never have done it without you. Supporting me through a PhD was already a huge sacrifice but then caring for me through spinal surgery and the many months of rehabilitation and the upheaval of changing institutions as a result, is more than I can ever repay. I will be forever grateful for all you have done and continue to do, and I promise all our weekends from now until forever will be shared. To my son Nicholas and daughter Emily and your partners Kendall and Andrew, my love and thanks for your constant encouragement and yes, Mum is back.

Finally, I dedicate this thesis to the Aboriginal women and families across Australia who have given me so much and so generously. I am humbled by what you have taught me, and the new ways of learning that you have shared. I promise to honour your trust, and to continue to follow the road down which you have led me. To Nampin Gina Smith, Wurramungu woman extraordinaire, and Rayleen Brown, proud descendent of the Nanggiwumerri and Arrernte peoples, your patience and guidance have helped me to understand a whole new world. This is really your story, and it has been my privilege to travel with you as I have written it.

CHAPTER ONE:
Introduction to the Study

1.1 Introduction

> *"My name is [participant] and I belong to the Arrernte people. My country is Arrernte Country and I live there now with my family, where we've always lived."*
>
> *"My name is [participant] and I work with [name of agency]. My role is to ensure we engage with and consult Aboriginal people about [topic]."*

This dialogue occurred at a meeting between Aboriginal and non-Aboriginal people in Alice Springs, Australia in December 2008. It was a consultation meeting arranged with the very best intentions of trying to elicit the views of people engaged in the Australian bush foods industry in central Australia. As the introductions continued around the room, the Aboriginal participants present identified themselves by name, family and 'country,' which is the term used by Aboriginal peoples when referring to the land to which they have cultural and spiritual ties. The non-Aboriginal participants present identified themselves by name, title and occupation. The differences in these approaches were striking, and raised questions about their effect on both communication and relationships between the Aboriginal and non-Aboriginal participants. As the meeting progressed, it was quite apparent that many of the Aboriginal participants were not speaking up. It appeared that Aboriginal and non-Aboriginal peoples emphasised different aspects of self in the introductions. When asked about this apparent difference, the Aboriginal woman who made the first statement above responded:

> "*Us mob are different to you mob. It is hard for us to talk to you sometimes, if we don't really know who you are and you don't tell us. We can't talk properly with you until we know who you are and where you belong, otherwise we don't know where you fit with*

us. Sometimes you mob tell us what you do, not who you are. Seems like us mob are human beings and you mob are human doings."

When queried about the observed differences in the introductions made that day and whether the differences were having an impact on how the consultation was going (in that some of the Aboriginal participants were saying very little), the non-Aboriginal woman involved in the conversation above responded:

"No, I think the Aboriginal people here are just shy, they're from out bush. They'll be ok later."

This exchange succinctly highlights one of the communication challenges that can occur when people with differing understandings of the world attempt to share knowledge, or otherwise interact. In this case, it seemed that the issues for the Aboriginal woman arose from the kinship and place-based perceptions of the world that she held, which firmly situated people in a specified context, attached them to others and attached them to the places to which they see they belong. In contrast, the non-Aboriginal woman held a different view of the world – one that perhaps could be described as a 'western' view – and one that perhaps many non-Aboriginal people in Australia might share. From her perspective, relationships could be negotiated, and ideas could be de-contextualised and made more abstract, perhaps creating different ways of thinking and doing, and of seeing the world, as some scholars have observed (Bain, 2005; Basso 1996; Bradley, 2001; 2010; Mearns, 1994; Rose, 1996).

The non-Aboriginal woman explained the reticence of the Aboriginal participants from within her own perceptions of the behaviours she was observing. While clearly, she recognised that some people were not speaking up, it was evident from conversations with her that she did not recognise there might be reasons for the absence of interaction other than those she could imagine from within her own understanding of the way people behave in particular social situations such

as the consultation she was conducting. That is to say, she did not know what she could not know, based on her present view of how the world worked.

Cognitive orientation, i.e. how we formulate beliefs, values, perceptions and ideas about our world and what we understand to be 'normal' can be called our 'worldview' (Palmer, 1996).

The term 'worldview' is derived from the literal translation of the German 'Weltanschauung' that in turn comprises the words: 'welt' (world) and 'anschauung' (view, outlook). 'Weltanschauung' has been historically attributed to Immanuel Kant (1724-1804). The concept encompasses many definitions from multiple fields, including philosophy, theology, anthropology and education (Vidal, 2008). Aerts et al., (1994) provide a useful description of worldview as an ontology, or model of the world, comprising six elements: a way of explaining the world; a concept of future, i.e. giving meaning to the question of where we are going; a way to answer ethical questions of what one should do in particular situations; a methodology or theory of action with which to attain goals; a theory of knowledge – of determining what is true or false; and, in those cases where the worldview contains an account of its own components, an etiology.

There are expectations about the ways in which interactions with others will proceed based upon one's worldview. In the dialogue described earlier, the Aboriginal participants were reticent and uncomfortable to speak, not necessarily because they were shy (although this of course may also have been the case), but primarily because they did not feel that introductions had been properly made. According to the comments made by the Arrernte woman, they did not have a meaningful context in which to place the others present. With no context, they found it difficult to work out the relationships which would determine who could speak to whom in the manner that they understood to be 'right and proper' from within their own worldview which, for them, clearly sets out such matters in relation to people, place, language use and time (Bain, 2005; Bradley, 2010; Rose, 1996, 2000).

It is with this notion of 'worldview' and the impacts that differing worldviews might have upon the manner in which people may interact and the ways in which worldview might influence thinking, acting and doing, that this thesis is primarily concerned.

The primary objective of the thesis is to better understand aspects of the impact of worldview on two fronts: Firstly, to understand the impact of worldview on questions of 'development' by examining the participation of remote Aboriginal peoples in the bush foods industry. Secondly, the research will explore the impact of worldview on research itself, again utilizing the bush foods industry. In essence, the research uses the bush foods industry as a lens through which a focus upon the impact of worldview on development and research in remote Australia might be considered.

Because this PhD project became a journey of exploration into the impact of worldviews upon the aspirations of different cultural groups, and into the nature of culturally sensitive research, the research questions formulated in the course of the work necessarily changed and evolved through time. The next section of this chapter provides contextualising information to situate the originally proposed research project and the fundamental research questions it motivated, before recording how the PhD project came to encompass a very different set of research questions.

1.2 Background to the Study

Despite much state input and economic development policies in various forms spanning nearly 100 years (Bannerjee & Tedmanson, 2010), poverty remains a major problem for Aboriginal people in Australia, particularly those dwelling in remote locations. Remote Aboriginal peoples, i.e. those approximately 120,000 people who dwell in some 1200 communities in remote Australia (ABS, 2006a; Altman, 2005) remain the most marginalized group in Australian society (Altman, 2005; Productivity Commission 2003). They have fewer jobs, are less

healthy and live considerably shorter lives than other Australians (FaHCSIA, 2009). Participation in the broader Australian economy continues to be promulgated as the solution to improving Aboriginal well-being and contributes significantly to the platform of reform proposed in the 'Closing the Gap on Indigenous Disadvantage' strategy of the Australian Government (FaHCSIA, 2009). For the most part, state-based interventions have focused on trying to integrate remote Aboriginal peoples into mainstream economies as a means of promoting their greater participation in Australian life. Measures encouraged have included engagement in the market economy, attaining education to obtain mainstream jobs and relocation to urban centres (Altman et al., 2008) with a view to allowing individuals to take up those mainstream jobs (Taylor, 2012).

The research articulated in this thesis arose out of preliminary work led by the researcher in the Desert Knowledge Cooperative Research Centre (DKCRC), between 2007 and 2009, within the Bush Products from Desert Australia (BPDA) Core Project (Core Project Proposal, DKCRC, 2007). The project was funded under the Australian CRC Programme:

(*https://www.crc.gov.au/Information/default.aspx*).

A summary of the BPDA Core Project and its outputs is provided in Chapter Two.

The major aim of the CRC Programme is to 'provide funding to build critical mass in research ventures between end-users and researchers which tackle clearly-articulated, major challenges for the end-users' (CRC Programme Website, last accessed 10 June 2011). Thus, the justification for the BPDA project was premised on perceptions of failure, and the 'major challenge' required in fixing it. In particular, the BPDA project aimed to examine why there was an under-representation of remote Aboriginal peoples in the industry; why they were reaping little financial reward from their involvement; and what could be done to 'fix' the situation.

Two major sub-projects undertaken in 2008 and 2009 and situated within the broader BPDA Project, were aimed at better understanding the relationships in existing remote bush food value chains. These sub-projects had as their goals to examine the social factors that appeared to be impacting upon Aboriginal participation in these chains (see Alyawarr Speakers from Ampilatwatja et al., 2009; Cleary 2009; Cleary et al., 2008; Ryder et al., 2009; Vincent 2009).

During the course of the CRC work and at the commencement of this PhD journey, the original PhD research questions formulated reflected both this notion of 'failure' inherent in the BPDA project rationale, and the project's interest in value chain analysis. To this end, the research questions at this early stage of thinking could be captured as:

- 'What is currently occurring in the bush foods industry, and why; is current participation of Aboriginal peoples ideal or not, from the perspective of these participants?'

And delving a little further one might ask (still operating from within a value chain perspective):

- Is there something about the nature of existing industry models e.g. value chains, which impacts upon the participation of remote Aboriginal women who practice wild harvesting?

In conducting both sub-projects however, it became apparent that there were important questions to be asked in relation to this notion of failure. These could be articulated as: 'To whom, by whom and to what is the "failure" that the broader BPDA project was aiming to address, being attributed?' 'Is it a failure of remote Aboriginal peoples to participate in the bush foods industry?' 'Is it the failure of the industry to deliver benefits to this group?' 'Do remote Aboriginal peoples have particular socio-cultural aspirations and imperatives related to bush food that render participation in the industry less meaningful or important to them

than it would be for non-Aboriginal Australians?' 'From within whose worldview is 'failure' being defined - that of remote Aboriginal peoples themselves or by external regimes of representation of Indigenous interests? (Bannerjee and Tedmanson, 2010). Finally, and most importantly, 'Is there a difference between these understandings and representations of what defines success and failure?'

In light of these questions there was a broadening of the initial research question(s), albeit still operating from within the value chain framework as the primary means of analysis:

- What do we need to know to develop models of participation that fit bush harvester socio-cultural aspirations in relation to continued participation in the bush foods industry? What value needs to be captured in these models?

As the PhD project progressed, awareness developed to the point where there were yet more fundamental questions that needed to be addressed, particularly as realisation occurred that perceptions of failure might be inherently derived from within a particular worldview. The community-based participatory nature of the early DKCRC research enabled the development of deeper relationships between the researcher and those remotely located Aboriginal women engaged in bush harvesting. These relationships provided tantalizing glimpses of an alternative world in which different perspectives existed. Understanding more about this world and the worldview of the women with whom she was working, became a personal research imperative for the researcher, fuelled by concerns about the nature and direction of further proposed institutional research based on 'improving' Aboriginal participation in the industry. Such research included ways of improving existing value chains, and was premised upon notions of present failure. It also included work aimed at improving bush food plants that might lead to the development of mechanisms that could be used by Aboriginal peoples to derive greater economic benefit, such as plant breeding rights (PBR). PBR enables the creation of new plant varieties where the associated property rights can be owned and therefore traded. It is a commonly used property rights tool in many horticulture-based industries.

However, there was a growing personal concern that developing these tools might not fit with the socio-cultural imperatives of the bush harvesters. There was also the troubling thought that 'improving' the value chain and associated development research and value chain measures were derived from western understandings of bush food as commodities, to the unwitting exclusion of any other consideration of their 'value'. These bubbling concerns raised further questions that were articulated as:

- Would the idea of property rights be comprehensible to those adopting place-based understandings of the world and their identity within it, people whose notions of identity are better captured with the formula "I belong in country" and not "this country and what it contains belongs to me"? (Berkes, 2008; Bradley, 2001; 2010; Claudie et al., 2012).

- Are the ideas pertaining to property rights and other matters related to considerations of bush foods as commodities capable of expression in the many different languages spoken by remote Aboriginal peoples - languages in which there had probably been no prior need (and therefore no terms) with which to express them?

- Were there already existing customary governance systems in place pertaining to the use of bush foods? How would these customary systems come together with western legal systems? Could they?

- Could other models of participation in the industry that better fit remote Aboriginal peoples' socio-cultural aspirations be developed?

- How well can a Western value chain work in a non-Western context and where was there evidence of this?

- What did the remote Aboriginal peoples with whom we were working think about the nature of the research we were conducting?

Importantly, there was a growing personal recognition that these questions probably could not be answered through research premised on the notion of economic 'failure', that is, research that derived its rationale from the somewhat paternalistic notions of 'overcoming disadvantage' that have been privileged by white normative discourses (Nakata, 2003).

It is from this background, and from a growing awareness that there was much more to grasp and recognise than could be known from within a worldview limited by the institutional perspectives within which the researcher was located, that the research articulated in this thesis is derived. It became very apparent that to pursue the PhD research as originally proposed, would probably contribute further to the premise of 'failure' already inherent in the institutional research framework within which this PhD project was situated. Given a deepening understanding that 'failure' itself can be considered a construction of worldview, the PhD research project is now firmly premised upon the idea that it was imperative to first begin to understand, *before* presuming to be understood (Covey, 1990). From this perspective, personal presumptions about what constituted 'failure' in the bush foods industry were no longer made. On that basis, there was a further recognition of the need to think differently about appropriate future research pathways around remote Aboriginal participation in the Australian bush foods industry. This created both personal and professional dilemmas, e.g. recognising that the PhD project could not be pursued as originally cast; and finding oneself the research leader in a programme of institutional research premised upon ideas of 'failure' that she had begun to deeply question.

Therefore, the major thrust of this PhD research is to better understand the way that remote Aboriginal peoples understand their world in relation to bush foods, recognizing that bush foods may be simultaneously considered commodities and cultural icons. Such representations with which bush foods might be endowed may be a product of worldview, and subsequent notions of 'success' and 'failure' may similarly be attributed. The intent of the research is to examine different

actor-positions and the realities that are perceived from within these positions in relation to bush foods. Fundamentally, the most basic question being asked is: 'How do you understand your world in relation to bush foods and what does this mean for your use of bush foods?' This can be articulated further as a research question: 'What impact does worldview have upon considerations of bush foods from the perspective of remote Aboriginal peoples?' The final research questions were refined following a preliminary review of relevant literature and are fully articulated at the conclusion of Chapter Two.

1.3 Thesis Structure

The study undertaken has been exploratory. In essence, the research journey began in one place (metaphorically) and finished somewhere that was completely different to what might have been originally anticipated. The study represents a 'research journey unfolding' as well as presenting research results. The thesis represents an honest attempt to accurately reflect what actually occurred, including a major personal shift from one research paradigm informed by a particular worldview, to a different research paradigm informed by what the researcher has come to think of as an enhanced worldview. The exploratory nature, and the manner in which parts of the research have emerged from other parts in a somewhat 'nested' fashion, has seen this process itself, become an important part of the thesis. Structuring the thesis to best reflect both the emergent nature of each component part and its respective results, and the learning that has occurred as the journey has been undertaken was an important consideration in the final rationale used to structure the thesis.

It could be argued that the 'unfolding story' in its entirety could have been deconstructed and reconstructed to fit neatly within classic thesis structural parameters. That is to say, findings from each aspect of the study could have been grouped together, as would conventionally be the case. Literature that was reviewed across the whole of the study may have been combined in a full literature review and positioned toward the front of the document. However, there was a deepening belief as the work progressed that this presentation of the work

would detract from the value inherent in the research journey itself. The research was exploratory and it did unfold – it wasn't a neat and linear process of setting up a research design, collecting data, analysing it and then drawing conclusions from what was uncovered. For these reasons, the research findings from each aspect of the study, and the literature related to these aspects are situated where they occurred.

1.4 Publications Arising from the Research

Publications have arisen from the research articulated in this thesis. These include peer reviewed journal articles, a book chapter and conference presentations. Publication details for these works are noted at the beginning of relevant chapters.

1.5 Outline of Thesis Chapters

1.5.1 Chapter Two: Preliminary Literature Review

This chapter contextualises the research by presenting a preliminary review of literature related to historical and contemporary perspectives of the lives of remote Aboriginal peoples; an overview of the bush foods industry including a summary of research conducted to date and what is known about remote Aboriginal participation in the industry. Chapter Two also begins to explore the concepts of both development and research and the manner in which these have occurred in remote Aboriginal Australia. This chapter is not intended as a definitive review of the literature related to the objectives of the thesis. Further literature is reviewed and appears in the chapters where it is most relevant. Nonetheless, the chapter explicitly identifies where the study fits with existing research, and the research gap it addresses.

1.5.2 Chapter Three – Methodology

In this chapter the theoretical framework underpinning the rationale for the study is described and the research design and methodology is established. A constructionist research paradigm using grounded theory and a case study approach is articulated and the data collection methods are described in detail.

This chapter also considers the physical research environment, attends to ethical matters and discusses the limitations of the study.

1.5.3 Chapter Four – Case Study One: Business Exchanges in the Australian Desert: It's about more than the money

This chapter explores the nature of participation of remote Aboriginal peoples in the bush foods industry through examining a bush foods industry chain in which remote Aboriginal women in the Northern Territory are participating. The chapter examines one particular bush foods value chain to try to determine the nature of the way in which the women are participating in this chain and more broadly in the industry. This case study addresses the questions, 'what is currently occurring and why? Is current participation ideal or not, from the perspective of these participants?'

Two key sub-questions the chapter explores are:

- Does culture and worldview impact on the women's participation in this chain?
- Are current Value Chain Analysis (VCA) tools sufficiently robust to reveal the true nature of these impacts?

1.5.4 Chapter Five - Case Study Two Part I: A Deeper Exploration of the Concept of Value

Chapter Five builds upon the analysis of the value chain undertaken and described in Chapter Four. The chapter presents Part I of the second case study, including the findings and analysis of a deeper exploration of the concept of 'value' in relation to bush foods and what value bush foods hold for remote Aboriginal peoples. The analysis undertaken in Chapter Four hinted at an alternative 'value' that was apparent in the chain analysed. However, this value was not fully revealed using conventional value chain analysis tools. Chapter Five explores the idea of social and cultural value in relation to bush foods, and discusses whether non-economic forms of value are important in those value chains where remote Aboriginal peoples are participants.

1.5.5 Chapter Six – Case Study Two Part II: The LARC Value Framework

Chapter Six presents the second part of the case study introduced in Chapter Five.

The field research reported in Chapters Five and Six found there are four domains from which the 'value' placed upon bush foods by remote Aboriginal peoples may arise. These four domains have been summarised as 'land,' 'actions,' 'relationships' and 'commodities' (LARC).

Chapter Six begins by further articulating these four value domains. The generic bush harvest value chain first analysed using Netchain Analysis in Chapter Four is then re-examined in light of the new understandings of value subsequently articulated. The chapter concludes by reflecting on how the LARC Value Framework might be thoughtfully applied in further research with remote Aboriginal peoples, and in particular, in considerations of what the future might look like for remote Aboriginal peoples participating in the bush foods industry.

1.5.6 Chapter Seven - Case Study Three Part I - Participatory Action Research: New Ways of Looking

The chapters to this point in the thesis provide contextualising information about bush foods in both commercial and cultural settings and reflect upon the complexity of where these two 'worlds' intersect for remote Aboriginal peoples. In Chapter Seven, the thesis begins an exploration into how researchers might engage in participatory research that is able to accommodate differing worldviews in the pursuit of research for development, particularly in the bush foods industry.

Chapter Seven interrogates the literature associated with PAR, both with a view to grounding it as an approach to understanding intercultural difference and the importance of this understanding in a research context, but also with a view to critiquing its use for the same. In relation to the research journey undertaken in the production of this thesis, Chapter Seven also provides the linkage between coming to understand (Chapters 1-6) and shaping future personal practice (Chapters 7-9) when conducting further research with Aboriginal harvesters in the bush foods industry.

1.5.7 Chapter Eight –Case Study Three Part II - Participatory Action Research: Seeing More Clearly

Chapter Eight examines an activity undertaken during the term of the Bush Products from Desert Australia (BPDA) Project, by reviewing and critically examining video footage taken during the activity and reflecting on the research praxis evident in the activity. The project under examination (upon which the researcher was Chief Investigator) was undertaken as a 'participatory' project with remote Aboriginal harvesters. This project was entitled 'Information = Power: Walking the Bush Tomato Value Chain' (hereafter I = P project) (Desert Knowledge CRC, 2008). Chapter Eight incorporates reflection of the researcher's practices in order to critique the approach taken in the development of the research. This critique pays particular attention to the extent to which the research described in Chapter Eight could be deemed 'participatory.' The chapter uses the case study to illustrate potential benefits of PAR approaches in future bush foods research and developmental research more generally, plus the value that PAR approaches may hold in working through the complexity wrought when those with differing worldviews attempt to work together.

1.5.8 Chapter Nine – Conclusions

This final chapter in the thesis draws together the two stories of 'research journey' and 'research outcomes' to make a coherent whole of the thesis. The chapter reflects upon the research journey as well as considering the implications of the research outcomes for policy and practice in developmental considerations for remote Aboriginal peoples. Potentially different models of participation are explored in the thesis discussion and conclusions.

CHAPTER TWO:
Preliminary Literature Review

2.1 Introduction

This thesis seeks to understand the ways in which remote Aboriginal peoples in Australia understand bush foods. In particular, the research considers whether worldview is a significant factor in remote Aboriginal peoples' considerations of bush foods. Further, the thesis examines Aboriginal peoples' industry participation in the broader context of economic development. The purpose of this chapter is to situate the research within both historical and contemporary contexts with regard to Aboriginal peoples in remote Australia.

Secondly the chapter also provides an in-depth examination of the bush foods industry in Australia, documenting its history and development, what is known about the current participation of remote Aboriginal peoples within the industry, and what research has previously been undertaken into remote Aboriginal industry participation. In consideration of previous research that has been undertaken, the chapter is particularly concerned with the ways in which that research has been conducted and the manner in which remote Aboriginal peoples have engaged within it.

2.2 Colonial Narratives of Remote Aboriginal Peoples

Given the nature of the research, it is important to understand some of the contextualizing, historical (colonial) narrative within which contemporary Aboriginal peoples, and particularly those living remotely, have come to be situated. Arguably, the historical frames of reference that have been applied to Aboriginal peoples in the past and into the present continue to define them (Rose, 2000). Many of the proponents of bush food harvesting from the wild in remote communities are older Aboriginal women. It is especially important to understand some of the context that has come to define this group – both in terms of the cultural significance of bush foods, and in the roles that Aboriginal women already have or may seek to adopt as the bush foods industry develops further.

The first Europeans to come into contact with Australian Aboriginal peoples thought them to be primitive savages exemplified by their few possessions, wandering, 'hunter-gatherer' lifestyles, apparent lack of religious life, and indifferent attitude toward material culture (Clarke, 2003; Flood, 2006). Indeed, Flood recounts a passage from William Dampier's writings of his encounters in the north-west Kimberley region of Western Australia, where he described Aboriginal peoples as 'the miserablest people in the world… They have no houses, or skin garments, sheep, poultry, fruits of the earth...' (Flood, 2006, p. 5).

Colonialism has endowed the term 'hunter-gatherer' with a particular meaning and innuendo. One key notion is that hunter-gatherer societies must be simple societies by definition (Lourandos, 1997). These attitudes and understandings of Aboriginal social organization were recorded in the writings of the early European explorers and thus shaped both this period in history (Bell, 2002; Flood, 2006; Latz, 1995) and subsequent approaches taken to 'civilising' Aboriginal peoples. As couched within the broad colonial ideology of the time, the project of 'civilising' Aboriginal peoples was premised upon the notion that western intervention was necessary in bringing 'wild' lands and people to productive endeavours (Adams & Mulligan, 2003). Lourandos firmly challenged many of the concepts implied or understood by the term 'hunter-gatherer'. He argued that it is not necessarily the case that hunter-gatherer societies are simple, nor are they homogenous in their constitution. Instead, these societies exist on a socio-cultural continuum from simple to highly complex, where simplicity does not necessarily equate to a nomadic existence, nor would complexity equate to a culture based upon a more sedentary lifestyle. Rather, he argues that different hunter-gatherer societies may exhibit a complex mix of characteristics. In the Australian context, Aboriginal peoples in Australia roamed, but they roamed within strictly observed, socially constructed boundaries and within the structures of complex, highly ordered and sophisticated kinship-based systems (Lourandos, 1997).

The impositions of colonialism have meant that Aboriginal peoples are often left with little choice but to define *themselves* in the terms available within white discourse (Bannerjee and Tedmanson, 2010). However, the 'white discourse' is not just 'white'. It is male-white, female-white, younger-white, older-white and so on. In seeking to discover and uncover the importance of bush foods to Aboriginal peoples in this research, it is important to be aware of these varying perspectives and the very different assumptions and prejudices they may contain.

Early gendered understandings of Australian Aboriginal societies have also been superimposed over these colonially inspired notions of simplicity. That is to say, the assumption is often made that in indigenous hunter-gatherer societies, the exclusive role of men is to hunt, while women gather exclusively. This is not the case in Australian Aboriginal societies. Women also hunt for small game - lizards, for example (Bell, 2002). Bell (2002) argues from a feminist perspective that not only were Aboriginal societies stereotyped simplistically, but given that early Europeans in contact with Aboriginal peoples were predominantly male, written accounts of these early encounters reflected prevailing Victorian social stereotypes regarding male and female roles. Thus, Bell argues, the colonisers not only got it wrong in relation to their perceptions and subsequent descriptions of Aboriginal societies, they got it particularly wrong when describing social organization, since the degrees of importance the colonisers attached to male and female roles helped determine the often hierarchical ways in which these were described and written about. Just as men dominated in colonial Victorian society, a similarly dominant role was ascribed to men in their accounts of Aboriginal societies. Bell argued that not only was this being perpetuated in anthropological writings recorded at a time when men dominated the discipline, but also that female roles became further diminished as Aboriginal peoples were increasingly assimilated into the colonising society. Women were thus expected to take on roles that were female-appropriate in the colonising society (Bell, 2002). This gendered theme is further echoed by Grieves (2009) who discusses both the ways in which the power of Aboriginal women was diminished through subjugation by the patriarchal colonising state, and also the misconceptions and the ways in

which assumptions about the apparent lack of Aboriginal female power might be viewed as a colonialist construct.

Early anthropological writings strongly emphasised the role of men and 'men's business' in Aboriginal societies (see for example the multiple works of Spencer & Gillen, 1899, 1904, 1927; Radcliffe-Brown 1956; Stanner 1979) and were either dismissive of female roles or did not describe them. As a result, women were often seen to have little or no ceremonial or religious role in Aboriginal culture. When it was first published in the 1970s, Bell's work with the Warrabri (now Alekerenge) community in the Northern Territory, and her subsequent publication 'Daughters of the Dreaming' (2002) was roundly criticised because it jarred with the prevailing discourse that culture and religion in Aboriginal societies was the realm and province of men. As a corrective to the prevailing discourse, later studies (Dussart, 2000; Grieves, 2009; Mearns 1994; Rose, 2000; 2007), clearly articulate the role and importance of women in the cultural and religious lives of Aboriginal peoples. Mearns (1994) specifically discusses the dilemmas of post-colonialism facing Aboriginal women in central Australia in continuing to care for their 'sacred sites' as an expression of their responsibilities in relation to culture and religion.

Rose (2007) highlights the role of gender in characterising country, ceremony, objects, substances and sites among the Victoria River people of the Northern Territory. She details the gendered roles of men and women in ceremony and the complementary rather than hierarchical nature of the same in this passage describing 'dancing up' country:

> *"Within this subtle understanding of the complexities of gender, we can see that in any given ceremony men who dance for their mother's country dance as "mothers," and the men who dance for their father's country dance as "fathers." Similar observations could be made in the context of women's business—the gender category women excluding men enables a zone of gendered procreative*

> *partnerships involving mothers, fathers, and country. Together, women with women and men with men, but also together as "mother" and "father," people dance up the fertility of the country. The work of bringing life forth is thus the work of men and women, separately from each other and in conjunction with their country"*
>
> (Rose, 2007, p. 42).

In pre-colonial Aboriginal societies in central Australia, female roles were crucial to survival. Women were food providers; they collected food for their family groups or 'bands' (Flood, 2006). Men hunted, but if they could not bring meat, then the band relied on the small animals (goanna and other lizards for example) that the women hunted, and the fruits, seeds, tubers and other non-animal foods they gathered. These non-animal foods provided an important part of the diets of desert dwellers.

Women also enjoyed important decision-making roles – for example when to move camp because local resources were depleted (Bell, 2002). Their labour, activities and outputs were economically important to the group's survival, providing resources upon which survival depended, and which could be traded for other resources not found locally, including non-food resources such as shells and ochre for ritual and ceremonial use. Trade in bush food between Aboriginal groups for example, was observed and noted even by European colonisers (Carnegie, 1898).

Such anthropological works clearly show that historically, both male and female roles are intrinsic to, and central within, Aboriginal religious life, ceremony and survival. More recent works, including those of Aboriginal women themselves (see for example Turner, 2010) clearly indicate that female roles are especially important with regard to considerations of bush food. Women have clear contemporary roles and responsibilities in caring for and nurturing bush food, in passing on knowledge about bush food and in the maintenance of stories and song associated with that knowledge. (Turner, 2010; Walsh and Douglas, 2011). This

recognition becomes important in a number of ways in the context of this research: in Aboriginal peoples' interactions with bush foods as these are important in spiritual and cultural life; in their functioning as commodities in the bush foods industry; and in cases where these two aspects of bush foods may intersect in the lives of remote Aboriginal peoples. It is also an important consideration in thinking about who to involve as research participants in the study.

2.3 Contemporary Realities for Aboriginal Peoples in Remote Australia

In academic and popular discussions of Aboriginal affairs in remote Australia, the words 'development' and 'improvement' often arise – notions that capture two aspects of the rationale for creating economic opportunities for remote Aboriginal peoples. To date, even in consideration of the significant state inputs and intervention that have occurred in remote Australia, for those who have remained in-situ in remote Australian Aboriginal communities, participation in public and private economies has been minimal and with marginal success rates (Altman, 2004; Duncan, 2003). There is now considerable evidence – much more than that which may be illustrated by remote Aboriginal peoples' participation in the bush foods industry - that attempts at economic development and similar initiatives aimed at 'improving' current situations for Aboriginal peoples in remote Australia have failed miserably (Altman, 2005; Austin-Broos, 2011). The question arises, why have such interventions not been successful?

Supporting Aboriginal enterprise development has been seen as one way of redressing the imbalance between the wealth of remote Aboriginal peoples and other Australians, by providing economic opportunities to those who choose to live in remote areas. The following sections of the Chapter explore some of the reasons presented for this development and interventional 'failure' in remote Aboriginal Australia.

2.3.1 Development Dilemmas

In remote Australia, business development ideas and subsequent enterprise activity have focused largely on Aboriginal landholders and their connections to that land. Pastoralism, cultural tourism and bush food enterprises have dominated options for enterprise development, with some mining rehabilitation now also occurring. More recently, attempts have been made to establish ranger programmes and to investigate land stewardship and ecosystem services as an economic opportunity for remote Aboriginal peoples (Altman & Cochrane, 2003; Davies et al., 2008). One such programme is the North Australian Indigenous Land and Sea Management Alliance (http://www.nailsma.org.au/). Such activities typically have been driven externally, primarily by government agencies, using public money and utilizing project-based activities to establish 'community' enterprises. For the most part, the success of these activities as sustainable wealth generators in remote Australia has been limited. Cultural tourism, for example, remains largely controlled by non-Aboriginal interests. Aboriginal peoples might produce goods and deliver services, but these are controlled and managed 'by and for "white interests"' (Bannerjee & Tedmanson, 2010 p. 154). Dodson and Smith (2003) also argue that Aboriginal peoples have had little control or power in the determination of their own futures. Dodson and Smith refer particularly to the lack of power Aboriginal peoples are able to wield in decision-making in their own development, especially where such development is concerned with Aboriginal-owned land.

2.3.1.1 Is it a Problem of Geography and Demography?

The literature on the sustainability of human settlements in remote areas suggests that a number of general approaches have been taken to enhance the stability of these populations (Carson and Cleary, 2010). The 'frontier approach' – where population growth is encouraged through in-migration (Gylfason, 2001, cited in Carson and Cleary, 2010) is one such approach. However, this approach has had limited success, as those moving into remote areas tend to congregate in the few larger centres, resulting in the creation of a pattern of very small, extremely isolated settlements (Gloerson et al., 2009, cited in Carson and Cleary, 2010).

A different approach has been to force the closure of settlements deemed to be unsustainable, as has occurred for example in Canada (Kennedy, 1997) or in concentrating resources in selected centres, e.g. the promotion of 'Territory Growth Towns' as part of the 'Working Futures' policy released in the Northern Territory, Australia (Anderson and Henderson, 2009). However, some remote settlements have proven highly resistant to such closures (Carson and Cleary 2010) often as a result of strong cultural ties (Farish and Lackenbauer, 2009, cited in Carson and Cleary, 2010), as illustrated by the settlement of Aklavik in the Canadian Northwest Territories. The township of Inuvik was established in 1953 as an administrative centre to replace the settlement of Aklavik on the Mackenzie River Delta, which was deemed unsustainable owing to flooding. Despite the entire population being relocated to the new centre of Inuvik, many of the Gwich'in and Inuvialuit former residents moved back into the settlement at Aklavik (Farish and Lackenbauer, 2009) where a population of some 600 remains (Stats Canada, 2006). Indeed, according to their website, the township's motto is 'Never Say Die!' (http://www.aklavik.ca/?p=about_aklavik).

Remoteness itself creates a range of structural factors that impact on the economic situation of Aboriginal peoples located in remote Australia. These include a lack of external connections beyond the remote regions and distance to markets (Stafford-Smith, 2008) and transport and communication limitations (Carson and Cleary, 2010) with which to facilitate and expedite resource flows that might be associated with production enterprises (Cunningham et al., 2009). Thus, for many remote regions, developing local economic activity is difficult, because mitigating the impacts of remoteness is largely beyond their control (Carson and Harwood, 2007).

2.3.1.2 Is It a Failure to Utilise Technology?

While the literature is generally positive about the improvements to remote living that technology might bring to remote settlements e.g. improved physical and virtual access to services and better communications (Skerratt & Warren, 2003), the realization of that potential rests with how well the technology is able to be exploited in those places (Carson and Cleary, 2010; Gilligan, 2005). For example,

Cunningham and colleagues (2009) pointed out that ICT and improved transport infrastructure could offer opportunities to remote Aboriginal businesses but only if they could be adapted to local conditions such as irregular access and seasonal variations in usage patterns. Carson and Cleary (2010) found that despite technological improvements in remote Australia, those who choose to remain living remotely, are becoming more isolated as a result of technology adaptability issues related to two factors: (1) how well users are able to adopt new technologies to their existing circumstances; and (2) how well users are able to adapt their practices to accommodate the new technologies. Cleary and colleagues (2008), pointed out that ICT and transport systems are usually designed and managed by those largely external to remote regions, and that these systems are more likely to be based in urban centres. Urban-based actors are more likely to be positioned to control supply chains, and consequently to use the technology to exploit remote businesses (Cleary et al., 2008).

2.3.1.3 Are the Development Models Appropriate?

Still others (see for example, Altman, 2001, 2005; Davies et al., 2008; Chambers, 1983; Scoones 1998; Rennie and Singh, 1996) have argued that development models for the world's rural poor (into which category many remote Aboriginal peoples could be seen to fall) which focus only on the monetary economy are limiting for those who may derive livelihoods from alternative economic activities, such as hunting, fishing and food gathering and the grazing of animals on traditional lands (as is the case for many remote Aboriginal peoples). Such alternative economic activities can be seen as very 'local' strategies, where the focus is on the utilisation of whatever is available that can be used to derive benefit.

From post-WWII until relatively recently (circa 1990s) professional economists tended to dominate development thinking and policy advice for the world's rural poor, using input/output measures in predictive models of supply and demand. Policy-makers overlooked those who might have taken a different tack, for example those who might adopt cross-disciplinary social science approaches to development (Chambers and Conway, 1992; Scoones, 2009). Additionally, the

neo-liberal political environment prominent from the 1980s tended to focus development policy energy at the macro-scale, across regions and states, rather than at the smaller, local scale. This meant that the importance of local understandings of priorities and the local knowledge of available resources in such considerations could often not be considered, or it was lost (Scoones, 2009). Chambers and Conway (1992) along with other development scholars at the time (see for example Almaric 1998; Rennie and Singh, 1996; Scoones, 1998) argued that conventional economic metrics and a limited focus on waged employment and monetary income as *the* critical elements of wellbeing were ethnocentric ideas. Such economic metrics had the further demerit of failing to consider the many and varied approaches and strategies through which people maintained their lives.

2.3.2 Alternative Development Pathways

In recent years, some alternative models have been proposed for Aboriginal economic development in remote Australia, based upon the conclusion that what has been tried in the past, and that might be referred to as the dominant approaches to economic development, have failed. This section of the Chapter now presents two such models that have been promoted as providing a useful alternative to the 'failures' of the past.

2.3.2.1 The Hybrid Economy Model

The 'Hybrid Economy Model' (HEM) (Altman, 2001; 2004; 2005; 2007; 2009) has been gaining prominence as a different approach to the dominant forms of economic development outlined above. Altman has conceptualised the HEM as one means of both recognising and representing the diversity of activities undertaken by remote Aboriginal peoples in Australia in the pursuit of economic goals.

The HEM encompasses the representations of both public and private economic sectors inherent in conventional economic models, while adding a third sector, the customary sector as an integral part of the model. The state or public sector is

made manifest in Altman's model in many forms for remote Aboriginal communities, just as it is for other citizens. The state can be seen as the provider of welfare and other services including health, law enforcement and as regulator (Altman, 2001 p. 4). The private economic sector, or the market, can be conceptualised as the productive private sector (Altman, 2001 p.4). In remote Aboriginal Australia however, the consumptive, rather than productive manifestation of the market is more evident. The productive component of the market is often very small in remote Aboriginal Australia, and might incorporate the retail sector, the arts industry and local entrepreneurial activity such as harvesting natural resources for sale, as occurs in the bush foods industry, for example.

Altman envisages that, along with the conventional representations of the economy as comprising public and private elements, there is a third 'customary' element within which remote Aboriginal peoples are engaged. This customary sector includes activities that are non-monetary, e.g. hunting, fishing, gathering and the maintenance of natural resources.

In the HEM (Figure 1), each sector is represented separately, but intersects with each of the other sectors, suggesting some level of interdependence.

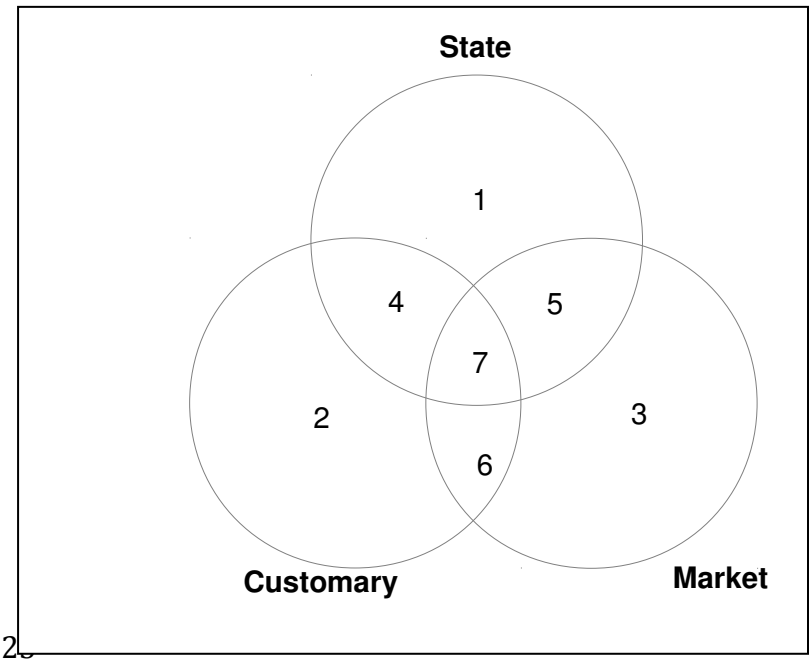

Figure 1: Hybrid Economy Model. Source: Altman, (2009)

Altman sees that the most 'productive' areas of this interdependence are at the intersections 4,5,6 and 7 in Figure 1. An example that is often used to illustrate real-world expressions of Altman's model is the production of art by remote Aboriginal peoples. In this example, art centres are subsidized by the state. Artists harvest the resources for the production of the art works and draw on cultural understandings to produce them. The finished products are sold commercially. In this instance, productivity is occurring across all three sectors of the hybrid economy model (Russell, 2011). Altman's model is clearly able to represent existing activities and to situate them within a single representative structure. In that sense, it provides a useful tool for researching these existing activities. However, Altman goes further than this, when he argues that sustainable development for Aboriginal peoples in remote Australia should be situated within the HEM. It is unclear from Altman's work how the HEM might foster new development and what criteria might be used to provide support, and in what form, to each of the economic sectors.

Wood and Garnett (2009) undertook quantitative analysis of each of the sectors of the HEM in relation to environmental sustainability in northern Australia, and with particular reference to remote Aboriginal populations and their ecological activities and impact in this region. While they found it relatively easy to quantify the market and state sectors of the HEM using input/output modelling, they found it more challenging to quantify the customary sector due to a lack of existing robust data (Wood and Garnett (2009). Davies et al., (2008) point to the continued non-recognition by the state of the value of the customary sector to remote Indigenous life, when constructing policy for economic development and the mechanisms intended to support such policies. It may well be the lack of clarity and difficulties in quantifying value around the customary sector, which Wood and Garnett (2009) identified, that is partly responsible for this hesitancy on the part of the state.

2.3.2.2 The Sustainable Livelihoods Approach

One further development model used sparingly to date (Davies et al., 2008), but that has been promoted, as a potential alternative model for development with remote Aboriginal peoples is the sustainable livelihoods approach. The sustainable livelihoods approach, which rose to prominence in the 1990s, is represented in the Sustainable Livelihoods Framework (SLF) (Figure 2). Under this approach to rural development, people and their priorities are placed at the centre of development trajectories. The focus is upon poverty reduction and empowerment, utilising the existing strengths and assets of the disadvantaged group. A feature of the sustainable livelihoods approach that is often promoted as the key point of difference to other development models is the participatory, or 'bottom up' nature of the ways in which the model is enacted. The development model also focuses on the role of institutional and policy environments and the manner in which these environments are able to provide support for sustainable development (Scoones, 2009).

Much of the literature related to the development of the sustainable livelihoods approach draws on the following definition from Chambers and Conway (1992, p. 6):

> *"A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global level and in the short and long term."*

Prominent scholars in the international development literature who advocate the approach include Chambers (1983), Chambers and Conway (1992), Scoones (1998), Ashley and Carney (1999) and Carney (2002).

The sustainable livelihoods approach has its genesis in the pursuit of international development with the world's rural poor (Scoones, 2009). Chambers and Conway (1992) highlighted that for this group, living and livelihood security strategies could include, amongst others: ownership of natural resources including land and trees; the rights to graze livestock; active engagement in hunting and gathering; pursuit of adequate income through secure employment or through various combinations of this suite of activities (Davies et al., 2008). In contrast, the dominant approaches to economic development described above, tended to focus only on the monetary components of these strategies, through employment or enterprise development.

As well embracing these desiderata of living well, the sustainable livelihoods approach also recognises the value of health and wellbeing and environmental outcomes in determining the quality of peoples' lives (Davies et al., 2008). The sustainable livelihoods approach assists in identifying changes, and where they can be made, to people's assets or to their livelihood strategies. This approach to development emphasises the core capacities, capabilities and strengths of individuals and their families as assets rather than emphasising their needs or desires as deficits. These capital assets, which can be drawn upon in the pursuit of livelihoods, can be categorised as human, physical, financial, natural and social capital.

This categorisation of capitals can also be seen in other community development models, e.g. the Community Capitals Framework (CCF) (Emery & Flora, 2006). The capitals themselves can be defined as follows:

- Natural Capital refers to natural assets that exist in a particular location, e.g. weather, geographic isolation; geological features; natural resources and amenities; natural beauty (Cocklin and Dibden, 2005; Emery et al., 2006).

- Human Capital refers to the knowledge, skills and abilities that people have available to use. It also includes health status. (Flora et al., 2004).

- Social Capital concerns the networks and relationships between people, and the levels of trust and reciprocity that is exchanged in the context of such networks and relationships. Social capital may exist internally i.e. between people within a locale or community, or between people internally and externally (Productivity Commission, 2003).

- Physical (also known as Built or Manufactured) Capital comprises material infrastructure which contribute to the production process rather than being the output itself – e.g. tools, machines and buildings, road, rail (Flora et al., 2004).

- Financial Capital has no real value itself but allows the commodification of these other forms of capital and thus makes them transactable (Lorenz, 1999).

The sustainable livelihoods approach represented by the SLF provides a systems perspective on livelihood attainment and highlights the changing nature of interactions between the assets that people have and the decisions they make regarding which livelihoods strategies to pursue. Importantly, the Framework also draws attention to those factors that constrain or support decision-making and subsequent life outcomes. Transformative structures and processes which can act upon capital assets in positive or negative ways to affect strategic decision-making around livelihoods may include a number of factors. These might be governments and policy, markets, laws, institutions and culture. In turn, livelihood decisions will have a feedback effect on the stocks of capital assets available for livelihood attainment (Chambers and Conway 1992; Davies et al., 2008; Scoones, 2009).

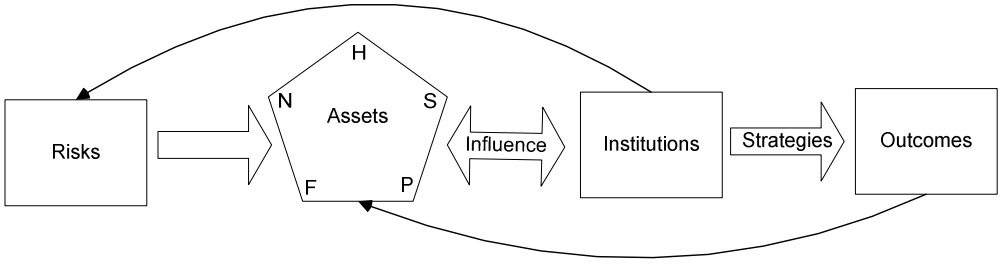

Figure 2: Generic model of Sustainable Livelihoods Framework. Source: Adapted from Davies et al., (2008, p. 58).

Following the emergence of the sustainable livelihoods approach in the 1990s, it has been widely advocated as a development mechanism for the world's rural poor. The approach and was especially prominent in UK development Aid through the UK Department for International Development (UKDfID) in the 1990s and early 2000s, and has been used widely by the UNDP and CARE (Cahn, 2002; Scoones, 2009). For Davies et al., (2008) and others in the Australian context (see for example Maru & Woodford, 2005; Measham et al., 2006; Moran et al., 2007; Davies et al., 2011) the sustainable livelihoods approach is seen as a valuable tool in the promotion of development with remote Aboriginal peoples. While Davies et al., (2011) acknowledge that the evidence for the efficacy of the approach in the Australian context is still limited, they point to their early experiences of applying the approach as confirming the international experience of the approach's value in promoting actions that will reduce the vulnerability of disadvantaged people (Davies et al., 2008, p. 63). Davies et al., (2008) also strongly advocate for effectiveness of the participatory nature of the approach. Davies and colleagues also point out that within the Australian context, it should be used flexibly, in conjunction with other tools, and not function as a stand-alone blueprint for development. Davies and colleagues also highlight the value of the diagrammatic representations of the livelihoods framework as being useful as a conceptual model (see Figure 2) in representations of the livelihoods attainment of remote Aboriginal peoples.

2.3.3 'Development Research' Dilemmas

As we have seen from the sections above, in very many cases where disparate and possibly incommensurable worldviews are brought into dialogue, it is the dominant worldview that succeeds in determining what constitutes 'development.' It can be further argued that the research, evidence-gathering and fact-finding upon which such 'development' is built, and which underpins the policy frameworks upon which 'development' interventions are implemented occurs within research frameworks that are also promulgated within the same dominant cultural paradigm (Du Bois, 1983; Guilfoyle et al., 2008; L. Smith, 1999; Tedmanson and Bannerjee, 2010). It is therefore important to examine

some of the arguments in relation to the forms of research and the manner in which this research has been conducted with remote Aboriginal peoples.

2.3.3.1 Anthropology – For the Service of the State?

Traditionally, research that has focused upon remote Aboriginal peoples has been closely associated with the discipline of anthropology. In relation to anthropology, Gray (2007) and Sutton (2009) have been particularly critical of the institution of colonialism and the resulting research and other impositions that have been wrought upon remote Aboriginal peoples. For these scholars, there is an almost inextricable link between the role of anthropologists and their research, and its connection to the service of the state, in the pursuit of knowledge about Aboriginal peoples to be used for power and control. Sometimes, issues of power and control have been articulated more 'softly' in language around the 'management' of Aboriginal affairs. Such management of Aboriginal affairs includes of course, those interventions aimed at 'improving' the lives of people through the generation of activities which promote, amongst others, economic development, or better health outcomes, or strengthening family relationships.

Dodson (1999) too, spoke of early research intent on classifying and labelling Aboriginal peoples for the purposes of colonial control. While the suggestion is not that unethical practices in research persist, undoubtedly early practices have created as a legacy, feelings of distrust and 'research fatigue' for some Aboriginal peoples (Guilfoyle et al., 2008). Another important legacy of early research practices is a persisting representation - with associated narratives - of Aboriginal peoples as a 'problem' to be solved using external interventions (Cochran et al., 2008; L. Smith, 1999). Perhaps the question that is not being asked is, 'where exactly does the 'problem' lie, and who is in fact defining it as such?' Are such representations the conceptualisations of external agents who are formulating the issues through an external prism, and where are the voices of remote Aboriginal peoples themselves heard in such formulations?

Research about Aboriginal peoples has often sought to emphasize the role of indigenous peoples in Australia's past. That is to say, indigenous Australians have been depicted as historical figures, but largely irrelevant to our future (Rose, 2000). There is an argument to suggest this focus on historicity has in part arisen through the processing of Native Title Claims, and the legal requirement for the Aboriginal proponents to demonstrate unbroken links from Aboriginal present to Aboriginal past in validating such claims. In light of this process, it is hardly surprising that focus upon the past has tended to be the *raison d'etre* for much research work with Australian Aboriginal peoples, most particularly within anthropology (Gray, 2007).

In raising concerns here about research and the manner in which it has been conducted, the purpose is not to denigrate the vast body of work that has provided an enduring knowledge of Aboriginal peoples - research that has been critical to developing an understanding of their cultural milieu. Rather, it is to suggest that perhaps we should be questioning the manner in which research is undertaken, and therefore concede perhaps, that there may be a problem with the focus of the research and its tendency to look at the past, rather than the present or the future.

2.3.3.2 …Or is it about Culture and Inequality?

Austin-Broos (2011) argues that the debates about success and failure in relation to developmental interventions (and the research that drives them) aimed at improving the lives of remote Aboriginal peoples is polarized simultaneously across two domains – that of cultural difference and of inequality. She argues that such polarization of the debate has led either to ineffective policy and subsequently to ineffective development initiatives, or to paralysis. For Austin-Broos there is a 'different inequality' in relation to the current situation for Australia's remote Aboriginal peoples that she defines as comprising *both* cultural difference and inequality and that neither the one nor the other can be considered in isolation.

According to Austin Broos, it may not be *either* cultural difference *or* inequality alone that constitutes the root cause of prevailing relative disadvantage but instead, both somehow must be considered together. If this is so, then it will prove difficult to know where to begin in redefining the narrative by searching for knowledge to move *from* somewhere *to* somewhere else – if only because it will be difficult to identify the destination point, for as long as we are trapped in prevailing external worldviews and the narratives these impose upon remote Aboriginal peoples. Such worldviews continue to predominantly valorise either the recognition of cultural difference *or* to mitigating disadvantage borne out of inequality through external interventions. Austin-Broos argues that such external interventions may not recognise cultural differences and the impact these may have upon the 'success' or 'failure' of such interventions.

Questions which arise here include: Who is asking the questions about what needs researching, and thus contributing to the prevailing narrative? How are the questions being formulated, and by whom? How can we develop the type of knowledge from which a shared perspective might emerge? Such new knowledges must bridge the domains of both culture and inequality, a bridging process which Austin-Broos argues is so essential in introducing initiatives and 'development' that benefit remote Aboriginal peoples (Austin-Broos, 2011). Only in this way do we stand any chance of developing enriching new cross-cultural narratives, narratives that move beyond notions of disadvantage, inequality and problems to be fixed.

2.3.3.3 …But Could it Be About Worldview?

Aboriginal knowledge systems and their worldviews have been extant for many thousands of years. A critical question is, *how* have researchers with knowledge-systems derived from a westernized cultural base engaged in such Aboriginal knowledge systems? Or, indeed, have they engaged 'with' them? The particular emphasis here is on the word 'in.' The word 'with' implies an externalized perspective and position that is shaped by existing worldview, such that any knowledge that happens to be acquired remains contextualized and to this extent, compromised by that worldview. Arguably, such research perspectives face a

double disadvantage, since these tend to be informed, not simply by the broad prevailing assumptions and prejudices of the long western knowledge tradition, but informed by discipline-specific practices that are themselves part of the culture and traditions of that discipline. And in those disciplines which pride themselves on adopting an 'objective', scientific or quasi-scientific research stance, the prevailing mindset is one of detached outsider: an observer who stands somehow 'apart' from that which is being observed. Such judicious detachment which treats the thing researched as 'other', is not well-suited to the task of trying to enter the mindset and ways of understanding implicit in a variant worldview.

A brief examination of the current anthropological debates about the Northern Territory Emergency Response (NTER) further extends the points being argued for here. This debate is particularly relevant in the context of 'development research' in central Australia, where much of the work undertaken in this thesis is situated. The NTER has intensified reflection upon the role that research, and anthropology in particular, has played during the last 50 or so years in shaping the present political environment in central Australia and in Aboriginal affairs more generally (see for example Hinkson 2010 and Sutton, 2009 for contrasting views). On the one hand, criticism has been levelled at the discipline of anthropology for at best ignoring, and at worst being complicit in, the plight of remote Aboriginal peoples over the last three to five decades. Sutton (2009) is scathing in his commentary upon what he identifies as the 'liberal consensus,' which he claims has failed to acknowledge the desperation of remote Aboriginal peoples in Australia. On the other hand there is staunch criticism of Sutton and others for perpetrating the rhetoric of 'neo-liberalism' and the state, a discourse which continues to peddle 'improvement' of the culture it (perhaps unwittingly) pathologises (Hinkson, 2010; Altman, 2010).

The NTER was instigated in 2007 by the federal government of then Liberal Prime Minister John Howard, as a result of the 'Little Children are Sacred' report (NT Government, 2007). This document reported on the current state of the health of Aboriginal children in the Northern Territory and dealt particularly with

purported sexual abuses of Aboriginal children. The report, and the subsequent federal government response (NTER) has generated considerable discourse and sometimes heated debate amongst policy makers, Aboriginal leaders, and within the anthropological research community (Hinkson, 2010; Sutton, 2009). Much of the ensuing debate ranges across what has happened in the past to bring about the present situation. Throughout this debate, little consideration has been given to the role Aboriginal peoples will play in shaping Australia's future. Where the role of Aboriginal peoples is discussed, the language used typically invokes concepts of Aboriginal survival (Rose, 2000) and preservation of culture and 'fixing' problematic situations.

The debate rages about what Hinkson (2010) has referred to as the culture wars – a term coined in the 2010 publication 'Culture Crisis,' (Altman and Hinkson, 2010) a series of essays that reflect the current very polarised and subjective academic and popular judgements of Aboriginal 'culture' as either being inherently 'good' or 'bad' as an influencer on the well-being of remote Aboriginal peoples. A critical question must be: 'who is asking the questions, and of whom, in the current debate in the Northern Territory as a result of the NTER?' And, more broadly in the context of remote Australia, who is asking the questions about what Aboriginal peoples think in relation to the term 'development' and what it means to them?' Dodson and Smith (2003) noted that what may be seen as development from one perspective may not be seen in the same way from another perspective. And that is a critical point about worldview- what constitutes development from one perspective may be viewed quite differently from another, especially in a cross-cultural context (Bain, 2005). Dodson and Smith further argue that the relativity of notions of development to a certain worldview is especially apparent when it comes to cross-cultural perceptions of the factors that influence sustainability (Dodson and Smith, 2003 p. 5), a notion which forms a significant plank in the platforms of policy aimed at improving the lives of remote Aboriginal peoples (e.g. 'Closing the Gap,' FaHCSIA, 2009).

Should questions about 'development' have a meaning that can be understood from within a perspective shaped by shared understandings of differing worldviews (Cameron & Gibson, 2005a; Guilfoyle et al., 2008)? Or, as exemplified in much of the current debate and the NTER itself (Gray, 2007) are remote Aboriginal peoples left with little choice but to define 'development' and their roles within it, using the terms and categories of the prevailing academic discourse (Nakata, 2003) and of state policy-making? Further, when one is seeking answers to questions about how to embark upon development initiatives, what impact does worldview have on the manner in which research about such initiatives might be undertaken and in which peoples with differing worldviews might be engaged? How might we define (and of course *who* might define) what constitutes engagement in such research activities and indeed, in policy making itself? Austin Broos (2011) argues that full participation and not simply 'involvement' of Aboriginal peoples themselves must be in place in the discourses, debates and interventions related to development and policy making to support such development, if the circumstances of Aboriginal peoples living remotely are to change. As Austin-Broos points out in her critique of historical ethnographies of Aboriginal Australia, the prevailing discourse might produce 'facts' about Aboriginal peoples and their lives all too easily. However, discourses (and thus their produced 'facts') can also change all too easily (Austin-Broos, 2011, p.59). Such 'facts' are thus never value-neutral, nor are they static. Yet they continue to prevail upon the lived realities as 'truth' for remote Aboriginal peoples. Such 'truths' are what is driving 'development' and 'improvements' and their associated interventions in remote Aboriginal Australia.

2. 4 The Australian Bush Foods Industry

This section of the Chapter now turns its attentions to an in-depth examination of the Australian bush foods industry, in light of the intent of the thesis to use the bush foods industry as the lens through which to address the research questions the thesis seeks to answer.

The Australian bush food industry, because of its links with Aboriginal land owners and the Indigenous Ecological Knowledge (IEK) they hold, has been seen as one area for potential economic development, particularly in the establishment of community enterprises in remote areas to grow or harvest bush food for sale (Gorman et al., 2008; Miers, 2004).

2.4.1 History and Development

The Australian bush foods industry or 'bush tucker industry' as it is sometimes known, is primarily concerned with food products derived from uniquely Australian plants, including fruit and seeds. The industry has its roots in the activities of seed collectors in the 1960s and 1970s (Miers, 2004), and was founded on traditional Aboriginal knowledge of the collection, preparation and uses of these plants (Miers 2004; Morse 2005). There was significant development in central Australia during the late 1980s and into the 1990s when trade began between remote Aboriginal bush food harvesters and a number of wholesalers/consolidators in Alice Springs (Ryder et al., 2009). The species traded were primarily bush tomatoes (*Solanum centrale*) and wattle seed (*Acacia spp.*).

Commercial use of bush foods began with their production as novelty items which epitomised 'outback' stereotypes such as the 'bush tucker man', Les Hiddins, and Paul Hogan (Cherikoff, 2000). These stereotypes and the language used to describe them e.g. 'bush tucker', were seen as a way of garnering international exposure and media attention (Cherikoff, 2000).

Although increased interest was shown in bush food production as an eco-friendly alternative to traditional crops in the early to mid-1980s (Brand, 1989) the industry really began in earnest through the efforts of a small number of individual pioneers and champions. Most prominently represented in the literature around this time are Vic Cherikoff; Jean-Paul Bruneteau; Ian Robins and Juleigh Robins who were most active in promoting, selling and using bush

foods in their enterprises, and in developing a range of value-added products (Miers, 2004).

A number of academics and horticulturalists identified the potential for incorporating bush foods into the hospitality and agricultural industries (Miers, 2004) and in analysing the nutritional benefits of bush foods (see for example, Brand-Miller et al., 1993). A small number of restaurateurs began incorporating bush foods into their offerings from this time (RIRDC, 2008a). In the 1990s a number of bush food forums and summits were held as the potential for the industry to grow was recognised and understood. The most notable of these in the development of the industry was held in 1996 in Queensland under the auspices of the newly formed Australian Native Bushfood Industry Committee (ANBIC), established in 1995 by the Rural Industries Research and Development Corporation (RIRDC). The ANBIC summit generated much interest by bringing together a disparate range of operators to discuss a more cohesive approach to developing the industry as a whole. A major business and marketing paper resulted, which predicted industry growth of 74% over 3-5 years (Ecoconsult, 1996).

More recently the industry has attempted to reposition itself with a view to catering to more sophisticated and knowledgeable food markets in the 21st century. This is evidenced by a proliferation of high-end restaurants, cook books and television productions, dedicated to showcasing a more 'grown-up' approach to bush foods. As indicated by the comments above, such developments may reflect a growing awareness of the unique nature of Australian bush foods. There are a number of examples of specialist bush foods outlets across Australia, and these include restaurants such as the 'Red Ochre Grill' in various locations and 'Tjanabi' in Federation Square, Melbourne, as well as specialist catering enterprises such as 'Kungkas Can Cook' in the Northern Territory and 'The Dilly Bag' on the Sunshine Coast in Queensland. The fare offered by these enterprises features Australian bush foods used in a variety of ways, but with an emphasis on sophistication, rather than novelty. Television productions about bush food have

moved away from the Les Hiddins-type 'frontierism' aspects of bush food toward more stylishly produced segments such as 'Mark Olive's Outback Café' on the Australian Broadcasting Corporation's (ABC) Indigenous feature programme 'Message Stick' (http://www.abc.net.au/tv/messagestick/).

There are currently thirteen main bush plant species used most prolifically in the bush foods industry, and these are listed in Table 1, along with current supply information. Whilst there are a number of other emerging plants these thirteen plants form the basis of most current commercial use.

Table 1: Commercially Used Native Foods Supply Status Source: (Adapted from New Crop Industries Handbook, RIRDC, 2008b)

Species	Mainly cultivated	Cultivated and wild harvest	Mainly wild harvest	Supply
Aniseed Myrtle	Yes	No	No	Under
Bush Tomato	No	Yes	Yes	Under
Davidson's Plum	Yes	Yes	No	Over
Kakadu Plum	No	Yes	Yes	Over
Lemon Aspen	No	Yes	Yes	Over
Lemon Myrtle	Yes	No	No	Over
Native Citrus	No	Yes	No	Over
Native Pepper	No	Yes	Yes	Under
Pepper-berries	No	Yes	Yes	Under
Native Mint	Yes	No	No	Under
Riberries	Yes	No	No	Under
Quandong	No	Yes	Yes	Over
Wattle Seed	No	Yes	Yes	Over[2]

2.4.2 Current State of the Industry

In 1995/96 the industry was estimated to be valued at $10-$12m (Graham and Hart, 1997). Cherikoff estimated its value at $16m in 2000 (Cherikoff, 2000). More recently, estimates vary from: $5m annually for bush foods only (Fletcher 2003); between $15m and $20m in 2004 for bush foods only (Miers, 2004); and $10m annually for bush foods and essential oils derived from bush species (Lester 2003). Primary Industries and Resources SA estimated the figure to be $16m per annum in 2005 (PIRSA 2006). Robins (2007) estimated the industry to be worth $14m per annum including value-adding. In its strategic plan for the development of the bush foods industry in Victoria, the Victorian State Government estimates the industry to be worth $22m per annum (Victoria

[2] At the time of publishing. Now anecdotally reported to be in under-supply.

Government, 2006 in Ryder, Latham and Hawke, 2008). Latest figures indicate little change. However, none of the figures mentioned are corroborated by any consolidated data. While estimates vary, it is clear that even if the uppermost estimate is taken, the industry growth is far below the predicted growth of 74% suggested for the 10-year period discussed at the 1996 ANBIC Summit.

Currently, the industry is characterised by very small and small-to-medium enterprises operating as sole traders or limited companies, often with short supply chains or lack of coordination, and relying upon spot market prices. The industry is also frequently undercapitalized. Activities associated with commercial bush food production generally comprise only a small part of business activities undertaken by those in the industry (Bryceson, 2008).

The bush foods industry suffers many of the challenges inherent in fledgling industries including mismatches in supply and demand, problems surrounding product and market development, and around raising potential consumer awareness through education (Fletcher & Collins, 2004). While no firm data are available, recent uptake of bush food products by supermarket chains would appear to indicate that consumer demand for bush foods is increasing (RIRDC, 2008a).

Harvesting from the wild is still the predominant means of supply of fruit and seed for the bush food industry, with six or more species being supplied to the market in this manner (Christensen & Beal 1998; Robins and Ryder 2004; RIRDC, 2008a).

Matching supply and demand continues to be a major challenge facing the industry, particularly for wild-harvested species (Cherikoff, 2000, Bryceson, 2008, Ryder et al., 2009). Bush tomatoes, for example, have been in extremely short supply since 2006 due to prolonged drought in the growing area and this has caused serious market supply issues (Bryceson, 2008). Conversely, there was a glut of wattle seed reported in Robins and Ryder (2004) and this appeared to be

the case still in 2008 (Bryceson, 2008), although most recently, processors are reporting an undersupply (J. Robins, pers. comm. 2011). Supply issues have created a series of 'boom and bust cycles' (Cleary et al., 2008 p. 2) in the industry and are most predominant for those species supplied through wild-harvest. This has led to a lack of investor confidence, and is a factor which continues to hinder industry growth and development (Cherikoff, 2000; Cleary et al., 2008). Cultivation is expanding as the industry grapples with continuity of supply and food safety issues, but is still in its infancy. Challenges here include a relative paucity of information in the published literature regarding suitable growing locations for different species, and regarding yield information on desired species (Ryder, Latham and Hawke, 2008).

2.4.4 Summary of Research undertaken into the Bush Foods Industry

In 1998, research began in earnest into the bush food industry, with the establishment by RIRDC of a bush foods sub-programme within its 'New Plants' research portfolio. RIRDC and research partners have provided a total of $3.97m to 33 bush food research projects since that time (RIRDC 2008a). To date, most research has focused on product enhancement and quality control (Davies et al., 2008).

Most funding provided by RIRDC has gone to addressing production constraints and exploring new uses to grow the markets for Australian bush foods (RIRDC 2008). Much of this work has focused on building the industry outside remote Australia in eastern and southern parts of the country (Davies et al., 2008). Other major research includes work undertaken by CSIRO, particularly in the realm of understanding production and in identifying bush food characteristics such as toxins and beneficial compounds (see for example Netzel et al., 2006; Latham et al., 2008; Konzcak et al., 2010).

There is no research objective in the RIRDC 2007-2012 Native Foods Research and Development Priorities directly related to Aboriginal peoples generally, or remote Aboriginal peoples specifically, and their participation in the industry.

This is despite acknowledgement and recognition of Aboriginal knowledge and the role it has played in the development of the industry (RIRDC 2008a).

The primary contribution to bush foods research, especially in the remote context, has been undertaken by DKCRC, within the Australian Government's Co-operative Research Centres programme. This work has focused primarily on the desert regions of Australia and two desert species of high interest to the market, i.e. wattle seed (*Acacia spp*.) and bush tomato (*Solanum centrale*). The DKCRC project *Bush Products from Desert Australia* focused on taking a value chain approach to identifying and understanding knowledge gaps in the industry in relation to the participation of remote Aboriginal peoples in the bush foods industry (Cleary et al., 2008). The research project aimed at better understanding value chains associated with bush products in desert Australia in order to determine where changes could be made to improve participation rates of remote Aboriginal peoples within the industry, and to increase the financial benefits to this group. The Value Chain concept was considered to be a useful framework, and one with the potential to unite the different methodologies and research approaches which were needed if one was to illuminate the unique nature of the bush food industries in Australia, and the bush tomato and wattle seed value chains in particular, with which the project was concerned (Desert Knowledge CRC, 2007). Qualitative and quantitative, empirical and ethnographic approaches were used in the research. The value chain framework was considered by the DKCRC to be able to accommodate all of these approaches meaningfully, in that they could be related to component parts of the chain and its activities in moving product from suppliers to the market. Research included the technical requirements of understanding the way the bush tomato plant itself grows, reproduces and spreads, and its characteristics, e.g. fruit size, yield (Ryder et al., 2009), and genetic variability (Waycott et al., 2009). Research also focused on horticultural production, pest management and post-harvest treatments (Ryder, 2009; De Sousa Majer et al., 2009). Considerations of the efficacy of existing business structures were also researched (Cleary et al., 2008) together with policy considerations (Cunningham et al., 2009.) Participatory research aimed at building the capacity of remote Aboriginal peoples to participate in the industry

was also undertaken (Cleary, et al., 2009; Cleary, 2012b). The BPDA project further sought to include social and cultural considerations in its research, including better understanding the relationships between harvesters and traders (Alywarr Speakers from Ampilatwatja et al., 2009; Walsh & Douglas, 2009).

However, it is important to note that these social and cultural considerations were included in the project primarily with a view to understanding how they impacted on the commercial activities undertaken within the bush foods value chain. These considerations were not necessarily brought into the research equation with a view to developing any understanding of them beyond market-related application. This market focus on bush foods as commodities and on finding ways to improve the value chains associated with Aboriginal peoples' participation in the industry formed the platform upon which the project was developed. However, the 'value chain' research focus employed within the BPDA project has been criticized as too narrow to represent the full suite of activities undertaken by remote Aboriginal women in the process of harvesting food for both commercial and non-commercial use (Walsh & Douglas, 2011) and the meanings that bush foods hold for this group beyond commercial considerations of bush foods as products.

2.4.5 Remote Aboriginal Peoples' Participation in the Bush Foods Industry

In central Australia and particularly the Northern Territory, there have been several attempts to develop Aboriginal community enterprises based on bush food. Many of these are supported by public funding. However, most development attempts involving bush food enterprises have ultimately 'failed', generally surviving for only short periods. Few remote Aboriginal peoples in Australia have engaged successfully in market-based commercial ventures involving bush plants. In remote Australia, participation is primarily through the supply of raw product, which is sold for processing and value-adding that occurs mostly outside the region of origin (Cleary et al., 2008; Cleary, 2012a).The exceptions have been in the use of plants as a medium for creative expression and as the basis for art and craft enterprises (Armstrong Mueller Consulting 2008; Gorman et al., 2008; Whitehead et al., 2006). The reality is that few remote

Aboriginal peoples are reaping significant economic benefit from participation in the Australian bush foods industry (Bryceson, 2008; Cleary et al., 2008).

Currently, there are two major supply / value chains operating within the bush foods industry in which remote Aboriginal peoples are participating: the 'Outback Spirit' and 'Outback Pride' chains. 'Outback Spirit' is the flagship native foods brand of Robins Foods, a food processing and manufacturing company operating from Altona, Victoria (Robins, 2007). Supply inputs to this chain from remote Aboriginal peoples occur from both the Northern Territory and the Kimberley region in Western Australia (Cleary, 2012a). From the Northern Territory, products supplied include primarily wattle seed (Acacia *spp.*) and bush tomatoes (Solanum *Centrale*) (Cleary, 2012a), while Kakadu plum is the major product supplied from the Kimberley region in Western Australia.

The 'Outback Pride' chain operates primarily in South Australia with Aboriginal and non-Aboriginal growers in both temperate and desert regions. Remote Aboriginal participation in the 'Outback Pride' chain is characterised by contract growing arrangements made with Aboriginal communities. Under these arrangements, growers are contracted to supply exclusively to Outback Pride, usually under five-year contracts (Bryceson, 2008). Additionally, raw product is produced directly by Outback Pride. Outback Pride also produces seeds and seedlings at its Reedy Creek Nursery in South Australia, and provides these, along with plant growing infrastructure, to contract growers to produce raw product for processing.

Along with these two major bush foods supply chains, bush foods travel from supplier to markets through many other avenues. While this traffic occurs in low to very low volumes, this is in fact how most people involved in the industry are currently participating (Bryceson, 2008) thereby contributing to the fragmentation that is evident in the industry.

In central Australia, middle-aged and senior Aboriginal women in remote communities (Davies et al., 2008; Everard et al., 2002) provide the majority of supply of the two key products, i.e. bush tomatoes (Solanum *Centrale*) and wattle seed (Acacia spp.) through wild harvesting activities. In other parts of remote Australia, most notably the Kimberley region of Western Australia, commercial harvest of Kakadu plum (Terminalia *Ferdinandiana*) is undertaken from wild stands on Aboriginal lands by individuals and family groups, and includes both women and men (Clarke, 2007).

For the most part, participation in the industry by remote Aboriginal peoples occurs on an individual basis. There are no overarching Aboriginal bush food producer alliances, bodies or groups comprised of industry participants. One such organization existed for approximately six years, but has since been disbanded. This organization, a procurement company comprising Indigenous bodies (Indigenous Australian Foods hereafter IAF) was established in 2002 to source and manage supply from its members in supplying the 'Outback Spirit' value chain exclusively. The member organisations of IAF included a number of remote Aboriginal organisations: Australian Aboriginal Food Company, Napperby Station, Tanami Desert, Central Australia; Bawinanga Aboriginal Corporation, West Arnhem, Northern Territory; Djabugai Tribal Aboriginal Corporation, Cairns, Queensland; Mamu Aboriginal Corporation, Innisfail, Queensland; Ngaanyatjarra-Pitjantjatjara-Yankunytiatjara Women's Council, Central Australia; and two regional Aboriginal organisations: Mildura Aboriginal Cooperative, Victoria, with Murdi Paaki Regional Housing Corporation Ltd, New South Wales; Worn Gundidj Aboriginal Co-operative, Warrnambool, Victoria (Robins, 2007). No listing for the organisation could be found in telephone directories and it had no web presence other than on the Robins Foods website. Contact information was also listed on this website. The organization has since disbanded (pers. comm. J Robins, 2009). In the Kimberley region in Western Australia, a harvesting cooperative was also established which comprised Aboriginal individuals and corporations. The primary purpose of this cooperative was to consolidate supply of Kakadu plum (Terminalia *Ferdinandiana*) to the market and to provide infrastructure e.g. commercial refrigerators and harvest

storage points that could be shared by members. However, at the time of writing, no information can be found about operation of IHA and a previously accessed website no longer exists. This points perhaps to the discontinuation also of this group.

As the discussion above indicates, the bush foods industry is dominated by non-Aboriginal horticulturalists and businesses (Davies, et al., 2008) many of whom operate outside of remote areas. There is little evidence of Aboriginal representation in industry decision making or in determining strategic industry directions. From this position, remote Aboriginal participants have little influence on the industry itself.

Australian Native Foods Industry Limited (ANFIL), the peak industry body, purports to represent all interests in the industry, providing advocacy and lobbying on behalf of the industry and working with all levels of government and other bodies to develop the industry and to identify research priorities (http://www.anfil.org.au/). However, scrutiny of ANFIL literature (newsletters and publications) and their website reveals little evidence to suggest that Aboriginal interests are broadly represented by ANFIL. At the time of writing, none of the current directors identifies as being Aboriginal. The industry profile on the ANFIL website lists no information regarding Aboriginal participation. There are approximately 300-500 Aboriginal peoples participating in commercial wild harvest activities in central Australia, many of whom sell their product regularly or occasionally (Davies et al., 2008; Morse, 2005; Ryder et al., 2009). However, no reference to consultation processes about needs or aspirations of this group can be found in any of the current ANFIL literature or publications.

2.5 Chapter Summary and Conclusions

The chapter commenced with a review of literature related to the colonial understandings of Aboriginal peoples in remote Australia, and the ways in which these understandings have continued to influence and shape the lives of

Aboriginal peoples. The chapter then examined the contemporary situation for remote Aboriginal peoples, with a focus upon dilemmas of development and suggested various reasons for why developmental 'failure' has occurred in remote Aboriginal Australia. Following this, the history and development of the bush foods industry, including remote Aboriginal peoples' participation in the industry and research to date undertaken about the industry was discussed.

As the information and literature reviewed in this chapter indicates, the colonial legacy that continues to drive the prevailing narrative in remote Aboriginal Australia is one of developmental 'failure.' This theme of 'failure' has been attributed to multiple causes and thus there have been a proliferation of interventions, policy responses and research activity aimed at driving 'improvement.'

It would be no exaggeration to say that, for the most part, and most importantly in the context of this research, the development approaches that have arisen from the economic development paradigms that have dominated in remote Australia can be seen to have largely failed. What is not clear from the literature however, are definitive reasons why such failures might have occurred. Rather, the literature suggests a number of reasons to which failure can be attributed.

Firstly, the literature suggests there are issues of geography and demography to which developmental failure can be attributed, in the form of distance to markets and external, non-remote domination and exploitation of supply chains. Demographic change and subsequent sparse and declining populations may also be impacting upon the availability of effective human and social capital through which development can be effected.

The second reason suggested by the literature for 'failure' is that such failure is structural in nature. That is to say, there has been a failure to fully exploit technology due to an inability to adopt or adapt technology to local conditions coupled with industry fragmentation and a lack of coordinated effort in the case

of the bush foods industry specifically. An examination of the industry itself reveals that in many respects it is still in its infancy. As such, the industry is fraught with many of the structural difficulties associated with new industries, including a propensity toward fragmentation that currently precludes cohesive industry-wide strategizing for development. In such an environment, there is an argument to be made that remote Aboriginal peoples have tended to be overlooked when industry development is under consideration. This situation may also explain in part why a significant focus of the major body of research undertaken by the Desert Knowledge CRC has been upon the relatively limited goal of increasing the participation of remote Aboriginal peoples in the industry.

Thirdly, the literature suggests that one of the factors that may be contributing to developmental failure is the imposition of development models which do not meet the needs or aspirations of remote Aboriginal peoples. In relation to this third point, the literature suggests an historical preoccupation with notions of 'development' and 'improvement' for remote Aboriginal peoples that is premised upon an ethnocentric understanding of these terms expressed through a singular focus on participation in the monetary economy. Such notions of development and improvement are supported by policy and development models where success is measured largely via (economic) input/output metrics. However, the literature also reveals that in recent response to this particular attribution of failure, alternative economic development models for remote Aboriginal peoples are gaining prominence and have been promoted as a means of mitigating this problem. Such models focus upon participatory and 'bottom up' approaches as key elements of difference to historical models. What remains unclear from the literature is exactly how these participatory approaches might be enacted and mobilized specifically in the context of remote Aboriginal economic development in Australia. For this reason, the robustness of such bottom-up approaches remains untested. Consequently, while the evidence for success of these alternative models of development has been well documented in the literature outside Australia, the evidence for the success of such approaches in relation to remote Aboriginal development within the Australian context is severely limited and largely still to be collected.

What is illustrated by the (limited) literature in relation to remote Aboriginal peoples' participation in the bush foods industry is the idea introduced in Chapter One: that we are led to conclude that there has been some measure of 'failure' in remote Australia, in relation to the 'development' of remote Aboriginal peoples in this area.

In the context of bush foods, specifically, this concept of 'mitigating failure through improvement' encompasses two domains that can be summarized as follows:

- Product improvements through better understanding raw inputs, such as plants and their fruit and the ways in which these grow; improving the commercial production of bush foods through creating horticultural enterprises; and better understanding and harnessing bush food properties, such as beneficial compounds for the economic return these might effect.

- Process improvements including harvesting and post-harvest handling techniques and the creation of business structures and institutions aimed at increasing efficiencies for agents engaged in the industry; increasing the participation of remote Aboriginal peoples in the industry; and developing a greater robustness in the industry itself.

Where these two domains are seen to intersect with the participation of remote Aboriginal peoples in the bush foods industry in a research context, the focus of research activities has been on improving economic returns for this group. That is to say, the focus of research has been how various factors, including some consideration of socio-cultural factors, have impacted upon the manner in which remote Aboriginal peoples participate in the bush foods industry from the perspective of what this means to economic returns to this group. This research focus has been driven by the notion that 'improved' participation in the industry will lead to greater economic returns for the participant. To this extent, the

research agenda has been driven by a very narrow notion of what constitutes benefit for remotely-located Aboriginal participants in the industry. For the most part, there is very little in the literature which focuses specifically on the *nature* of participation of remote Aboriginal peoples in the bush foods industry. That is to say, there is little that can be found that focuses on what remote Aboriginal peoples themselves think about the industry, or their participation within it. There is no focus on exploring why Aboriginal peoples participate in the manner that they currently do, or how this impacts upon their lives.

Furthermore, the limited available literature suggests that 'participation' itself has been promulgated from within economic development paradigms that valorise 'improvement' through 'one-size-fits-all' development models that are ethnocentric and that do not consider the importance of local knowledge, culture and context in the strategies they employ to effect the kind of improvement with which they are preoccupied. Unlike the sustainable livelihood approach, existing development paradigms do not necessarily value all the strategies and alternative approaches that people bring to bear to sustain themselves in their life-worlds. Nor do such paradigms recognize the (sometimes unseen) assets which economically disadvantaged groups might draw upon in these endeavours.

One further possibility exists however, in relation to considerations of 'failure.' Is it possible that the well-meaning development interventions and understandings of the manner in which these could and 'should' be undertaken have 'failed' in part because they are premised upon understandings of the world that are not shared by those involved in the processes associated with such interventions? Where one's perceptions of the world and the language and symbolism used to navigate within it are not shared between those attempting to communicate, as in the case of the proponents of intervention and its recipients, issues will arise that may not even be recognized as issues (Basso, 1996). If not recognized, it follows that they cannot be dealt with, and nor can they be resolved in mutually acceptable ways. Rather, it is possible that we may be left with a kind of 'cognitive apartheid' (Cobern, 1996) created through discontiguous views of

the prevailing social situations that exist in remote Australia. Could 'failure' itself be merely a perception that the 'other' has perhaps failed in some way?

Where such 'failure', is thus identified, is it the view from the 'top of the hill' that is to say, the dominant cultural (and powerful) perspective that prevails? Interventions aimed at development and improvement often start with an idea or goal that is derived from an assumed or singular understanding of the current state and also of the desired state that can be achieved as a result of the development. Research and fact-finding are undertaken and actions are determined and put into place which aims to achieve the goal identified at the outset of the project. However, such assumptions about what constitutes 'development' and how to achieve it are often derived from within the categories and constraints implicit within one particular worldview (Guilfoyle et al., 2008; Sutton, 2009), and most often, the culturally dominant worldview at that, which, it follows, will see anything else as 'failure.'

A logical conclusion to draw from the perception that something or someone has failed, is that there should be some consideration of doing things differently, in order to create outcomes which are successful, that is to say, outcomes that stand as an alternative to failure. For some, new kinds of development models hold promise in this regard. However, this in itself raises further questions:

- 'Is using a new kind of development model enough? Do these alternative models encapsulate differing worldviews, where economic activity might not be valorised?

- Is there something else that might be missing from such models?'

What is especially pertinent to this study, is that differences in worldview and the impact that this may be having on notions of 'success' and 'failure' insofar as 'development' and its subsequent interventions is concerned is not evident in the literature. Questions to be asked here include:

- ‘How might differing worldviews affect the manner in which such interventions come to be implemented and received?

- ‘If there is a perception of failure, what impacts does this have upon the manner in which people with differing worldviews might interact for considerations of interventions promulgated through policy and aimed at mitigating disadvantage?’

In the context of the thesis as an exploratory study, this ‘gap’ in the literature presents a number of challenges that can be captured using the following refined research questions, upon which the thesis will focus:

1. Who is defining what is currently occurring in remote Australia in the context of Aboriginal participation in the bush foods industry? Are differing worldviews impacting upon the picture that has developed in relation to this participation, especially with regard to notions of ‘success’ and ‘failure’?

2. To what extent has participation been explored from the perspective of Aboriginal peoples themselves? Do those Aboriginal peoples participating in the industry view their current participation to be ideal?

3. Do current models of participation in the bush foods industry fit the aspirations of remote Aboriginal peoples in relation to bush foods? Are there factors that sit outside existing development paradigms which need to be considered?

4. How might exploring these questions impact upon further research with remote Aboriginal peoples with regard to bush foods, and perhaps have implications for ‘development’ considerations more generally?

There is no doubt that these questions are complex. Exploring and answering such questions will entail adopting a number of research techniques within a flexible research design. Proceeding in this exploratory manner will enable the further consideration of emergent findings and specific themes readily, as they emerge. Further literature review may be required as the thesis progresses. Such

an approach will be critical if the study is to realize its ambitions in relation to understanding the questions raised above.

Chapter Three considers how the research might be undertaken, taking particular account of the exploratory nature of the study and incorporating the necessary elements of flexibility that will facilitate such exploration.

Chapter Three:
Research Design, Methodology and Methods

3.1 Introduction

In this chapter the ontological and theoretical rationale underpinning the study are established, and the research design, methodology and methods is described. Firstly, the chapter presents an overarching theoretical position which guided the research design. Following this, the chapter establishes a theoretical justification for the methodological framework within which the study is situated. Within this framework, the chapter then provides an outline of each of the elements of the study undertaken, and discusses data collection methods. This chapter also considers the physical research environment, attends to ethical matters and discusses the limitations of the study.

3.2 Research Design

As concluded from the literature reviewed, the study is likely to be best undertaken from an exploratory position. The literature indicates research that has occurred in the bush foods industry has focused primarily on product improvement and more fully understanding the properties of bush foods as products. The literature also suggests that where these product improvement processes intersect with remote Aboriginal peoples' participation in the bush foods industry, there has been a focus on increasing participation of this group in the industry. There is little in the literature related to remote Aboriginal peoples' participation in the bush foods industry from the perspective of this group themselves.

Exploratory research lends itself to working in the natural setting in which the questions were raised, i.e. the idea of understanding the 'two-world' paradigm referred to in the thesis introduction, and which lies at the heart of the research itself. Understanding the nature of how remote Aboriginal peoples engage with

bush foods, and the manner in which these are understood and used by remote Aboriginal peoples themselves is a fundamental part of what the research seeks to uncover. Most especially, the question of who defines what is currently occurring in remote Australia in the context of Aboriginal participation in the industry, and whose worldviews are being considered in defining 'success' and 'failure' of this group is most critical.

Unpacking this understanding of bush foods was a critical consideration in determining how to design the study. Further, the nature of how research has occurred with remote Aboriginal peoples and importantly, the implications for further research, were also important considerations. These combined factors led to the consideration of a flexible, qualitative design which would enable the deep exploration of the four research questions refined at the conclusion of Chapter Two:

- Who is defining what is currently occurring in remote Australia in the context of Aboriginal participation in the bush foods industry? Are differing worldviews impacting upon the picture that has developed in relation to this participation, especially with regard to notions of 'success' and 'failure'?

- To what extent has participation been explored from the perspective of Aboriginal peoples themselves? Do those Aboriginal peoples participating in the industry view their current participation to be ideal?

- Do current models of participation in the bush foods industry fit the aspirations of remote Aboriginal peoples in relation to bush foods? Are there factors that sit outside existing development paradigms which need to be considered?

- How might exploring these questions impact upon further research with remote Aboriginal peoples with regard to bush foods, and perhaps have implications for 'development' considerations more generally?

3.2.1 Social Constructionism

Qualitative research allows that reality is subjective, that it is constructed and that it is diverse (Sarantakos, 2005). From a theoretical perspective, this research is guided by the theory of social constructionism (Berger and Luckmann 1967). Social constructionism argues that the knowledge we have and the ways in which we use it arises from social interaction, and sees that there are no universal laws that sit outside human interaction in the creation of that social reality (O'Dowd, 2003). From this position, reality can be said to be experienced internally, and that it does not exist objectively. Physical objects may exist, but they do not have meaning outside the social contexts in which they are experienced (Cooper, 1998). 'Reality' is therefore subject to interpretation in order to provide meaning in the social world (Walter, 2010). From within the social constructionist position, symbolic interactionism, which emphasizes the ways in which meaning, culture and identity are created through social interaction over time, also provides a theoretical perspective on this study. From this perspective the temporal aspects of identity and culture can be considered. The ways in which culture and identity have influenced the manner in which bush foods might be regarded and used can also be considered from this angle. Importantly, the manner in which culture and identity have influenced perceptions of participation in the bush foods industry can also be explored. Understanding perceptions of 'success' and 'failure' in relation to participation in the bush foods industry is a critical plank in the study and fundamental to the broader questions of how to 'improve' the future.

The social constructionist position holds that it is the interaction between people and their relationships to the physical world through which 'realities' are derived (Gergen, 1994, 1999; Guba, 1990). Thus, human beings occupy a central position in qualitative research because it is they who construct systems of meaning through which reality is created (Sarantakos, 2005). It is these 'systems of meaning' that this research is seeking to understand and which therefore establishes the appropriate criteria to undertake a qualitative study. It is also important to note that from this theoretical perspective, there is an acknowledgement that being sentient does not separate us from the world in

which we live and thus it follows that the researcher accepts that all 'facts' are contextual – they cannot be meaningfully separated from that context without being distorted.

The thesis introduction highlighted the communication difficulties experienced by the parties interacting at the meeting described at the beginning of that chapter. Taking a social constructionist position that there are 'no universal laws' that sit outside human knowledge will enable the consideration of (perhaps) differing worldviews about bush foods. Participation, success, failure and the future might be considered from *within* another's worldview.

A further influencing factor on the design of this study was the inter-cultural nature of the research context, i.e. the need to work with both remote Aboriginal women operating within a very different cultural paradigm to that of the researcher, set alongside the need to work with other, Western actors engaged in the bush foods industry. There were also the practical challenges to consider, such as that of traversing distance and geography and the cost factors associated with managing these, and language differences.

3.2.2 Participatory Research

A further important consideration in deciding how to design the study was the understanding that research about Indigenous peoples is inextricably linked to the imperialism and colonialism of the researcher's own non-Aboriginal heritage (L. Smith, 1999). Smith asserts that research is still a site of struggle for Indigenous peoples who are subject to the objectified peering of Western researchers through the lens of Western culture, while Indigenous peoples are simultaneously seeking to define themselves and re-establish their indigeneity (L. Smith, 1999). Such research inevitably brings with it particular cultural orientations and values and sometimes different understandings of concepts, e.g. time and space, and theories of knowledge. It also brings its own specialized language and power structures (Smith, 1999; Rigney, 1999). The anthropological literature reviewed in the previous chapter also highlighted the ways in which remote Aboriginal people

continue to be defined by colonial and post-colonial impositions of 'otherness.' The 'development' paradigm as reviewed in the literature and that has been imposed upon remote Aboriginal peoples can perhaps be seen as another expression of this imperialism. The manner in which such development paradigms have failed to consider local context, culture and knowledge creates a particular mindfulness in designing a study to further explore aspects of such development. Mitigating the impositions of colonizing methodologies to ensure that the voices of the researched are heard (L. Smith, 1999) was an important design consideration in this study. Undertaking the research from a participatory position was thus important and these considerations are now examined.

From a human and cultural geographical perspective, participatory research approaches aim to be sensitive to context and cultural differences to ensure that voices of the 'researched' are heard (Fuller & Mellor 2008; Herlihy and Knapp; 2003; Kindon, 1998). Participatory research is seen to be particularly useful in studies where place-based connections to one's environment and accounts of space and time are of central interest (Pain, 2004). For some researchers, cultural identity bound in place is a common concern. Participatory approaches that are context-specific and that can generate a rich and thick picture from the perspective of various actors to address the research questions posed are seen as helpful (A. McIntyre, 2003). In relation to this study, such place-based and context-specific understandings were necessary, especially with those remote Aboriginal residents whose connections to Country were of paramount importance to them. Understanding differences in worldview and how this reflected participation in harvesting (for the harvesters) and trade (for harvesters and other Western actors in the study) was an important consideration in the study. Operating in a participatory way enables the researcher to immerse themselves in the specifics of the data to discover themes, uncover patterns and then examine interrelationships across the breadth of the data (Johnson and Christensen, 2004).

Participatory approaches can also maximize the advantages of existing research relationships, and in the case of this study, with remote Aboriginal women with whom there were long-established trust relationships. This was important, because as Smith (1999) says, there are many levels of entry to an Aboriginal community, and these are dependent on factors such as how you approach the community, how you are introduced and by whom and importantly, how you are accepted into the community. With those remote Aboriginal women with whom the researcher was already working, these parameters had already been established, and in terms of the very practical considerations of time and cost, would also negate the need to 'start from the beginning' in establishing trust, entrée and reciprocity. This approach would also promote mindfulness of how the processes of the research were conducted including the sampling techniques applied, and the manner in which emergent data were analysed. These considerations are further discussed in the following section of this chapter.

3.3 Research Methodology

In consideration of the factors related to research design discussed above, a variety of research methods have been considered to best focus data collection and analysis, in order to remain consistent with the principles of social constructionism that underpin the study. This has resulted in a distinct and customized approach to data collection and analysis. A customized approach in social research enables the researcher to draw upon principles from a variety of research designs and methods and is legitimate and valid in exploratory studies (Crotty, 1998), providing the basis for a more fully informed process through which rich data might emerge. Within the social constructionist paradigm, this study draws upon elements of both grounded theory (Glaser and Strauss, 1967; Strauss and Corbin, 1990; Charmaz, 2006) and case-study research.

3.3.1 Grounded Theory

Grounded theory (GT) methods emerged from the work of Barney Glaser and Anselm Strauss in the 1960s, from their work in hospitals with the dying (see Glaser and Strauss, 1965; 1968; Strauss and Glaser, 1970). The key aspect of grounded theory (GT) that differentiates the approach from other methodologies

is the generation of theory from data, rather than verification of a theory from data (Glaser and Strauss, 1967; Charmaz, 2006; Strauss and Corbin, 1990. 1994). As Glaser and Strauss conducted their analysis, they developed methodological strategies that were systematic and that could be replicated by social scientists seeking to study other topics. These included: Theoretical sampling, constant comparative analysis of data, memo writing and simultaneous data collection and analysis (Glaser and Strauss, 1967). Theoretical sampling is used to explain the categories decided upon within the study. Constant comparative analysis represents a layered approach to analysis, whereby data are compared with other data, or to categories. Categories may be compared with other categories and to generated concepts. The inductive process moves toward the generation of ever more abstract concepts as theory is generated (Charmaz, 2006).

The Discovery of Grounded Theory (Glaser and Strauss, 1967) is considered the seminal work on the approach. Although Glaser and Strauss developed divergent viewpoints in relation to data coding in later works (Charmaz, 2006), their 1967 book provides a compelling argument for the legitimacy of qualitative research as a '…credible methodological approach in its own right, rather than simply a precursor to developing some further form of quantitative instrument' (Charmaz, 2006, p. 6). In particular, Glaser and Strauss challenged some fundamental research 'truths' that had underpinned sociological research to that point:

- Beliefs that qualitative methods were impressionistic and unsystematic
- Separation of data collection and analysis phases of research was essential
- Qualitative research was at best, a mere precursor to more 'rigorous' quantitative methods
- The division between theory and research is arbitrary
- The presupposition that qualitative research could not generate theory

(Charmaz, 2006 p. 6)

Several adaptations of GT have emerged from Glaser and Strauss's early work (Morse, 2009). Essentially, these follow either a 'Glaserian' approach to GT that has a strong emphasis upon positivism and empiricism where categories are seen

to arise from the data and are thus 'discovered' (Charmaz, 2006); or a 'Straussian' approach that emphasizes verification of pre-conceived categories (Morse, 2009). For some GT proponents (including Glaser, 1992), there is contention that Straussian (and later Strauss and Corbin, 1990) approaches to GT 'force' data and analysis into preconceived categories which seem to contradict the fundamental premise of GT, that is, that theory is generated from data.

Further developments of the 'Glaserian' tradition have seen (among others) the emergence of Constructivist Grounded Theory (Charmaz, 2006). Under this schema, CGT assumes that neither data nor theories are 'discovered' but are constructed from within the lifeworlds of human beings (Charmaz, 2006). Further, Charmaz (2006) asserts that theoretical renderings that arise from CGT studies are an interpretive portrayal' of the social situation being studied, rather than an 'exact' picture of it (p. 10). Given the constructionist stance taken in relation to the design of this study, CGT represents the best 'fit' as a methodological and analytical approach. While Charmaz visually represents the CGT process she uses (Figure 3), she is careful to point out that she advocates for flexibility and 'guiding principles' rather than rigid adherence to prescriptive GT processes and procedures (Charmaz, 2006).

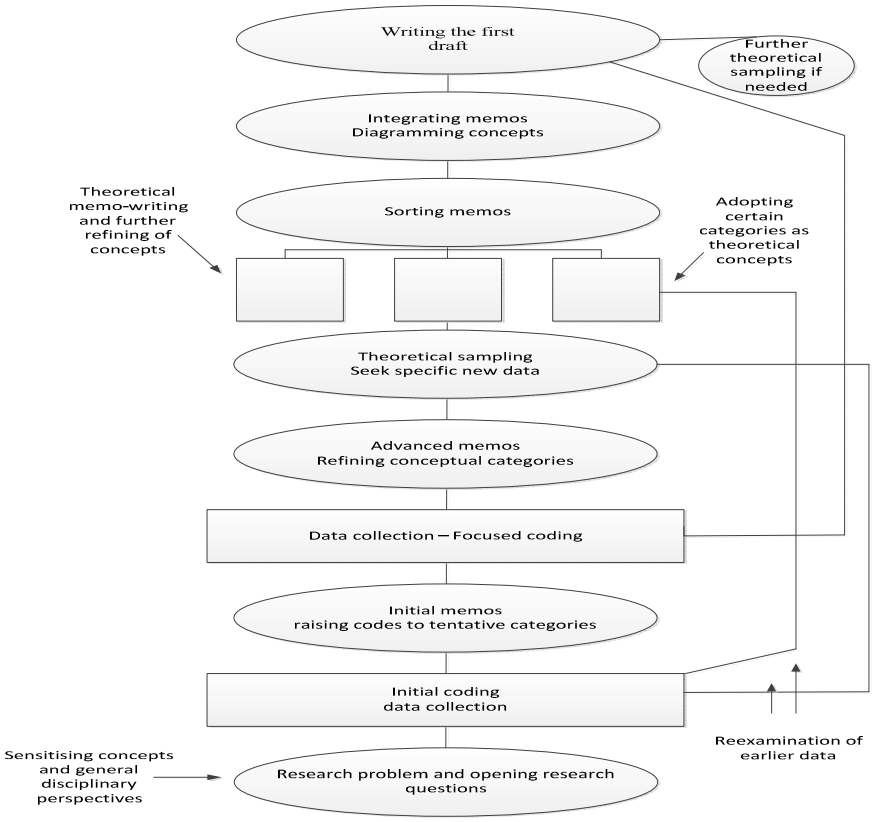

Figure 3: The Grounded Theory Process. Source: Charmaz, 2006 p. 11

3.3.2 Case-Studies

A case study approach was used as the 'scaffolding' to conduct the research undertaken in this study. Primarily, the research used three case-studies to collect data, through which emergent results and themes could be further explored and interpreted. The case study approach to social inquiry has arisen out of a desire by researchers to comprehend social situations and phenomena with regard to both their complexity and their natural contexts (Hird, 2003). A 'case' may involve the study of one individual or many and involve singular or multiple events (Hird, 2003; Yin, 2003). Case studies in and of themselves are not a method of data collection, but rather represent a research model where data may be collected and analysed through a variety of methods and within different contexts (Bromley, 1986). This level of flexibility fits well with both the constructionist position that has guided the research design, and has facilitated quite naturally, the process of

unfolding exploration that has occurred as the research has progressed. Taking a case-study approach has also assisted in using CGT to analyse the data generated.

A case study may be intrinsic, i.e. conducted for its own sake; or instrumental, i.e. used to provide input in examining a broader social issue (or to construct and refine a theory, as in this study. In the latter, there is an expectation that the results will have a wider application than the case study itself, whereas in instances of the former, the intent is to examine the specifics of that particular case for a particular purpose (Sarantakos, 2005). In applying this process to this research, each case study may be considered discrete in and of itself. However, each case study is also linked to the next by virtue of the deeper exploration that has progressively occurred. From a CGT perspective, this has enabled a rich and deep engagement with the data generated and assisted in formulating and categorizing various themes as they have emerged.

Ideally, case study research should meet most or all of the following criteria: that it is conducted in natural settings; is suitable for pursuing depth analysis; perceives respondents as experts, not as sources of data; employs many and diverse methods; and may use several sources of information (Sarantakos, 2005 p. 212). Of these it is the third point - that respondents are regarded as experts rather than sources of data - which most accurately reflects the principles of the participatory nature of this study.

Some aspects of the research evolved out of emergent findings as the research progressed. For example, an initial analysis of the generic wild harvest bush tomato value chain (undertaken in Case Study 1) produced findings that questioned what constituted 'value' from the different worldview perspectives encountered in that chain. In order to understand these different perspectives on value, a much deeper unpacking was required than could be achieved using value chain analysis techniques alone. In this instance, a series of follow-up, semi-structured and unstructured interviews (undertaken in Case Study 2) was subsequently conducted with a broader sample of the particular sub-set within the

chain (i.e. Aboriginal harvesters) whose understanding and expressions of value in relation to bush foods was not adequately captured within the initial chain analysis. This work resulted in the development of the LARC Value Framework.

Given the exploratory nature of the study, and the emergent nature of findings, adopting a case study approach seemed both appropriate and indeed, necessary. The case studies undertaken have enabled the emergent findings to be incorporated into further data generation, which in turn have contributed to the generation of new concepts to inform the construction of new theory, and to further illuminate existing theoretical frameworks and models. An overview of each case-study is presented in the following sections. A brief introduction to data collection methods is provided in each overview. However, it should be noted that data collection methods are specifically dealt with in the chapters where each case-study is presented. Figure 4 renders a visual representation of how the study was conducted.

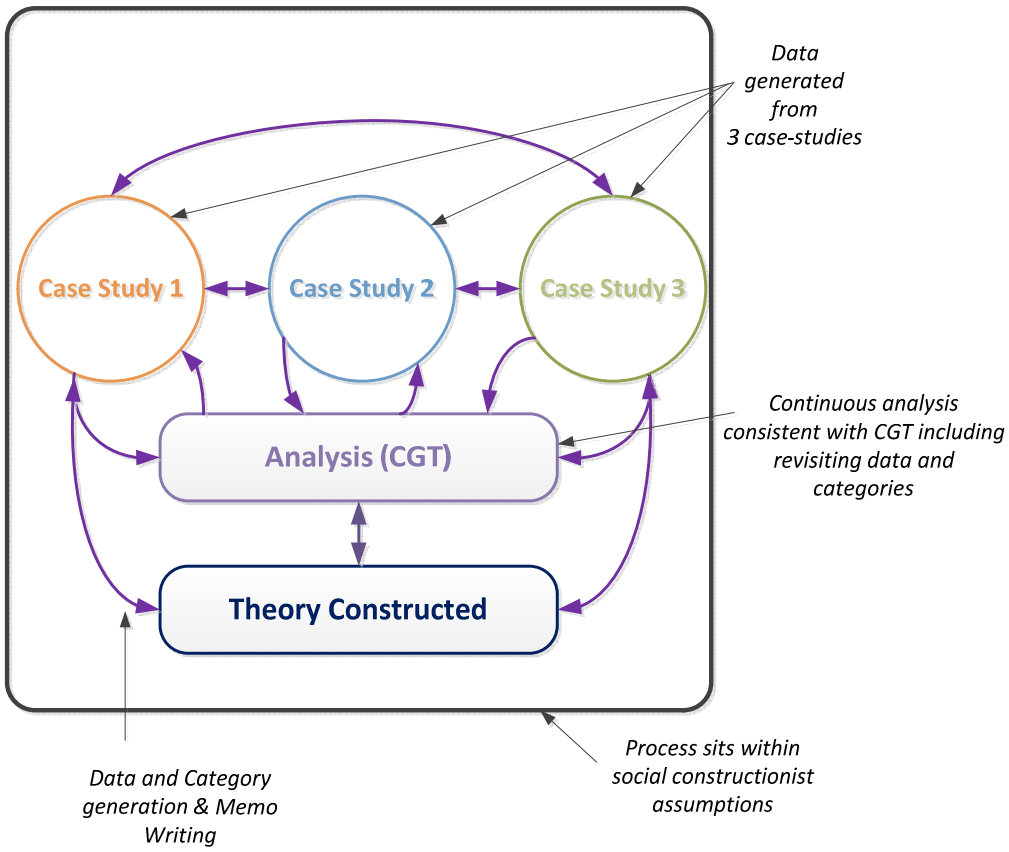

Figure 4: Visual Representation of Data Gathering and Analysis Process

3.3.2.1 Case Study One – Business Exchanges in the Australian Desert: It's About More Than the Money

The starting point for the research produced in this thesis was to analyse the generic wild harvest bush tomato and wattle seed value chain in operation in Central Australia, using the Netchain Analysis (NCA) Framework (Lazzarini et al., 2001). The purpose of this work to was to determine where in the generic wild harvest value chain Aboriginal people were operating as bush foods industry participants and how this was occurring. This work also aimed at identifying where value and its form and nature were arising in the chain. Undertaking NCA of the generic bush foods value chain involved the collection of both primary and secondary data associated with the analysis of the chain. Primary data were obtained through direct observation of activities within the chain including harvesting, cleaning, drying and weighing of fruit; observations of transactions and price discussions; examination of physical infrastructure e.g. fruit drying racks and other objects used to harvest, package, store and transport fruit and seeds; and informal interviews. Secondary data sources included articles, reports, working papers and presentations produced in the conduct of Desert Knowledge CRC research related to the harvest and trade of bush tomatoes and wattle seed in central Australia. Case Study One is presented in Chapter Four.

3.3.2.2 Case Study Two – The LARC Value Framework: A Deeper Exploration of 'Value'

The second case study undertaken as part of this research arose out of the findings of Case Study One. It became apparent in completing Case Study One that the participation of remote Aboriginal peoples in the bush foods industry was more complex than could be understood through examining the value chain using conventional chain analysis methods. The purpose of Case Study Two was to examine questions related to 'value' and 'value creation' that emerged from Case Study One, from the perspective of Aboriginal bush foods industry participants. These questions required further exploration in order to more fully understand the nature of the value derived by remote Aboriginal peoples in their interactions with bush foods. Case Study Two also examined where participation in the bush foods industry sat in relation to other aspects of peoples' lives. The research involved working with Aboriginal peoples in the East and West Kimberley

regions of Western Australia; the central desert and Barkly Tableland in the Northern Territory and the Flinders and Far North region of South Australia. These locations were specifically chosen to increase the probability of obtaining a broad cross-section of views from Aboriginal peoples belonging to different Language Groups. Case Study Two employed in-depth semi-structured and unstructured interviews to record the views of participants. Demographically, the interviewees comprised 35 females and five males, ranging in age from 18 to 84 years. There was a predominance of females in the sample because in the context of bush food, harvesting is undertaken primarily by women, and they were therefore most likely to have well--developed views about the topic questions. From a cultural perspective, women were also more accessible to a female researcher. Within each broader location, a snowball sampling technique was used, where initial contacts referred to others who might be willing to be interviewed. The majority of interviews were conducted face-to-face, with a small number conducted via telephone. In each of the telephone interviews, a prior research relationship existed with the interviewees. Case Study Two is documented in Chapters Five and Six.

3.3.2.3 Case Study Three – Participatory Action Research: Can we PAR-take differently in Research with Remote Aboriginal Peoples for Bush Foods Industry *Development?*

Following the two case studies described above, it became apparent to the researcher that her own critical reflections on her research practice formed an important, constructed perspective on the research itself. This perspective led to the formation of a position regarding how further research in the bush foods industry might be conducted and why. Case Study Three is presented in two parts in Chapters Seven and Eight. This case study provides both the rationale for using a specific research approach (Participatory Action Research - hereafter PAR) for ongoing research with remote Aboriginal Peoples (especially in relation to ongoing research in the bush foods industry) and documents the critical reflection of the researcher on her own research practice from a PAR perspective. Case Study Three firstly examines a research activity in which the researcher had previously participated, in light of changed thinking brought about by a

worldview enhanced by findings in Case-studies One and Two. The final case-study then explores the literature associated with PAR to ground and critique it as a 'two-world' research approach and its effectiveness in an inter-cultural research context. This case study highlights in a very pragmatic way the value of PAR as an approach to uncovering complexity that may not be immediately apparent from within a singular worldview.

3.4 Sampling

The research documented in this thesis deals with a specific and defined group of actors, i.e. primarily remote Aboriginal peoples. In particular, the study focuses on those remote Aboriginal peoples (especially women) who engage in harvesting bush foods, in some cases as participants in the bush foods industry, in some cases for non-commercial use, and in some cases for both purposes. Therefore, the study is limited to those engaged across each of the domains outlined above, suggesting that the most useful sample could be achieved through non-probability-based purposive sampling. In this sampling technique, key informants are approached by the researcher on the basis of their relevance to the study (Sarantakos, 2005). For example, in undertaking in-depth interviews, the researcher was often directed to speak to particular people in the remote Aboriginal communities and homelands in which these interviews were conducted. This occurred because these individuals were deemed to be specialist knowledge holders within those communities who could speak with cultural authority about bush foods in the context of Aboriginal Traditional Knowledge (TK). As a deeper understanding of this TK in relation to bush foods was a critical part of the study, this was an important and appropriate means for gaining access to these knowledge holders. Throughout the study, there was also an element of snowball sampling (Vogt, 1999) where participants identified further potential participants, again, particularly in relation to key Aboriginal informants.

3.5 Research Environment – Remote Australia

The research in this thesis was undertaken in several parts of remote Australia, in the Northern Territory, Western Australia and South Australia (see Figure 1). Physically, much of inland Australia is desert, or semi-arid, characterised by extreme climate ranges including very hot summers where daytime temperatures frequently exceed 40 degrees Celsius and winter night temperatures can plummet to below freezing (Latz, 1995). Resources including food and water may be scarce, patchy and variable (Stafford-Smith, 2008). Unlike in many arid places in the world, many portions of Australia's deserts do support considerable vegetation (Latz, 1995) both permanent and seasonal (Moore, 2005) some of which becomes quite spectacular, prolific and diverse after heavy rain (Clarke, 2003). There are permanent and semi-permanent water-holes in some parts, which provide reliable water sources in all but the most prolonged dry times (Latz, 1995). There is also a vast underground water store that may be accessed via wells or bores and which in some locations presents as natural springs. Water from this source is variably potable. The city of Alice Springs, for example receives most of its water from this source, and underground water is used extensively by the sheep and cattle industries across much of Australia. Inland Australia is therefore not a vast empty space of sand dunes and little else, but comprises a rich diversity of multiple land systems, including spinifex hills, grassy foothills, riverine woodlands, mulga woodlands, dunes, sand plains, chenopod shrublands and gibber plains (Clarke, 2003; Latz, 1995; Moore, 2005).

Stafford-Smith (2008 p. 3) has identified characteristics of the desert and remote areas such as sparse populations; distance from markets and decision-making; perceived unpredictability in markets, labour and policy (social variability); scarce and patchy resources; climate variability; cultural differences; and reliance on local knowledge, that by themselves are not unique, but systemically combine to produce conditions that create a unique environment in remote areas. In the context of the research undertaken in this study, the factors that Stafford-Smith has identified impact upon the remote environment in which commercial and non-commercial harvesting from the wild occurs. For example, climate

variability can produce both highly abundant seasons when there is high rainfall and lean seasons when there is minimal rainfall. Rainfall in much of remote Australia is highly variable and unpredictable, especially in the shorter term i.e. from season to season. This unpredictability impacts on the reliability of supply from the wild and thus has market implications, particularly in the context of further development of the bush foods industry in remote Australia. From a market perspective, wild supply with its heavy reliance on optimal seasonal conditions thus presents an investment risk.

3.5.1 Research Sites

Research sites in the Northern Territory included the townships of Alice Springs and Tennant Creek, and more remote Aboriginal settlements including Ampilatwatja, Canteen Creek, Rainbow Valley and Warrumungu Homelands (see Figure 6). Research was also conducted in the East and West Kimberley region of Western Australia. These areas experience predominantly two seasons: 'wet' (November-March) and 'dry' (April-October). During the dry season, the physical characteristics are very similar to the more arid regions, particularly in those areas that characterize the boundaries between arid and tropical regions. Research sites included the towns of Broome and Kununurra and communities along the Gibb River Road (Figure 7) In South Australia, research was conducted in the semi-arid far north and western regions of South Australia, including Ceduna and Port Augusta (Figure 8). Each of these geographical areas is classified as 'very remote' using the Australian Standard Geographical Classification of Remoteness Areas (ASGC-RA) (ABS, 2006b).

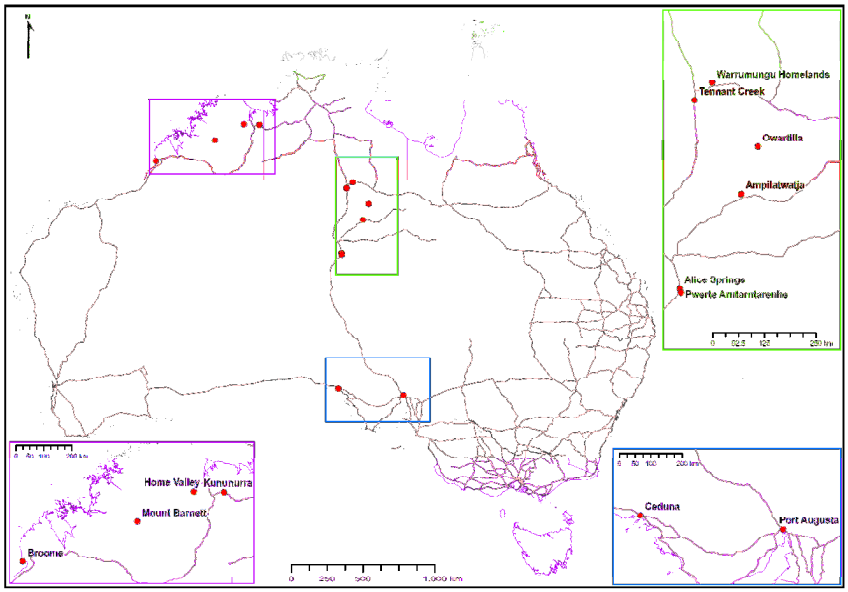

Figure 5: Map of Australia showing NT, WA and SA Research Sites.

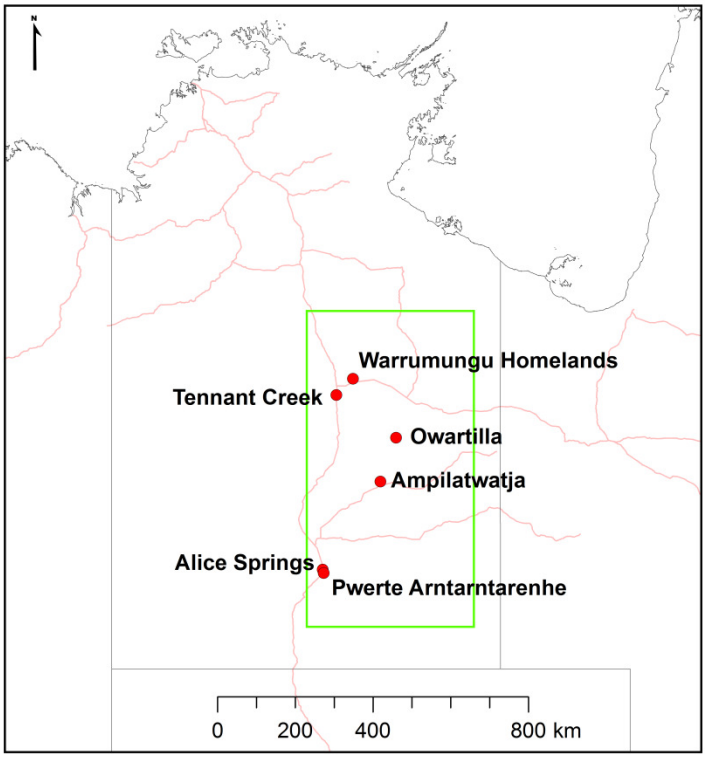

Figure 6: Map of Northern Territory Showing Research Sites

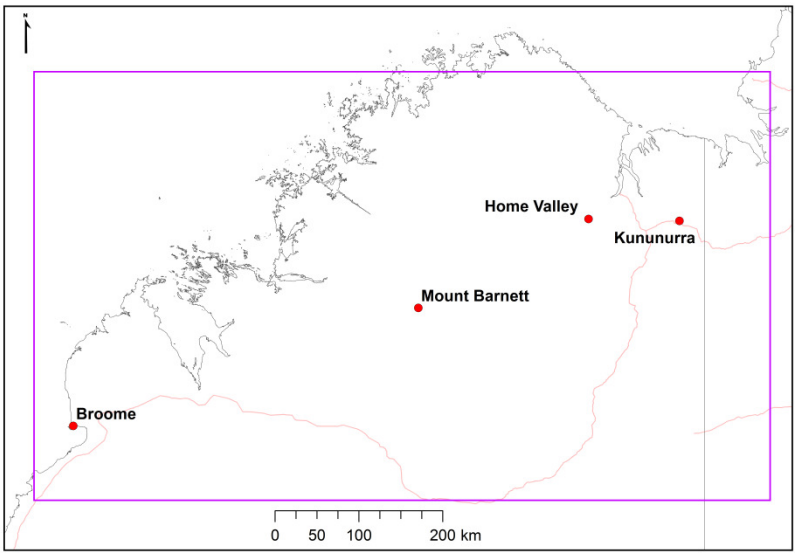

Figure 7: Map of Kimberley Region, Western Australia Showing Research Sites

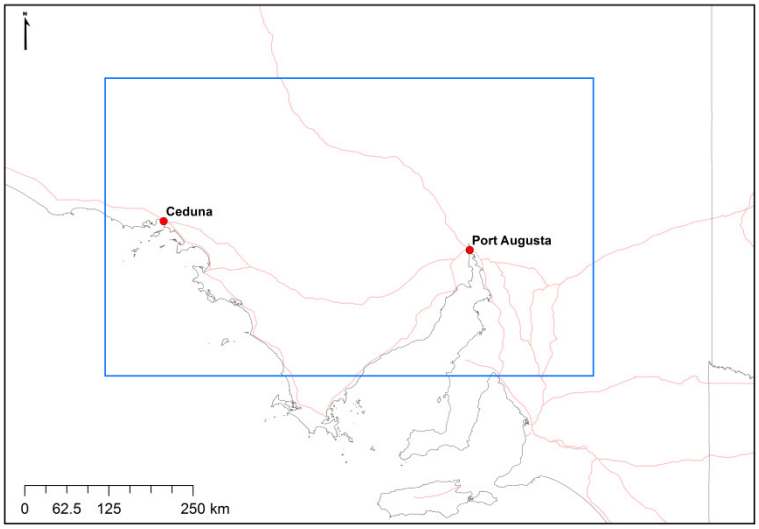

Figure 8: Map of South Australia, Showing Research Sites

3.6 Research Methods

3.6.1 Participant Observation

Participant observation (PO) is a research method structured to provide opportunities for gaining intimate familiarity with groups of individuals, e.g. a sub-cultural group, workforce group or a particular community. Essentially, PO involves observing a social situation while simultaneously participating in it. Such observations may be either overt or covert (Thompson and Brewer, 2003, p. 222). PO usually involves the researcher assuming a role that may be completely new in the context of the social situation under observation. In some cases, the

researcher already has a role that is known and familiar (Thompson and Brewer, 2003). A key characteristic of PO is that it enables the researcher to observe communication and interaction between participants in the social situation in a natural and unstructured manner (Sarantakos, 2005, p. 231). It is a widely used methodology across many disciplines, but is often a method of choice in cultural anthropology and geography. Classic works include Evans-Pritchard, (1940); Malinowski (1929) and Mead (1928) for example. Participant Observation enables the researcher to develop an intensive involvement with people in their cultural environment, usually over an extended period of time.

The production of this thesis has in part drawn on activities undertaken during leadership of the Desert Knowledge CRC 'Bush Products from Desert Australia' (hereafter BPDA) Research Project between 2007 and 2009, where opportunities arose for extended involvement with various groups and individuals engaged in bush food harvesting. These activities provided opportunities to closely engage with women in remote Australia who harvest bush food for personal and commercial reasons, and to be present during harvesting and hunting activities. Additionally, the researcher has an ongoing engagement with a group of Aboriginal women in the Barkly region of the NT. This research engagement has enabled her to directly participate in and thus observe harvesting activities, participate in collective discussions, conduct informal interviews and compile field notes about how and why harvesting is undertaken. All of these activities have been undertaken in the cultural environment in which they have occurred. Together with field notes, photographs and video footage were also produced and subsequently reviewed.

As a participant observer, the observations made in the conduct of this research were overt. In all cases participants were clear that the researcher was there primarily for research purposes, and that one of the purposes for her participation in these bush food trips and other activities was to produce a doctoral thesis.

3.6.2 In-Depth Semi-Structured Interviews

Semi-structured interviews involve the researcher usually determining in advance the broad topic and themes about which he or she is seeking information (Lindlof and Taylor, 2002). Structured interviews on the other hand comprise a formalized and specific set of questions. Semi-structured interviews allow that additional questions based on the discussions that occur between the researcher and the research participant may be asked. Interview questions thus tend to be open-ended rather than closed (Leonard, 2003). In the context of the exploratory nature of research conducted in this study, semi-structured interviewing was a most suitable research method, in that it enabled participants to highlight what was important to them about the topic, and in some cases, to provide additional, rich information. For example, in interviews conducted in Case Study Two, the data were more richly informed by the stories and anecdotes that some participants related, which would have been precluded had a rigidly structured interview schedule been used. From the theoretical perspective of social constructionism underpinning this study, understanding the particular meanings that people assigned to bush foods i.e. as either or both cash commodities and cultural icons was critically important, and this understanding was enhanced by the additional information provided in semi-structured interviews.

3.6.3 Unstructured Interviews

Like semi-structured interviews, unstructured interviews have no predetermined set of questions. Additionally, they do not have any broad themes or answer categories (Minichiello et al., 1990). From this position, the interviewer assumes a 'no prior knowledge' perspective of the discussion topic. The conversational style of unstructured interviews can also allow the interviewee to determine the course of the discussion (Leonard, 2003). Patton (1990) sees unstructured interviews as a natural extension to participant observation, in that as the researcher observes activities and interacts with research participants in the natural setting, questions will become apparent. This style of interviewing is particularly useful in situations where ethnicity and cultural difference may preclude specific questions from being asked, or where such direct questioning may be seen as an invasion of space (Minichiello, 1990). As Fuller & Mellor

(2008); Herlihy and Knapp (2003) and Kindon, (1998) have all argued, context sensitive approaches are especially useful in inter-cultural research where different worldview perspectives are being sought in the research. In this study, unstructured interviews in the form of conversations with harvesters during bush harvesting trips were especially useful in this regard. For this setting, where conversations were taking place at the same time as activities were occurring, questions asked and explanations given were specifically contextualized in space and time in the harvesters' own environment.

3.7 Ethics

Informed consent was obtained from participants for all research activities. This extended to the taking and use of photographs, the use of printed materials and for appearances in videos produced during the course of the research. Research was also conducted within the parameters of the Desert Knowledge CRC research protocols (Desert Knowledge CRC, 2006). The Value Chain Analysis reported in Chapter Four was subject to the DKCRC research protocols (2006); work reported in Chapters Five and Six was approved by the University of Queensland HREC[3].The project described in Chapter Seven was approved under DKCRC research protocols and subject to additional ethics approval by the Central Australian Human Research Ethics Committee (CAHREC).

3.8 Limitations of the Study

One important consideration in the theoretical positioning of this study within social constructionism using CGT is the recognition that any account of the original study cannot and will not approach the true richness of the study itself. From a social constructionist perspective, recognising that any reconstruction will always occur from the perspective associated with the worldview of the constructor, as Guba and Lincoln (1994) point out, is an important ontological position that is assumed and accepted. Interpretation of data will thus be

[3] The thesis was originally begun within the University of Queensland and the researcher subsequently transferred to the University of South Australia due to disability issues.

subjective, and recognized as such, in that each participant and the researcher will interpret events according to the worldview within which they exist. The written account will also be open to comment and criticism which may suggest, e.g., that it could or should have been done within a different timeframe, or done better, or that some other approach would have been more effective (Checkland, 1985). However, from a social constructionist position, such questions related to validity are also taken to be constructed from the worldview within which the questioner is situated, and can also be attributed to the research paradigm from which the questioner would approach the research questions.

3.9 Chapter Summary and Conclusions

This chapter has provided the rationale and justification for the manner in which the research has been designed and undertaken. In consideration of the structure and nature of the research questions, the researcher determined that situating the research within the parameters of social constructionism would provide the most useful position from within which to consider such questions. The research sits most easily within CGT analytical framework, as the study is exploratory, and seeks to construct meaning/s attributed to bush foods and their uses from within the worldviews of participants within the study.

Case-studies have been employed to allow each of the components that have emerged in the exploratory research to be considered in the contexts in which they have occurred, and then brought together as a coherent whole in the final theoretical position constructed. The use of case-studies has also enabled a variety of data collection methods to be used to best effect.

Ethical considerations and limitations of the study have also been outlined in this chapter. The research framework established in this chapter provides the underpinning structure for the remainder of the thesis.

Chapter Four:
Case Study One: Business Exchanges in the Australian Desert: It's About More than the Money

Chapter Note:

Some material from this chapter has been published in the Journal of Rural and Community Development (JRCD). Publication details are:

Cleary, J. (2012) Business Exchanges in the Australian Desert: It's about more than the money. *Journal of Rural and Community Development,* Vol. 7(1), pp. 1-15.

4.1 Introduction

This chapter focuses on one highly demanded desert bush food product - the bush tomato[4] - and examines the generic wild harvest supply chain associated with its journey from the central desert region in the Northern Territory, Australia, to suburban supermarket shelves, using Netchain Analysis (NCA) (Lazzarini et al., 2001). The chapter, in part, draws on and synthesizes research led by the author between 2007 and 2009, within the 'Bush Products from Desert Australia' (BPDA) Research Project undertaken by the Desert Knowledge Cooperative

[4] 'Bush tomato' is the commonly used commercial name for Solanum *centrale* in the bush foods industry. However, 'bush tomato' is also known in non-commercial contexts as 'desert raisin.' The term 'bush tomato' will be used here, as this paper deals largely with issues related to the market aspects of the fruit. A number of different Aboriginal names are also used for the fruit. In the central Australian desert region these include *akatyerr, katyerr, akatyerre, katyerre, kampurarrpa, kampurarpa* and *jungkunypa* (Ryder et. al., 2009; Alyawarr Speakers from Ampilatwatja et. al., 2009).

Research Centre (DKCRC)[5] and outlined in the previous chapter. Research included the technical requirements of understanding the way the bush tomato plant itself grows, reproduces and spreads; and its characteristics, e.g. fruit size, yield and genetic variability. The DKCRC also sought to include social and cultural considerations in its research, e.g. better understanding the relationships between harvesters and traders (*see* Alywarr Speakers from Ampilatwatja et al., (2009).

In particular, the BPDA research project aimed at better understanding value chains associated with bush products in desert Australia in order to improve participation rates of Aboriginal peoples within the industry. The Value Chain concept was considered to be a useful framework, and one with the potential to unite the different methodologies and research approaches which were needed if one was to illuminate the unique nature of the bush food industries in Australia, and the bush tomato value chain in particular. Qualitative and quantitative, empirical and ethnographic approaches were used in the research. The value chain framework was considered by the DKCRC to be able to accommodate all of these approaches meaningfully, in that they could be related to component parts of the chain and its activities in moving product from suppliers to the market. It is important to note that, whilst the DKCRC sought to include social and cultural factors in its research, these considerations were included primarily with a view to understanding how they impacted on the commercial activities undertaken within the bush tomato value chain. This is a critical point in this chapter and the next, because it formed the initial rationale for undertaking the chain analysis that is described in this chapter. The fact that these considerations apparently were not brought into the equation with a view to developing any understanding of them beyond market-related application, subsequently led to the case study presented in the next chapter.

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[5] Reports and outputs from all sub-projects associated with this research can be found at: http://www.desertknowledgecrc.com.au/research/bushproducts.html.

The chapter begins by exploring literature related to the definition of industry chains and the various tools used in their analysis. The chapter then describes the wild (or bush) harvest bush tomato value chain and the context in which the chain is situated and applies NCA to analyse the chain. Following this, findings of the analysis are discussed, with a particular focus on the effectiveness of NCA in uncovering sources of value apparent in the chain.

4.2 Industry Chains

The value chain concept was first described by Porter (1985) to describe the movement of commodities through a chain of activities from input suppliers to consumers. The value chain encompasses a chain of activities undertaken within firms, or more broadly at the industry level, with each activity in the chain adding value to a product as it moves from supplier to the market. Since Porter's early work, a large body of work related to the description and analysis of value chains has developed. The value chain literature spans at least eight different research approaches reflecting differences across disciplines (e.g. sociology, geography and economics) differences in research tradition (e.g. Anglophone versus Francophone literatures) and ontology (structuralism versus post-structuralism) (Neilson & Pritchard, 2009 p. 31). These approaches span different linear, non-linear and hybrid metaphors in their approaches to commodity analysis, reflecting the attention paid to either vertical, horizontal or both vertical and horizontal analyses of commodity flows (Neilson & Pritchard, 2009). Linear approaches include (for example) supply chain analysis and commodity systems analysis. Non-linear approaches might include commodity circuits analysis and commodity networks analysis; while hybrid approaches could include global production networks and netchain analysis. These approaches reflect the different emphases of different research traditions, disciplines and ontologies (Neilson & Pritchard, 2009, p. 33).

The primary goal of managed industry chains is to optimise performance in that industry using the combined expertise and abilities of the members of the chain

(Chaddad & Cook, 2004; Greenwood and Hinings, 1996; McBride, 1986; Porter, 1985). Synchronisation, collaboration, and information- and knowledge-sharing are critical to the performance of the chain as an entity and as a unified, compelling market force (Mentzer et al., 2001; Ross, 1998). Successful chains are usually defined through return on investment (Boehlje, 1999; Mentzer et al., 2001; O'Keefe, 1998). Maintaining competitive advantage by reducing costs, increasing profits or by creating efficiencies for the firms or industries involved within chains is thus a paramount consideration. Analysing chains with a view to examining these factors and identifying their sources of value therefore becomes a critical component of efficient chain management (Beamon, 1998 & 1999; Bryceson and Smith, 2008) and the primary focus of tools designed for that purpose. The various research approaches described above have been used to examine the effectiveness and efficiency of collaboration and inter-organisational relationships in multiple industry contexts, including the agrifood sector. These relationships between firms or agents can be described as interdependencies, i.e. the ways in which such firms or agents interact and are connected within production systems (Thompson, 1967).

4.2.1 Supply Chain Analysis

Supply chain management models are primarily concerned with the vertical, serial relationships in the supply chain. SCA focuses on understanding resource flow and resource allocation (including information) up and down these vertical relationships (Christopher, 1998). Supply chain management models tend to focus on production and operational optimization as a key source of value. Performance measures include cost-based and technical efficiency metrics, with qualitative indicators of customer satisfaction sometimes incorporated (Beamon, 1998; 1999).

Recent literature (see for example Archer et al., 2009; Higgins et al., 2007; Higgins et al., 2010; Miller et al., 2007) queries whether SCA offers an optimal method for analysing agricultural chains. One of the criticisms Archer et al., (2009) raise is the concern that agricultural chains are more akin to complex systems, comprised of a potentially large number of actors in multi-dimensional

networks, rather than a linear set of businesses that might be seen in typical manufacturing chains. There is a concern that SCA, with its traditional systems view of measurement and analysis of stocks and flows across vertical relationships, cannot consider this complexity (Higgins et al., 2010; Lazzarini et al., 2001).

SCA also poses a problem in that it does not pay particular attention to relationships between agents engaged horizontally with each other, e.g. producers engaged in the same industry. Understanding these relationships is important to understanding knowledge exchange and the uptake of new information (Stuart et al., 1998). In agriculture, for example, farmers might share knowledge with each other about new technologies in order to improve production and management regimes, or with a view to developing supply cooperatives to decrease transaction costs (D'Haese et al., 2007). Such knowledge in many cases would create greater efficiencies, thus ultimately reducing costs across the chain. However, since in this instance the source of value creation occurs horizontally and is a product of the relationships between the farmers, it would not necessarily be identified by the application of SCA.

4.2.2 Network Analysis

Network Analysis (NA) has its roots primarily in the disciplines of Sociology and Economics (Freeman, 2004; Watts, 2003). It deals with horizontal relationships in social networks (Freeman, 2004; Granovetter, 1973 & 1983; Wasserman and Faust, 1994; Wellman and Berkowitz, 1988) and the strength of the 'ties' (Granovetter, 1973; 1983) between actors in networks. NA examines how personal relationships between agents and the positioning of actors in a network influence and impact on individual or collective behaviour and performance within the network (Granovetter, 1973 & 1983; Lazzarini et al., 2001).

NA has been used as a modelling technique to explain how social relations affect the economic behaviour of agents and the institutional arrangements supporting transactions in relationships between firms or agents (see, for example

Granovetter, 1985; 2005; Nohria and Eccles, 1992). However, it does not concern itself with the vertically integrated, operational optimization of resources that is the focus of SCA. Nor is NA concerned primarily with the measurement of efficiencies.

4.2.3 Netchain Analysis

NCA attempts to integrate and interpret both supply chain and network perspectives on inter-agent collaboration, with emphasis on where the sources of value creation and coordination mechanisms occur (Lazzarini et al., 2001). NCA seeks to analyse both vertical and horizontal interdependencies simultaneously. For this reason, its proponents argue that it can be used to analyse the complexity of relationships and the simultaneous consideration of both horizontal and vertical interdependencies in industry chains and their impact on the creation of value. Figure 9 illustrates this concept of horizontal and vertical relationships in supply chains and the interactions between them.

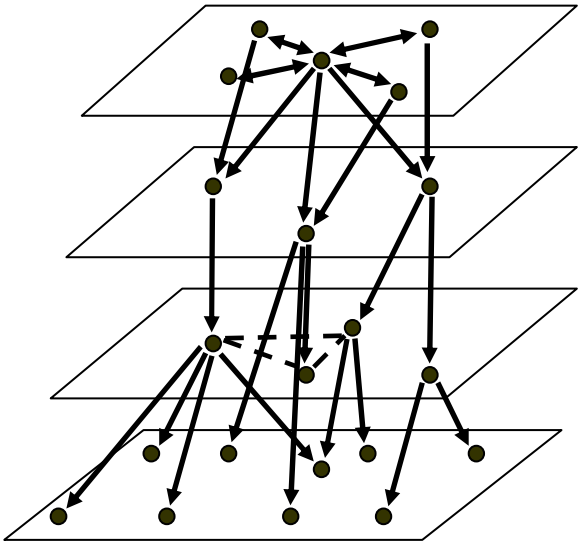

Figure 9: Generic Netchain. Source: Lazzarini et. al., (2001)

Lazzarini et al., (2001:7) argue that focusing upon coordination mechanisms and sources of value is essential to understanding complex inter-organisational relationships and their interdependencies and thus the impact of these relationships on the efficiency of the chain. Following Thompson (1967) in the NCA framework the vertical relationships of SCA are characterized by sequential

interdependencies where one actor's output is another's input (depicted in Figure 9 by a solid, single arrow). Horizontal relationships of NA are characterized primarily by either pooled interdependence (depicted in Figure 9 by a dashed line) where relationships are indirect and agents are sparsely connected to each other and where each contributes a discrete piece of work to a broader task or goal; or reciprocal interdependence (depicted in Figure 9) by a solid, doubled-headed arrow), in which case agents are mutually dependent on the actions of one another. Sources of value created in managed industry chains are derived from the variables that yield economic rents, e.g. cost reduction; rent creation or rent capture. Understanding the characteristics of the various interdependencies and then assessing them to determine where these variables lie - whether in horizontal and/or vertical relationships - is the first-stage analysis required in improving the chain so that further value may be created (Lazzarini et al., 2001:19).

The bush foods value chain under examination in the BPDA project was thought to be quite complex, and there was a level of understanding that the social and cultural factors observed to that point had some level of impact on the activities in the chain. For these reasons, NCA was considered a useful approach for identifying where existing sources of value might be uncovered in this chain.

4.3 Netchain Analysis of the Wild Harvest Bush Tomato Supply Chain in Central Australia

4.3.1 Methodology

Undertaking NCA of the generic bush foods value chain in central Australia involved the following elements: collection of primary data through participant observation of activities within the chain including the processes of harvesting, cleaning and drying and weighing of fruit; observation of transactions and price discussions; examination of physical infrastructure e.g. fruit drying racks and other objects used to harvest, package, store and transport fruit and seeds; plus informal interviews with actors within the chain, including harvesters, processors,

distributors and retailers[6]. These observations and informal interviews were undertaken on field trips and through ongoing engagement with actors in the chain over a three-year period. These field trips included one visit to Canteen Creek Community (Owartilla) (NT) in September 2007 which involved participation in harvesting, cleaning and preparing a variety of bush foods; two visits to Ampilatwatja Community in 2008 and 2009 for the purpose of discussion and examination of harvesting processes and harvesting infrastructure; one visit to Broome (WA) and surrounding homeland communities with harvesters from central Australia to participate in harvesting activities; and bringing together Aboriginal peoples engaged in the bush foods industry from The Kimberley, central Australia and South Australia in Alice Springs in 2008 for discussions and information-sharing. Interviews were also conducted with the principal of a bush food processing business, and observations made at a distribution company in Melbourne in 2011. The NCA process also involved the examination of secondary data specifically associated with this chain, including research reports and presentations (i.e. Bryceson, 2008; Cleary et al., 2008; Cleary et al. 2009; Miers, 2004; Morse, 2005; Ryder et al., 2009; Walsh and Douglas 2011).

In applying the NCA framework to the wild harvest value chain, the same process as that used by Lazzarini et al., (2001) was employed i.e. engaging in a systematic examination of the vertical and horizontal links in the chain, plus assessing the interdependencies at these points using the data gathered.

4.3.2 The Movement of the Product through the Value Chain

Figure 10 below provides a visual representation of the movement of bush tomatoes harvested from the wild in the Northern Territory. A summary of the movement of the product through each of various points in the value chain included in the NCA are summarised in the following section.

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[6] Interviews were unable to be conducted with traders, but there were rich data available from Ryder et al., (2009), where in-depth interviews were conducted with the traders.

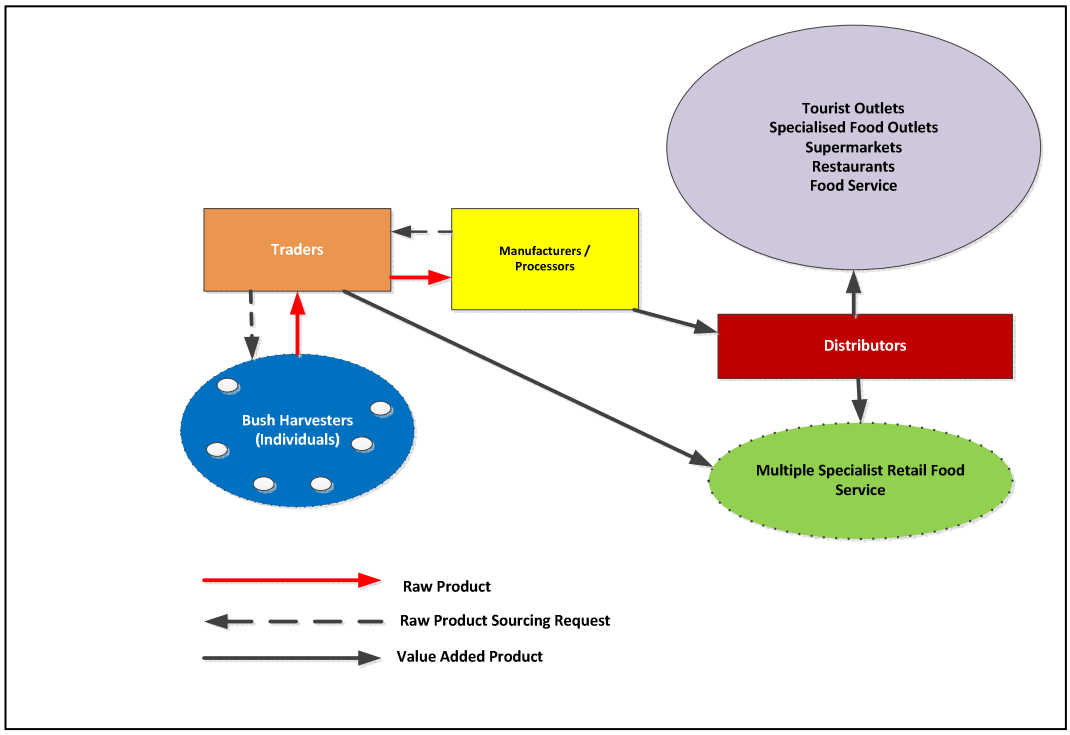

Figure 10: Movement of resources associated with bush tomatoes from Northern Territory, Australia. Source: Adapted from Bryceson (2008).

4.3.2.1 Harvesting of Raw Product

Wild or 'bush' harvesting in the Northern Territory has been undertaken by Aboriginal women for many thousands of years (Clarke, 2003; Everard et al., 2002; Latz, 1995). As well as serving the obvious purpose of gathering food, bush harvesting also functions as a social and cultural activity that is associated with caring for country and passing on knowledge to younger generations (Dobson and Walsh, 2009). Bush harvesting has also been linked by the harvesters to health and wellbeing outcomes for families (Hassall & Associates, 2007).

In addition to undertaking harvesting for the purposes outlined above, a number of bush harvesters in the Northern Territory have also been involved in commercial activities related to their harvesting of bush food during the past 30-40 years. This has occurred primarily through selling some of the fruit they harvest to three (with sometimes a fourth) 'traders' (as they are known) (Morse, 2005; Ryder et al., 2009).

For the purpose of commercial harvesting, harvesters collect fruit in bags provided by the traders. On buying trips to remote Aboriginal communities, the bags are weighed and the harvesters are paid cash individually by the traders (Ryder et al., 2009). For the most part, there appears to be little understanding by the harvesters of the commercial industry or the existence of the value chain itself, beyond their interactions with the traders (Cleary et al., 2008; Vincent, 2009).



Photograph 1: Dried Bush Tomatoes



Photograph 2: Bush Tomato with Fruit

4.3.2.2 Product Consolidation

Each trader has a particular geographic area from within which they purchase raw product (Ryder et al., 2009). In mapping these areas, Ryder and colleagues indicate that each area relates to specific Aboriginal Language Group boundaries and their associated settlements. Ryder et al., (2009) also report that relationships between the harvesters and the traders in each of their collection areas are strong, and have been built up over long periods. There is little evidence that harvesters

consolidate the fruit themselves, and little or no infrastructure exists to support such activities in the remote settlements in which the harvesters are located. After each visit to the remote communities in their collection areas, the traders consolidate the multiple bags of harvested fruit and package them for sale to processors, sometimes setting aside small quantities to value-add for local sale. Price setting, including the prices paid to harvesters and paid by the processors, occurs at this point. Traders may also sell on demand directly to restaurateurs and specialist caterers. Annually, approximately 4–10 tonnes of fruit are traded this way, with supply varying with seasonal conditions (CSIRO, 2007; RIRDC, 2004).

4.3.2.3 Processing and Distributing

Processors to whom the traders sell are located primarily outside the Northern Territory, in cities on Australia's eastern and southern seaboard. Bryceson (2008) reports two major processors operating in the market, with a number of smaller firms processing some bush foods as a limited part of their businesses. For the major processors, bush foods comprise the bulk of their business activity. In relation to the specific use of bush tomatoes, processors value-add to the raw product to create a range of products, including sauces, chutneys, marinades and rubs. More recently a range of fresh products including bush food flavoured sausages and pasta products have been added to the ranges of both major processors. Most of the supply for this product range comes from wild harvested fruit. This has created supply issues for processors. As one processor commented:

> *"Supply is the biggest problem for us. The products that we get from wild harvest can be irregular. We need to find a way to get consistent supply. The most popular product we sell comes from wild harvest. We've recently had to change one of our products on the shelf at [supermarket chain] because we couldn't get enough of the raw product. This makes it very hard for us to maintain our shelf space, which is critical to the business. Once you lose shelf space, it is very hard to get it back, so we work hard to maintain it. We were lucky this time that [supermarket chain] allowed us to replace one product with another - normally that wouldn't happen."*
>
> *(JR: Vic)*

Those actors at the downstream end of the chain who are marketing the product display little knowledge of the harvesters' activities or how, why and where they operate. In such marketing, no emphasis is placed on the fact that the food is hand-harvested from the wild and is thus 'clean and green' (Cleary et al., 2008). Nor is there any specialist stream of bush food product in the market that utilises as a selling point the cultural associations with the food that the harvesters hold. In short, little value seems to be placed on the harvesters' traditional knowledge of the product at this downstream end of the value chain.

4.3.2.4 Retail Sale and Consumption

Value-added bush food products are then distributed for domestic and (increasingly) international sale, through a variety of mechanisms and outlets including specialist retailers and supermarkets. Both major supermarket chains in Australia now carry a range of bush tomato-based products for example. Increasingly, these products are moving from specialist 'niche' positions on supermarket shelves, to being found alongside more mainstream products.



Photograph 3: Value-added Product – Bush Tomato Chutney

4.3.3 The Nature of Interdependencies in the Wild Harvest Value Chain

Applying the NCA framework to the Wild Harvest Value Chain reveals some interesting interdependencies and their sources of value at some of junctures shown in Figure 10. These are described and discussed in this section.

There are interdependencies that are clearly *sequential*, where direct relationships between firms are organised serially, e.g. the movement of the raw product from the traders to the processors and its subsequent distribution and sale to retailers and consumers. Each stage relies upon output from the preceding stage becoming input for subsequent stages. The movement of the raw product from the traders to the processors and the creation of value-added products and their distribution and sale to retailers and consumers, occurs as one would expect in any contemporary value chain. There are no unusual characteristics to these relationships to be noted, and they conform readily to the sequential types of interdependencies described by Lazzarini et al., (2001) Value is created at each stage as the product moves between agents in the chain. Bryceson (2008) very clearly illustrated these sources of economic value in these sequential relationships in a report undertaken on stocks and flows in two major bush tomato and wattle-seed supply chains operating in the bush foods industry.

It is at the upstream end of the supply chain at the harvester / trader juncture that the application of NCA reveals some complexity in the interdependencies, and it is here also where the interdependencies do not fit so easily within the NCA framework. These are now explored in more detail.

The statement below was made by a participant in a bush food harvesting trip in the Northern Territory, undertaken by a group of harvesters at a remote Aboriginal community north east of Alice Springs:

> *"We will go harvesting today, because it is the right time. Everyone is here, too and we know where to find some katyerr. It might be on [name]'s country or my country. Could be some there. All the kids are coming too. We are not sure when [name of trader] is coming, but we'll have some for family and some for him if he comes soon. He pays each of us for the katyerr we pick and then he goes" (JH, NT).*

This statement highlights two points. Firstly, the women are clear on the fact that there is a 'right time' to harvest seasonally (i.e. the katyerr is likely to be there). It is also a 'right time' because particular people are present. Those people on

whose country the katyerr is likely to be found are there and therefore harvesting can occur from those 'countries.' Secondly, the statement highlights the individual nature of the transactions that subsequently occur with the traders i.e. the movement of the bush tomatoes from the harvesters to the traders. So, while the harvesters go out to harvest together and this is necessary because of the cultural imperatives related to 'whose country' on which the katyerr might be found, they sell individually. Walsh and Douglas (2011) also noted this to be the case in their work with harvesters in the Northern Territory.

In selling the bags of fruit separately to the traders, the harvesters act as independent agents supplying a resource individually to a pooled resource. The interdependency that exists between the harvesters would be described as a pooled interdependency under the NCA framework, because they are sparsely connected to each other in relation to the supply of the product to the pooled resource. Ordinarily, under the NCA framework, agents comprising pooled interdependencies enjoy sparse social connections with one another. Granovetter (1973; 1983) has described this sparse connectivity as a 'weak tie.' As a result of being 'weakly' connected, i.e. not sharing common social (and cultural) bonds, each agent existing within a pooled interdependency with other agents is more likely to have access to different sources of information and resources to each of those other agents and this differential information and resource can be brought to the 'pool.' Consequently, knowledge diversity is often high within such a network, allowing the network to benefit from this diversity by, for example, using such knowledge for continuous improvement.

However, this is not the case among the bush harvesters. The nature of the pooled interdependency holds true *only* as it relates to their minimal economic interactions with each other in relation to *selling* the bush tomatoes. However, harvesters of bush tomatoes are strongly interconnected in the manner through which they harvest, i.e. they go out together to harvest, and this collective action is important to them for social and cultural reasons irrespective of whether they are harvesting for commercial reasons or for non-commercial reasons. Outside

this economic activity, the harvesters have very strong social and cultural ties to each other with a high degree of collective historical and customary knowledge about the fruit. Being strongly connected socially, they have very few 'weak ties' that can be utilised to bring external knowledge and information about the fruit as a commodity in the market to themselves. Thus, they are highly dependent on the ties they have with the traders to acquire this information.

In order for the interdependency to be properly described as a pooled interdependency in this chain, the harvesters would have to be sparsely connected both socially *and* commercially. Clearly, this is not the case. Therefore, it follows that only a part of the value derived, i.e. the economic value of the bush tomatoes as a commodity, is able to be identified under the NCA framework.

Additionally, within the terms of the NCA framework, the harvesters display *reciprocal* interdependencies amongst themselves, , to the extent that they share resources in the process of harvesting, i.e. vehicles to transport them to harvesting sites: '*we go out together*'; and customary knowledge and information associated with the fruit and how and where it can be harvested: '*it is the right time';* and '*we are all here too'*: as well as the passing on of that knowledge to children: '*the kids are coming too'*. The 'value' derived from this reciprocal interdependency in the process of harvesting is both commercial and non-commercial in nature. However, under the NCA framework, again, only the economic value (cost savings as a result of sharing resources) becomes immediately apparent. Any socio-cultural 'value' that lies within the historical and customary knowledge of the fruit and the value of harvesting as a socio-cultural activity appears to sit separately to the economic 'value' of the resultant product and is not easily categorised within the NCA framework.

The traders display *reciprocal* interdependencies in their dealings with each other, in that they have informal agreements related to the areas from which they each limit their procurement. This reciprocity is most often seen within the same layer, or horizontally, as Lazzarini and colleagues note. In this instance, this is

also the case between the traders, and is therefore not unusual within the NCA framework. Clearly, there are mutual benefits to each of the traders through having agreements with each other about the particular regions from which each of them will procure fruit. However, what has also happened over time, as a result of this agreement between the traders, is that the procurement regions have become associated with strong relationships between each trader and those harvesters located within that particular procurement region. The harvesters and traders thus enjoy longstanding relationships, where repeated business exchanges have led to the creation of trust and social norms in the manner described by Coleman (1988; 1990). The traders themselves describe the relationships they have with the harvesters as based on trust built up over a number of years (Ryder et al., 2009). Ryder and colleagues reported that the motives of the traders were a mixture of self-interested financial gain and philanthropic concern for the welfare of the harvesters. The economic motivation of the traders varied, according to Ryder and colleagues, as did the incomes derived from their procurement activities and their level of reliance on them. In addition, three of the six traders interviewed by Ryder and colleagues talked about having 'particular interests in ecosystems and land' (Ryder et al., 2009: 32). These individuals placed a high value on the associated productive uses of natural resources by Aboriginal peoples for economic benefit. In short, often there exists a strong concern for the personal or relationship aspects of what is occurring between the traders and the harvesters that sits alongside, but separate to, the process of trading fruit.

In a purely economic sense, the harvesters are entirely reliant on 'their' trader to purchase any fruit they have for sale. The trader is reliant on 'their' harvesters' knowledge and expertise in knowing where the fruit can be harvested and when it is likely to be available. This creates a reciprocal interdependence between the harvesters and the traders, who sit within different layers under the NCA framework. Under the NCA framework, this is irregular as reciprocity is seldom seen across vertical relationships. The relationship between the harvesters and the traders is therefore not easy to categorise within the NCA framework, displaying as it does characteristics of reciprocal interdependencies *across* layers.

In this instance it appears that the lines between social and economic behaviours and the 'value' that is attributable to each are blurred.

What can be said about 'value' in this instance is that there is social value in the relationships between the harvesters and traders that has developed over time. One positive result of this relationship is the development of a strong understanding, on the part of the traders, of the factors which motivate the harvesters. This understanding, grounded in trust, reciprocity and knowledge gained over time, and also the fact that traders do not rely upon bush food as their sole source of income, means that the traders are less likely to put pressure upon the harvesters to provide product on demand. This represents a considerable departure from the orthodox market relationship between supplier and buyer. There is clearly a high demand for the product, as indicated by the supply inconsistency highlighted by one of the processors earlier in the chapter, and the difficulties for their business as a result. However, despite this high demand, the traders are responding to the cultural imperatives of the harvesters. This is important for the harvesters, because as has been highlighted earlier in this chapter, certain aspects of harvesting (e.g. the cultural necessity to have a particular person or people available to go on harvesting trips), help to determine the timing of individual harvesting trips. If for example, the traders were to make scheduled, regular demands for product to meet the demand from the processors, these cultural imperatives may either have to be overridden, or, as is more likely, the demand for product must be left unmet, which could be seen as failure, i.e. a performance issue.

Clearly, there is economic value associated with the movement of product between the harvesters and traders, but there is also other value, which is non-economic. For both, the 'value' associated with the act of transacting cannot be clearly delineated as solely monetary, and this means the value concerned evades easy categorisation under the NCA framework. Figure 11 illustrates the interdependencies that can be seen in the wild harvest bush tomato chain.

One important point to remember here is that this non-economic value might have been missed in the event that considerable field work had not been undertaken, thus developing an ongoing engagement with the harvesters. This non-economic value might further have been missed in the event that the NCA had been done in the standard way, purely on the basis of examining the vertical and horizontal interdependencies in order to uncover economic value. The lesson to draw here is that it was the participatory nature of the research in undertaking the NCA of this chain which managed to uncover the noneconomic value implicit in these transactions.

In summary, the most significant features of the interdependencies in the bush-harvest bush tomato chain under the NCA framework are that:

- There are both reciprocal interdependencies (taking the form of double-headed arrows in Figure 11) and pooled interdependencies (represented by dashed lines) between the harvesters. Reciprocal interdependencies relate to the sharing of resources and the interaction between harvesters in the process or actions of harvesting. The pooled interdependencies relate to the way in which harvesters act as individuals in their economic transactions with the traders, reflecting the individual supply of fruit and the payments they receive.

- The harvesters are highly reliant upon the traders in terms of resource flows, including income received, and in receiving information feedback from the market and the rest of the chain. This is depicted by double-headed arrows between the harvesters and traders in Figure 11.

- The traders rely upon each other and their agreement to procure from particular regions in which they have existing trust relationships with harvesters. These reciprocal interdependencies between traders are depicted by double-headed arrows in Figure 11.

- Sequential interdependencies are depicted by single-headed arrows in Figure 11. These interdependencies are seen between layers in this chain, in the manner that the NCA framework predicts. However, these interdependencies exist in the chain only between those firms which operate downstream, i.e. beyond the harvester/trader juncture.

- What cannot be readily captured in Figure 11, are the strong social ties among the harvesters (which yield value), nor the reciprocity that exists between the harvesters and the traders (which also yields value).

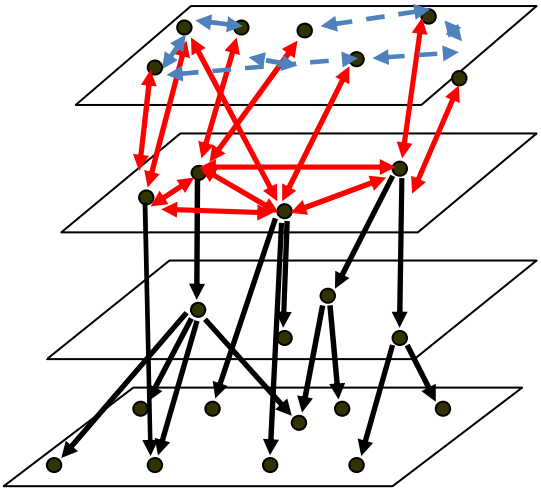

Figure 11: Netchain Perspective of Bush-harvested Bush Tomato Chain.

4.4 The Effectiveness of Using NCA to Capture Value

Some of the value inherent in the interdependencies in this chain has been identified using NCA. NCA captures the economic value associated with the trade between harvesters and traders, and quite clearly is able to capture the economic value in the rest of the chain. NCA provides a useful framework for examining the vertical and horizontal *structure* of the chain. NCA would be useful in subsequently determining ways of restructuring the chain for increased efficiency and economic sustainability. However, there is 'value' associated with the interactions among the harvesters, and also between the harvesters and the traders, value located in both harvesting and trade, that goes beyond considerations of the economic value of moving commodities forward for sale. NCA does not fully capture this non-economic value in the chain. Nor is it

possible for the level of complexity associated with these non-economic sources of value to be framed fully within the NCA model.

NCA is able to represent the *economic* relationship between the harvesters i.e. their lack of connections to each other (when trading as individuals with the traders), but it cannot capture the rich and complicated socio-cultural relationships between harvesters which lie outside of this economic relationship. Does this matter? It is possible to argue that it matters a great deal that the social and non-economic characteristics of the relationships in the chain are not able to be captured nor represented in the model, because these relationships reflect 'value' that is very significant to the harvesters and traders. For example, from an economic perspective, the value chain could be seen as inefficient upstream e.g. no institutional relationships between harvesters and monopsony relationships with traders. Where relevant forms of the social and non-economic value are unable to be captured and represented, it becomes unclear how any potential consequences might be assessed in the event that changes were to be made to the chain. Such changes might include, for example, creating upstream efficiencies based upon considerations of economic value. These changes would be instigated without a clear picture of possible impacts. For instance, what if demands (in the form of supply contracts) were made of the harvesters to supply consistently irrespective of socio-cultural considerations and conditions for harvesting? According to the comment made by the processor above, consistent supply is critical to their business, in order to retain supermarket shelf space. The most likely outcome is that the demand for product from bush harvest simply would not be met if socio-cultural conditions for harvesting were not right. From an economic perspective, that would probably be seen as failure, rather than adherence to socio-cultural practice that values something beyond economic considerations of the product.

What NCA does do, however, is reveal that knowledge of this complexity is essential for assessing options for change within the chain. That is to say, much is revealed in what NCA cannot adequately represent. For example examining

matters at a relatively superficial level, it could be argued that the traders are simply taking advantage of the harvesters' socio-cultural and physical isolation in order to make money for themselves. However, Ryder et al., (2009) argue that the traders are in fact displaying high levels of altruism through their activities. The longevity of existing trader/harvester relationships (more than thirty years) attests to this. Evidence from Ryder and colleagues suggests that, at least on the part of some traders, other motivations may be in play as well. For instance, three of the six traders interviewed by Ryder and colleagues talked about having 'particular interests in ecosystems and land' (Ryder et al., 2009: 32). These individuals placed a high value upon the associated productive uses of natural resources by Aboriginal peoples for economic benefit. The reasons *why* chain members are participating will have a strong bearing on *how* potential change might be addressed, and indeed, whether change is deemed desirable. Creating new structures (such as supply cooperatives) to increase the efficiency of bush harvest supply and potentially improve price by decreasing transaction costs, may in fact prove to be disruptive or to *de-value* the current non-economic or quasi-economic sources of value that appear to be important to both harvesters and traders. What is important is that a much broader view of what constitutes 'value' should be entertained before any changes are attempted to this particular supply chain.

Given the 'blurring' of vertical and horizontal interdependencies in this chain that do not fit neatly within the NCA model, is NCA a useful tool for analysis? In light of considerable evidence that NCA has proved effective elsewhere in analysing supply chains (see for example Chaddad et al., 2009; D'Haese et al., 2007), other possibilities need to be considered before dismissing NCA as an analytical tool.

One possibility is that the wild harvest bush tomato chain constitutes more than a supply chain as this term generally is understood. At its simplest, a supply chain is the physical forward flow of resources required for raw materials to be transformed into finished products (La Londe & Masters 1994). Certainly, there

is evidence of the physical flow of resources that can be analysed in the bush harvest bush tomato chain. However, could it be the case that the chain represents something more, of which the flow of resources forms simply one part? In that sense, some of the complex dynamics at play in the chain (and partially uncovered using NCA) reveal that not all the value that is inherent in these interdependencies is readily identifiable using this analytic model. In other words, the business exchanges that are occurring may be more than business exchanges related to the movement of a product from harvest to retail. This is a critically important point, especially if changes to improve the economic performance are undertaken without due consideration of all forms of value inherent in the structure.

4.5 Rethinking Value

It is clear from the NCA undertaken on the wild harvest bush tomato chain that there is value in both socio-cultural and economic domains that is not easily explained by conventional chain analysis. Walsh and Douglas (2011) argued that using a value chain framework was insufficient to represent the complexity of bush harvesting for trade in central Australia, and this work supports their findings. There is a complexity related to the nature of interdependencies that exists in the chain and what each of these interdependencies yields in the form of social and economic 'value.' It can be further argued that there is also complexity associated with where these interdependencies occur and the manner in which they span the vertical and horizontal components of the chain. To better understand this complexity, it may be useful to consider the chain from an additional perspective, by exploring some alternative possibilities to explain what may be occurring between actors in this chain.

Max Weber (1864–1920) expressed strong views on what he termed 'the rationality of economic participation,' which he argued, was reasoning behind the creation of any form of economic activity in the context of capitalism (Taylor, 1994). According to Weber, rationality for economic participation may be either formal or substantive. He described formal rationality as seeking efficiency, and

substantive rationality as adherence to an ideological system (Taylor, 1994). He also saw formal and substantive rationality as being opposed, especially in relation to economic life, whilst arguing that they very often existed together (Nwala, 1974). He suggested that individuals may hold both formal and substantive reasons for undertaking economic activity and that where this happens, a tension exists between the two (McGehee, 2007). The proposition to be made here, is that this tension is present but in a minimal way at the harvester/trader juncture in the bush harvest value chain. In the context of the bush foods value chain, understanding this rationality for participation contributes to understanding what constitutes 'value' for participants and where such value is located.

Following Weber, we may say that the harvesters hold both formal (picking bush tomatoes provides a limited but reasonably important source of income) and substantive (picking katyerr is a customary activity associated with health and well-being; passing on traditional knowledge; and caring for country) rationales for harvesting. For the harvesters, the balance between these two forces may be related to their current worldview and how this applies to harvesting, in considerations both of its economic and cultural importance to them. If their reasons for harvesting prove to be more substantive than formal, in the Weberian understanding of these terms, then participation in the bush foods industry through harvesting may continue to be opportunistic, as suggested by the traders in Ryder et al., (2009). That is to say, while the existing conditions under which they are able to supply fruit to the traders fits with their socio-cultural needs and aspirations, they will perhaps continue to do so. If, however, in the event that certain changes were made to the current supply model in the name of efficiency - for example, through the development of a supply cooperative with formal supply contracts - then the harvesters may well choose not to participate. This choice could then be said to be made from within their worldview which in turn supports the substantive rationality on which their current participation is based.

The traders also may be interpreted as holding both formal and substantive rationalities for their interactions with the harvesters. These rationalities form the basis of how and why they do what they do, and the balance between 'formal' and 'substantive' influences determines how they function. Currently, they are providing a critical link to and from the harvesters that appears to be mitigating the effect of remoteness and to be bridging both socio-cultural and economic domains in ways which create 'value' (which is both socio-cultural and economic in form) for both the harvesters and for themselves. Income derived from buying from the harvesters is not necessarily a prime consideration (as described by Ryder et. al 2009) so they too possibly have a more substantive than formal rationality for participation in the current arrangement, and likewise, may reconsider should changes be instigated.

4.6 Chapter Summary and Conclusion

This chapter has provided insight into the use of NCA as a tool for assessing value in value chains in the bush foods industry. Specifically, NCA of the bush harvest chain has enabled a level of analysis that assists in the identification of sources of value associated with both horizontal and vertical relationships and their interdependencies that may be invisible under an analysis employing SCA or NA alone. However what was found was that 'value' as it appear in the context of this particular value chain, may take both social and economic forms. Certain forms of value which matter to the chain participants may not relate only to the flow of resources, and therefore may not be reflected as a potential 'efficiency' in the chain and may even be seen to be hindering cost reductions and profit increases. Such extra-economic value is also not recognised as 'value' in the finished product. Thus, applying NCA as a means of identifying sources of 'value' (while perhaps more effective than either vertical or horizontal approaches alone) may not prove entirely informative in cases like the one examined here. However, what the use of NCA has done is help to identify that there is a level of complexity present in the bush food netchain which resists adequate analysis under the NCA network. The fact that this complexity and the underlying sources of value which support it cannot be fully understood using this framework, suggests that some rethinking is required. This rethinking needs to

consider both the structure of the value chain itself (perhaps by identifying ways in which this isn't 'just' a supply chain) and what constitutes 'value' (the value in play here may not be 'just' economic in nature) and how this value would be best captured. Critically, any attempt to change economic or market structures of this nature with a view to creating efficiencies or to making improvements in accordance with the success metrics described in conventional chain literature may have a negative impact on the 'value' associated with the current interdependencies. 'Value' in this case is affected by the rationality for participation that certain chain members hold (harvesters and traders) and this is more substantive than formal in nature.

In short, issues pursued in this chapter suggest that consideration should be given to broader definitions of 'value' and frameworks to represent them, in order that they are able to encompass non-economic socio-cultural value. The following chapters (Chapters 5 and 6) introduce and develop such a value framework.

Chapter Five:
Case Study Two Part I: A Deeper Exploration of the Concept of Value

5.1 Introduction

The analysis of the generic bush harvest bush foods value chain undertaken and described in the previous chapter reveals that 'value' in this chain can be thought of as being both socio-cultural and economic in nature, and something which arises across interdependencies associated with different contextual domains. Some of these domains receive no consideration in the context of a value chain analysis. This chapter further explores the idea of social and cultural value in relation to bush foods, and discusses why non-economic forms of value matter in those value chains where remote Aboriginal peoples are participants.

5.2 Concepts of 'Value' in Value Chains

Chains, Supply Chains, Networks and Netchains have become established during the last five decades as widely used frameworks describing production systems, including the production of agricultural commodities. Typically, one defining feature for each of these production system frameworks is an association with a specific commodity and its market. Each of the firms and/or actors in such frameworks is connected centrally by the commodity and market that forms the focus of the relevant framework. Thus, such frameworks take as their focus the notion of value that is economic in nature. To this end, the seminal works of Porter (1985); Forester (1958); Gereffi (1999); Fine, (1998); Friedland et al., (1981); Cook and Crang (1996); Lazzarini et al., (2001) and Thompson (1967), representing various methodological approaches to commodity analysis, are firmly focused upon understanding the nature of input/output production systems and their flows of information, materials, money, labour, and capital equipment in order to maximise economic returns. Other works, such as Estrada-Flores (2007), focus on understanding the dynamics and drivers in production systems, with a view to better understanding the ways in which economic returns can be

improved for the entities operating within those production systems. Contemporary agribusiness and value chain scholars such as Boehlje, (1996; 1999; Boehlje and Lins, 1998; Boehlje et al., 2006; Bryceson and Smith, 2008; Chaddad & Cook, 2004; Chaddad et al., 2005; Kaplinsky, 2004; Lazzarini et al., 2001; Neilson and Pritchard, 2009; Peterson, 2002; 2009; 2011; Peterson et al., 2001; Womack and Jones, 1996) continue to write within economic frames of reference in relation to these production systems. The language used is consistently economic in nature, e.g. 'market forces,' 'return on investment,' 'performance optimisation.' In some instances (Neilson and Pritchard, 2009) there is an emphasis on a specific aspect of the production system (in this case, governance). However, implicit in all cases is the impact that the specific aspect under consideration has on the overall economic performance of the system. Whilst other scholars (e.g. Peterson, 2011) may advocate different approaches to researching and understanding these production systems, the fundamental premise remains intact, that it is the economics and economic performance of the system that is of key interest to the systems analyst.

Neilson and Pritchard (2009) describe the various methodological strands and academic disciplinary approaches to production and commodity analysis and the key works associated with these (Neilson and Pritchard, 2009, Table 2.1 p. 31). They also highlight the constantly changing field in the area of commodity analysis and describe it as an 'exercise in motion' (p. 31) with 'different researchers seeking to augment, renovate or rebuild particular frameworks in the search for more inclusive and/or purpose-specific frameworks' (p. 31). What is most interesting is that, in all the methodologies described in their review, only one disciplinary approach (cultural geography) does not mention the words 'economic' or 'economy.' The works that Neilson and Pritchard have associated with the cultural geography approach include Cook and Crang (1996); Crang (1996) and Cook et al., (2004). However, while these three works emphasise the cultural understandings of food, they do so from a commodity-based (and thus economic) perspective. The other disciplines and associated works highlighted in Neilson and Pritchard's comprehensive review table are explicit in their economic emphasis. So, while commodity analysis may be a constantly changing field with

different research approaches and frameworks for analysis becoming apparent, these approaches and frameworks still take as their focus, either explicitly or implicitly, the economic nature of commodity analysis.

Journals such as the *Journal of Chain and Network Science* (JCNS) and *Supply Chain Management* are dedicated to the pursuit of research related to production networks and value chains, and their language reflects the intrinsic importance of the economic nature of the topic. In Issue One of JCNS for example, the first article provided an overview of the intended scope of the journal, and that it aimed to focus on the '…development and validation of strategies, methods and techniques for the improvement of the efficacy of business networks' (Omta et al., 2001 p. 1).

It can be argued that because value chains and production networks are economic structures in and of themselves, they have no use for analyses of anything *other* than economic value, or those activities and actions which impact on economic value. Indeed, the value chain and VCA literature for the most part, does not even state that this is the case. Rather, the economic nature of the value focus is 'taken for granted' and thus implicitly understood. Other considerations, such as social and cultural actions and characteristics apparent in production systems are analysed only inasmuch as these actions and characteristics impact in some way, either positively or negatively, upon whatever economic value attaches to the system. Batt, (2003) for example, highlights social characteristics inherent in connections between actors in value chains such as trust, satisfaction, appropriate power structures, commitment, communication, relationship-specific investment and strong personal relationships as being critical to chain performance. Others, such as Nohria and Eccles (1992) have modelled the ways in which social relations and institutional arrangements in networks and chains affect economic behaviour. Granovetter (1973; 1983; 1985) discussed the importance of the nature of 'ties' or social connections between agents in networks and how these affected economic relationships and performance. Granovetter (2005) also

argued that economic activity is embedded in social relationships, and that therefore these are important to consider in analysing economic performance.

However, none of these considerations of social concepts in value chains and production systems deal with any *intrinsic* or non-economic importance that social or cultural actions, relationships and activities might have for actors in value chains. There is no consideration that there may be non-economic 'value' attached to these social and cultural factors, or that this value may be important. Rather, where social concepts are considered, the focus is either explicitly or implicitly on how these social considerations affect the economic activity in the chain or production system.

The remainder of this chapter seeks to present a case for challenging prevailing notions of how value is conceived and measured. In particular, the chapter makes a case for challenging or reconsidering the value orthodoxies surrounding value chain analysis when discussing bush food value chains in which remote Aboriginal peoples are key participants. The chapter presents an alternative worldview representation of what constitutes value and thus an alternative view of what could constitute a value chain.

5.3 Methodology

The aim of this case-study was to better understand perceptions of value that remote Aboriginal peoples attributed to bush foods. The case-study utilised in-depth interviews conducted with remote Aboriginal peoples across three broad geographic areas to ascertain their perceptions of value associated with bush foods. As outlined in Chapter Three, (Methodology), case study approaches may be instrumental in illuminating a particular social situation while providing insights that may be applied more broadly (Sarantakos, 2005). In that sense, undertaking this research as a case-study provided a way to frame the work as an input into the construction of a grounded theoretical perspective in respect to the broader research questions the thesis seeks to explore.

Participants were interviewed in three key areas: the East Kimberley region of Western Australia (Figure 7); the central desert and Barkly Tableland in the Northern Territory (Figure 6); and the Far North region of South Australia (Figure 8). These locations were specifically chosen for two reasons. In the first place, interviewing across such a variety of locations increased the probability of obtaining a broad cross-section of views from Aboriginal peoples belonging to different Language Groups, with potentially different cultural traditions, especially in relation to bush foods. Secondly, each of these geographical areas is classified as 'very remote' using the Australian Standard Geographical Classification of Remoteness Areas (ABS, 2006b). Stafford-Smith (2008 p. 3) has identified characteristics of the desert and remote areas that by themselves are not unique, but systemically combine to produce conditions that create a unique environment in remote areas. These characteristics include: sparse populations; distance from markets and decision-making; perceived unpredictability in markets, labour and policy (social variability); scarce and patchy resources; climate variability; cultural differences; and reliance on local knowledge. This study accepts Stafford-Smith's premise for uniqueness in desert and very remote areas and thus confines itself geographically to these areas in order to exclude the level of remoteness or non-remoteness as a variable. Thus any findings purport to relate to remote areas only. Whether or not findings may have relevance elsewhere is beyond the scope of the study.

Field trips were undertaken to each of the three regions during 2011-2012 and a range of in-depth interviews each of approximately 1.5 hours duration were conducted. In some cases these were conducted on a one-to-one basis. In cases where it was requested or desired by participants, interviews were conducted in groups. This style of group interviewing was particularly important in some cases, in that those who might choose to speak, were more comfortable to do so when figures perceived to be authoritative on bush food knowledge (primarily senior Aboriginal women) were present. In some cases, this included men or younger women commenting and participating, whereas in circumstances where the primary knowledge holders were not present, this may not have occurred. Project information and a discussion of the nature of the research and how the

data would be used, was also undertaken with each participant. Informed consent was obtained from all participants prior to interviews commencing. In most cases, informed consent was obtained in writing. In other cases where the participant did not have written English, informed consent was obtained verbally, through a translator, and the interview conducted through a translator. Ethics clearance was obtained through the University of Queensland, as outlined in Chapter Three.

The interviewees comprised 35 females and five males, ranging in age from 18 to 84 years. Interviewees were predominantly female, to reflect the fact that bush food harvesting is an activity undertaken primarily by women, therefore women were most likely to have well developed views about the topic questions. From a cultural perspective, women were also more accessible to me as a female researcher and as the primary holders of knowledge about bush food were the most appropriate target group as research participants. Within each broader location, a snowball sampling technique was used, where initial (known) contacts referred others who might be willing to be interviewed. The majority of interviews were conducted face-to-face, with a small number conducted via telephone. In each of the telephone interviews, a prior research relationship existed with the interviewees.

As Sarantakos (2005) points out, case studies are particularly useful in pursuing depth analysis in natural settings and enable many techniques and sources to be used for data gathering. During the course of this field work, the researcher embraced opportunities to observe and participate in bush harvesting activities and to participate in other community activities and events. For example, in the East Kimberley, she was able to participate in a cattle muster and to visit a community school. In South Australia, as a result of interest in the work she was undertaking, she was invited to attend an Aboriginal women's healing camp. These activities became important sources of additional information, and she has made mention of them here to highlight the value of taking a case-study approach when conducting intercultural research.



Photograph 4: The Researcher learning about bush foods, Kimberley, WA (Photo Credit: Murray McGregor)



Photograph 5: The Researcher learning about bush onions, Tennant Creek, NT (Photo Credit: Kim Bryceson)

5.4 Analysis

Consistent with Grounded Theory methodology (Glaser and Strauss, 1967), intensive interviewing (Charmaz, 2006) of case-study participants was undertaken, enabling participants to talk about what was important to them about bush foods. Interview notes together with field notes were taken. Across all interviews, the discussion would start with the topic of bush foods initially, but in most cases the discussion would progress to a much broader range of topics, of which bush foods might form a part. Consistently, the discussion about bush foods would be framed within the broader context of peoples' lives. Following each engagement, interview and field notes were then examined and major themes and ideas were identified and memos written. As each subsequent

interview proceeded, themes from prior interviews were raised with subsequent interviewees, in a continuous cycle of comparative analysis. In this way, initial coding categories were generated, which were then refined through summary coding, consistent with constructing grounded theory (Charmaz, 2006).

The preliminary and summary coding process resulted in a rich dataset from which a number of key data categories and themes arose. Further recoding using focused coding (Charmaz, 2006) was then undertaken. Focused coding in Grounded Theory approaches is the second major coding phase whereby grouping initial codes into similar sets of ideas and common themes enables the data to be analysed more selectively, in a directed and conceptual manner to identify major groupings and themes (Charmaz, 2006). These data categories were then further recoded by grouping them into similar sets of ideas and common themes, which resulted in four major groupings from which theoretical categories were then generated. The following section of the chapter presents the key findings and concepts that arose from this coding process.

5.5 Findings and Themes

5.5.1 Value

Very strong themes related to the value that participants attached to bush food emerged very early in the coding of the data. However, when discussing bush foods, people would invariably go on to talk about where bush foods fitted in the larger picture, that is to say, bush foods were discussed contextually, in relation to peoples' lived experience, rather than in any abstract manner. People talked strongly and consistently about bush foods being 'good' for them and 'right' for them. People talked about bush food as promoting wellbeing and health. There was also a sense from participants in all three regions that bush foods were left by ancestors to provide for those people to come, that they had 'always' been there and were an intrinsic part of everyday life.

What emerged most strongly in the early stages of each interview was that bush foods were part of a balanced lifestyle and that they were a key part of 'caring for country' and that this had a timeless quality. One person expressed this idea as:

> *"Old ways about bush food is good. That food is good for us. Shop food makes us weak. [This food] makes us strong." (Uncle A[7]).*

This idea of health and wellbeing and the importance of balance were most often expressed as a form of reciprocity, in that if country was cared for, then country would 'care for us.' During one interview, this was articulated as:

> *"Care and respect is always in our minds. If our country is not healthy, then we are not going to be healthy. It is part of us, you know? We always have to think about this. Responsibility to country and family (GS, NT)."*

There was a very strong sense that everything including bush foods and people were an intrinsic part of country, and that they couldn't be separated out from country when people were thinking about them. Again, this was expressed as a deep knowing and understanding of one's country and of self, family and of knowing where one belonged as a part of that. Comments included:

> *"[Country] is part of us" (GS NT).*

> *"[Country] is who we are. We belong here and we are connected to this land. We care for it, and it feeds us, looks after us. It is everything and we are part of it too. We know on our own country where to find food" (Aunty P, WA).*

> *"Country is handed down. You have a responsibility to that country and to your Skin. You have to do things the right way, because you belong to that country" (VD, NT).*

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[7] This participant wanted to keep his location anonymous, as did others who spoke with him. This was in respect of the fact that this particular group of people were completely negative towards the idea of selling bush food, but recognised that other Aboriginal peoples were already doing this, and thus did not want to appear to be judgemental of what was not the 'right way' for them, but 'might be for other mobs.'

Alywarr speakers from Ampilatwatja, Walsh and Douglas (2009), talk about these responsibilities in relation to making rain so plants would grow:

> *"The old people thought about rain. They made rain. They would go to a sacred site and make rain. They would sing the correct songs. It was the Kemarr and Pwerl skin groups who would sing those songs… After making rain the trees and grass would grow."*

(Banjo Morton *in* Alywarr Speakers from Ampilatwatja, Walsh and Douglas 2009, p.13).

In relation to the concept of 'value' attached to bush food, what can be interpreted is that bush food has a more intrinsic rather than extrinsic value for those interviewed. That is to say, the terms used to describe its value were expressed in ways that related to the food itself and to people and their relationships with their land. It is worth stressing that money and payment for selling bush foods, was not mentioned at this point by anyone interviewed. Money was certainly discussed at other points in the interviews and in fact was a topic specifically pursued. However, the topic of money, in all cases, was raised by the interviewer, rather than being initially raised by interviewees. This lack of attention to financial considerations of bush foods held across those interview participants who sold bush food as well as those who did not.

There was a similar lack of attention to the economic aspects of bush food harvesting when participants were asked whether there were some bush foods that were more important to them than others. One might expect to hear from those who were selling bush foods that these bush foods had a particular level of importance. What emerged instead was the same sense of intrinsic importance as expressed earlier, in relation to value. People talked about all bush foods being important. In fact, what was consistently noted and identified in field notes in relation to the concept of 'importance' was the amount of time that people took to answer the question, *what kinds of bush food were to be found on people's country?* They would attempt to list as many foods as they could recall growing on their country, and would often come back to this point throughout the

discussion, to add more foods. There was a strong sense that all foods were important, and thus none should be 'forgotten.'

The notion of bush foods' importance was expressed in terms of 'seasonality' and the availability of different food at different times. However, importance was also expressed as two different concepts related to time, and relationships. People articulated that, along with seasonal availability of different foods, there were other 'right' and 'wrong' times to eat particular foods. One person expressed this as:

*"It is mostly about seasons, but there are rules too. Like, if you are pregnant, you can't eat goanna fat" (*Aunty P, WA).

Another expression of this idea in a different setting:

"You don't eat turkeys that have eggs. You'll get boils" (GS, NT).

People also spoke strongly about 'special relationships' between all things, and that this was important. This concept was often articulated as knowledge gained through stories. For example, 'Uncle A' suggested that

> *"Stories tell us about that food. And Ancestors. Maybe some things were people first. Now they might be animals, or plants or rocks. We know about these things. This is our Knowledge. It is important to us. So we know it. We know the Law."*

People talked about 'knowing the rules' and the 'Law' in a very straightforward way, i.e. that this was all about being a part of your country, and knowing what was expected of you, including how to behave, how to take care of country and to respect your relationships within country. When asked about how they learned this, most people expressed that it had been a part of their growing up, that knowing the seasons, knowing the 'Law' and what to pick and when was taught to them by mothers, aunties, grandmothers and sisters, and that knowledge had been handed down in this way from Ancestors.

During a bush food harvesting field trip in the Northern Territory, I asked the women who had taken me out how they knew when, where and how to dig for the bush potatoes we had harvested that day:

> *"That one takes a lot of moisture to grow that big. It gets the water from the ground around it. That makes the ground dry out a lot and then it cracks. We follow the cracks. Where they cross over, that's where you find them. They are good to eat and fill you up. Our families have always eaten them. This is our country and they grow here" (AL, NT).*

What was being articulated in these statements was very clearly an expression of identity very strongly attached to place – to one's country. Another person articulated this very succinctly as:

> *"You have to do things the right way. You belong in that country. If you don't do the right thing and then you don't belong, then you are nobody" (KM, WA).*

> *"It is important to be well connected to your land – it is a part of you and you feel very emotional about it and what is in it. You are proud of it. I am part of the land. My language and my culture are a part of that. How we are related to the land is very important to know. We always need to know who we are, where we came from and who we belong to"* (A, NT).

The women on this harvesting trip said that this knowledge had been passed on from female relatives and that they, in turn would pass it on to future generations. They talked about learning and understanding 'the right ways' by watching and doing. Again, this notion of 'rightness' was related to identity – to 'who' people were, and thus, where they belonged. The women talked about different stories associated with their country, and about who could 'speak' for country and of the particular plants and animals in particular parts of the land. They described this as 'people belonging in country' and 'knowing who the right people are – only those people can speak for that land, and tell the stories for that land, because they belong in that country and that country belongs in them.' The women also referred to 'special knowledge and responsibilities' in relation to caring for the country that could not be shared by everyone, but that had to be passed on to

particular people by particular people, and that this was predetermined and based on skin, kinship relationships and 'Law'.

In all discussions and interviews, the idea of understanding the 'right way' and 'the Law' was consistently raised. This theme of right and wrong, and doing the 'right thing' richly informed the interview data. For example, particular processes associated with bush foods were very much in evidence. For instance, in the answers to specific questions related to harvesting activities, and in the researcher's personal observations of individuals engaged in harvesting activities, it became very clear that harvesting was carried out very much within the framework of the 'Law'[8] and with attention to specific, and clearly understood processes. Throughout the fieldwork, the researcher observed that when women would go harvesting, they were aware at all times of whose country they were on, and where the exact boundaries for different countries lay, and where particular countries intersected. If the food that was being harvested crossed the border between one person's country and another's, permission would be sought.

> "*It might be a rock or a tree that is on the edge of your country. But you know that is where your country stops"* (JN, NT).

This woman then told of the relationship between herself and another traditional owner:

> *"So you know Aunty 'B.' Well, 'B' and I are family in the traditional way, and next door neighbours as traditional owners. If we go out to get bush food together, then we don't have to ask each other for permission to go on each other's country, because we are both there*

[8] The 'Law' arose through Creator Spirits who determined such things in giving life. This concept is described at length in the anthropological literature (see for example Bell 2002; Stanner, 1968; Stockton, 1995; Tindale, 1953; Unaipon, 1929).

> *anyway. If 'B' was away though, then I would wait to go out. I wouldn't go on her country without her"* (JN, NT).

When asked about possible consequences related to transgressing, such as trespassing and picking food from another's country, people across all three areas responded similarly. Responses included:

> *"That country will play tricks on you. Maybe hide all the food"* (GS, NT);
>
> "*It would be like if I came to your house and took something"* (AD);
>
> "*Country will get cranky. Spirits will get angry. That person might find trouble"* (MF, NT);
>
> "*Maybe no food next time"* (P, NT);
>
> "*There will be no food next time for the family"* (P, SA);
>
> "*Country won't care for you, if you don't care for it"* (V).

The interview themes and subsequent coding indicated very strongly that people's actions and behaviour in relation to each other and to country were particularly important, and understanding that these actions and behaviours were important was an intrinsic part of people's identity and belonging in specific places. That is to say, understanding appropriate actions and behaviours constituted part of knowing who they were as a member of a particular family group and how they were connected to their ancestral country.

In her book 'What it means to be an Aboriginal person' (2010) Margaret Kemarre Turner, an *Akarre* woman from Harts Range in central Australia, describes this connection or attachment to country as 'The Land *is* us, and we *are* the Land' (p. 8) [emphasis in the original]. She describes this relationship as being permanent and unable to be changed. 'You were created out of your Ancestral country to be who you are. And this is what you are' (Turner, 2010 p. 13).

The intimate knowledge of country and the deep and abiding kinship relationships between people and country are firmly situated in 'place' giving rise to an understanding of Australian Aboriginal identity as being inherently place-based (Bell, 2002; Rose, 1996; Ross et al., 2011). Identity through place is all-inclusive. Perhaps a useful way to describe this notion using the language of relationship is to speak of 'relationship in' rather than 'relationship to' or 'relationship with' country (Rose, 1996). Veronica Perrule Dobson explains this visually in the DVD *Arnpernirentye*: Relationships between Bush Foods, People, Country and All Things, (Dobson & Walsh, 2009). She talks about how all things are connected: people, creation time and country. Plants and animals and inanimate objects such as particular sites, landscapes, rocks and other geological features including water-holes are related to people, and to the Law and that these relationships are timeless; forever. She describes, for example, how *Akatyerre* (the bush or desert raisin *Solanum centrale*) is a 'totem' for some people. She says that the plant must be treated with respect, and her people respect that plant. Respect might include the ways in which the fruit is picked or when it is picked, the way it might be prepared for consumption, who is able to pick it, sing songs about it and paint its story. Dobson further illustrates this point about respect by referring to a particular tree, which she refers to as an 'ancestor tree' and how the branches must not be broken when fruit is picked.

The assignment of a totem to a particular person also brings obligations to stewardship of the totem itself, and its entire habitat. In this way, those who share totems also share responsibilities, and this is an important social connection reinforced by Law (Ross et al., 2011).

For those interviewed, knowledge of the cosmological perspectives described above and their daily expression of the value attached to them, were accepted as 'normal' and part of people's everyday lives. This 'everydayness' and acceptance as the norm of particular behaviours and actions in relation to living one's life thus forms the worldview within which those lives are enacted. This is an

important point that will be further examined in the discussion section of this chapter.

Clearly, there are strong ‘value’ themes apparent in the initial data related to bush foods, and these are related directly to people’s understandings of who they are and the natural order of things for them. These value themes are summarized in Table 2.

Table 2: Initial Coding of Data Categories

Common Themes and Keywords	Preliminary Coding
Respecting the law respecting family respecting country respecting culture; Being part of country country is part of us belonging somewhere is important knowing where I belong is important it is always this way; always been this way Ancestors in country caring for country crying for country looking after everything that is there country is important to us; our country means everything to us country takes care of us	Respect Right way Knowledge Knowing Connection Family Normal Belonging Identity Timeless Belonging Reward Punishment Reciprocity Looking out for Survival Feelings and emotional connection

In light of the predominantly non-economic forms of value that initially emerged in the preliminary coding of the data, the researcher pursued a number of explicit questions related to monetary considerations, with a view to gaining insight into whether people held monetary considerations also to be important in relation to

bush foods. Thus, participants were asked a number of specific questions related to the buying and selling of bush foods and the processes associated with these actions. The following section provides an analysis of the collected data that relates specifically to monetary value that people in the study attached to bush foods.

5.5.2 Money and Bush Foods

There was a very mixed response from participants related to specific questions and discussion about buying and selling bush foods. In terms of the idea of selling the food, views ranged on a scale from vehement opposition, through uncertainty about the idea of buying and selling and/or a lack of knowledge that this was already happening, to some views expressing full support for the idea and/or revealing that some interviewees already participated in the market.

It is important to note at this point that one particular group of people in this study at a specific location did not want to be identified, even by broad region. They agreed to speak only on this condition. This particular group has a strong aversion to selling bush food (a fact that was not known to the researcher prior to the commencement of the study). However, they recognize the fact that other Aboriginal groups in their region and Aboriginal peoples more broadly are selling bush food. They did not want to be seen to be judging the actions of other groups, and thus requested complete anonymity in order to speak freely of their own thoughts about selling bush food.

In most cases where there was opposition to buying and selling bush food, people expressed a strong sense of this being 'wrong' in relation to their understanding of the 'Law.' This was especially related to the idea that country will provide, and that taking food to sell was in some way disrespecting country. That is to say, in the event that one was taking food to sell, then one was taking more than one needed, and therefore this was not a 'balanced' way of acting. What also emerged in discussions around this understanding was the idea that bush food 'belonged' as 'part of everything' and because there were special relationships

between all things, it would be 'wrong' from this perspective to sell bush food. One woman expressed this as:

> *"It would be like me selling my own son"* (A).

This picks up Uncle A's point highlighted earlier, where he said:

> *"Maybe some things were people first. Now they might be animals, or plants or rocks."*

This particular group of families own and operate a cattle property and a tourism enterprise. During the discussion, I asked about selling cattle and the implications of that in relation to the 'country' on which they were being raised. The response was again framed from within a non-western cosmological worldview. I was informed that 'cattle have no dreaming,' that they were not 'from this country' and that they were introduced by non-Aboriginal people. *"We didn't bring them here, but they were brought here. We can sell them" (A).* This was an interesting separation between what was perceived to belong, and that which was perceived to not belong, within the cosmological understandings of the landscape expressed by this group.

Within a different region, another perspective on this idea of 'country providing' and taking only what you need was presented in the following terms:

> *"Things are changing now. We need money for things. One time, we didn't need money. Now we need money to pay for things. Things like funerals now, you know? They are expensive. We have bills too. We can sell bush food to get money for these things" (MF, NT).*

The family group opposed to selling bush foods had alternative economic activities from which they could derive income and thus for them, perhaps it was much simpler to be able to maintain a separation between their 'worlds.' For others, as expressed by the response of 'MF' above, where there was no alternative source of income, some people were thinking differently about the ways in which 'country provides.' While this interpretation of differences in response is speculative, it does illustrate the range of viewpoints that might be encountered in relation to the development of the bush foods industry amongst

different Aboriginal peoples. While there may exist a cosmology that might be broadly shared amongst different Aboriginal peoples, understandings and interpretations of such a cosmology may find different forms of practical expression. No 'pan-Aboriginal' expression of cosmology can, nor should be, assumed.

5.5.2.1 Trading Bush foods

Where people were already engaged in selling bush food, or amongst those individuals and groups who had considered it, knew about it, or were keen to start, views about the ways in which this was done, or could be done were expressed quite strongly. There were definite ideas about the processes associated with buying and selling bush food. 'Trust' was a strong theme that emerged from the data. As with responses to earlier questions, 'respect' was a common theme in relation to selling bush foods.

> *"People would need to know where that food came from. It should be properly labelled. It is about respecting where it came from and those language speakers" (VD, NT).*

People talked about the desirability of dealing with people they knew and trusted, and who knew about them. This was expressed directly as people needing to be 'trustworthy' and indirectly as 'people need to do the right thing,' 'they need to be interested in our food,' 'people we know' 'people who respect us.' When asked why this was important, the responses ranged across a number of themes, but were primarily related to 'right and wrong' ways in relation to country:

> *"People [who buy our food] need to know that we cared for that properly. They should know we picked it properly" (RG, NT);*

> *"They need to know where it came from, whose country" (PT, WA);*

> *"That is not just rubbish food. They should know it is good food" (DD);*

> *"They are going to do the right thing too, because we don't want people to get sick from that [food]" (RB, NT);*

> *"Sometimes they come when we can't pick any [desert raisin]. We don't have any for them then" (AL, NT).*

In this instance, the woman was referring to her experiences of not having any desert raisin for a trader, because she and other women had been unable to go harvesting. She explained that someone had 'finished' (died), and that 'everyone was in Sorry Camp.' When this particular trader arrived, there was no desert raisin, and effectively the journey to the remote Aboriginal community had been made for no financial return. However, no mention of the trader being upset was made and the implication was that he understood exactly why there had been no desert raisin harvested and was accepting of this. Thus, this last comment in particular reflects the value of the relationships the harvesters in this case have with their buyers. It may be inferred that, in at least some cases, buyers understand the complex cultural imperatives governing bush harvest.

In his work on governance relationships in remote Aboriginal settlements, Moran (2008) describes the intermediary role performed by what he calls the 'trusted outsider'. In Moran's conceptualization, the role of 'trusted outsiders' was to act as agents in intercultural exchanges between local people and distant governments. The people who fulfilled such roles were accepted in remote Aboriginal communities and had usually built up relationships with local people over lengthy periods in which they had proven to be effective and trustworthy in navigating the intercultural space between 'local insiders' at the remote community and non-local 'outsiders.' This idea of 'trusted outsider' also appears to be relevant in relation to trade in bush foods. In the NT for example, relationships between traders and harvesters have been built up over a period of thirty years (as described in the previous chapter, and illustrated above) during which the traders have developed a deep understanding of the cultural responsibilities of the harvesters and their relationship to their country, and the ways in which this might impact what 'product' (in the form of raw fruit and seeds for example) they are able and not able to supply to the traders, and when they might do so. The bush food traders fit Moran's description of 'trusted outsider.' For the people interviewed in this study, this notion of 'trusted

outsider' was very evident as a requirement and a prerequisite for selling bush food.

The importance and value of relationships was a key theme that emerged when people were talking about the buying and selling of bush food. As well as highlighting the importance of trust in terms of others who might buy bush foods, people talked about how the selling to these people would take place. A strong preference for cash payments was expressed by those already selling, or those who would like to sell. When asked why cash was preferable, people spoke about how easily it could be shared and the immediacy of payments to individuals[9].

> *"It is better if I get paid straight up, then I know how much money I have" (AA, NT).*

Interestingly, while a broad preference was expressed for payments in cash and to individuals, the decision-making aspects of trade were seen to be the prerogative of family groups. In response to questions about decision-making in relation to which bush foods could be sold and how much of these could be sold, people also spoke about how this would be discussed with 'Elders and family' and that all would be involved in this decision-making. When asked about pricing for bush foods, again, the majority of respondents also talked about this being a decision that would be made collectively after consultation and discussion.

5.5.2.2 Cultivation of Bush foods and Developing Bush food Enterprises

One very interesting idea that emerged from discussion about bush foods as commodities lay in the area of cultivation. For the most part, the people engaged in the study were bush harvesters. Nonetheless, a question about whether or not bush food could be grown to be sold was asked. Generally, people didn't think this was a good idea.

Responses centred primarily on the notion that country was already providing.

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[9] In remote communities, funds are not always easily accessible electronically, except through agents, such as the community store.

> *"…if something was meant to be growing there, it already would be" (RG, NT).*

Other responses included:

> *"No need to grow it, plenty there already" (DD, WA).*

People also felt that if something was cultivated, it wouldn't be as 'good' as that which grows naturally in the landscape:

> *"Won't taste the same" (MF, NT).*

For others, the idea was already known, but seen to be unsuccessful:

> *"Yes, people have tried that in some places. No good really. Needs to stay in its own environment. Maybe it could be done where it [is] already growing, but it wouldn't be the same. Those plants wouldn't belong there" (JN, NT);*

> *"Perhaps, but you could only do that from seeds you got from there" (RG, NT).*

When asked whether they would consider cultivating bush food, the response was overwhelmingly that they would not.

> *"That is not our way. We are not farmers. Too strong a spiritual connection – it [bush food] is like the 'flesh of me' so putting seeds in the ground is not 'of me'" (JN, NT).*

During the course of the interviews, discussions about cultivation often led to further discussion about other forms of bush food 'enterprise.' One idea that was raised for consideration was the development of enterprises which involved incorporating bush foods into cultural tourism activities. This was articulated as taking people out on to country and preparing food for them as part of their tourism experience. Some responses around this idea included:

> *"Maybe we could do that here. The Ghan [train] stops here for a long time. We could prepare food for them and tell the story about it. People would know about the food then" (GS, NT);*

> *"Would have to be the right people there whose stories they are. They can tell them. Some of that knowledge is just for us though" (DD, WA);*

"Tourists come here now, and they ask questions but they don't pay. Maybe we can cook bush food for them and show them how we do it. We could tell them about where that food comes from" (AD, WA).

The themes and keywords and the subsequent coding drawn from the analysis relating to the financial aspects of bush foods, cultivation, enterprise development and trade are summarized in Table 3.

Table 3: Preliminary Coding Related to Bush Food Trading and Cultivation for Commercial Use.

Common Themes and Keywords	**Preliminary Coding**
Buying and Selling Bush Foods	
Selling is a new idea Family would have to decide if ok Family would decide how selling could happen Cash payments work best Can't sell bush foods because it would be taking more than you need Country will provide Sometimes need money	Wrong way/Maybe/OK Sufficiency Balance Care Caution Relationships to country

Trading and Transactions	
Important that people know where the food comes from and who cared for it People would need to know that it is good food Need to know who is buying it and what they will do with it Where will it go? We would need to know that people are using it properly We would have to trust those people buying it	Belonging Quality Right Wrong Law Specific Actions 'Right' people Trusted people / Relationships Reciprocity Care Respect (for food) Control
Cultivation for Commercial Use	
Bush food is already growing Plenty there already Family would decide Have to ask Elders Doesn't work Grow what is already there Food belongs where it grows already Wouldn't be as good	Right Wrong Law? Family decision-making Specific Actions Belonging (of food in country) Quality
Enterprise Development	
Family would have to decide how/where/when On-country	In-situ Right/Wrong/Law Control Legitimacy Processes Actions

5.5.3 Data Recoding

Following the preliminary analysis and coding, data were reorganized and re-coded for summary analysis, using focused coding techniques. The results of this secondary analysis are presented in Table 4.

Table 4: Focused Coding

Keywords and Themes	**Preliminary Coding**	**Focused Coding**	**Value Concept Descriptor**
Respecting family, culture, law, country, ancestors Caring for country; family; ancestors Caring for country; family; ancestors Looking after country; family Doing things the right way; Always the same; Need to know people using food properly; people need to know food was cared for properly; Need to know where food goes;	Respect Right Way Knowing Law Punishment Reward Looking out for Family Timeless Control	The ways in which people, including those in the case-study and those with whom they interact are important. How actions are undertaken is important.	Actions
Being part of country; country is part of us; belonging in country (people, food, all things) Emotional	Knowledge Belonging Identity Connection Relationships Law	'Everything' arises from connection to country, including law, relationships and identity.	Country/Land /Identity Bush foods as subjects also holding identity that is validated by

attachment to country Caring for country; crying for country; country is important to us; country means everything to us; country takes care of/provides for us; always there; Ancestors in country Food belongs in country; in-situ development	Normal Reward Punishment Survival Balance	The land is important and is the space of interaction. Land provides 'context' and is the primary frame of reference from which all else arises. The land is essential in concepts of both survival and balance.	cosmology arising from worldview
Family decision making; ask Elders; family decides how/when/where selling might occur; need to trust people buying food; need to know who is buying and what they will do with it;	Relationships Reciprocity Trust Family Knowledge / Law Legitimacy	Relationships are all-important. Relationships are the 'glue' which supports the ways in which actions are framed and enacted. Concept of 'family' and 'other.' Relationships are built on trust, especially those relationships outside family.	Relationships/ Interaction

Selling; not selling; cash payments; need money; people need to know how to use food properly;	Quality Right and wrong way/Maybe/OK Sufficiency Balance Care Caution Relationships to country Family	Selling bush foods was a new idea for many. Selling framed in terms of 'right' and 'wrong' and these terms is a product of worldview. Care and caution as well as balance relate to both relationships with family and others as well as relationship to country. Care and caution relate to the manner in which actions are undertaken. Quality is about recognizing both the monetary value of bush foods and the perceived quality of the food itself. Bush foods can be 'family' too.	Bush food as commodities / objects Relationships as enablers and disenablers

From Table 4 above, these expressions of value can be seen across four distinct domains that can be summarised in the following manner:

- Value arises from remote Aboriginal people's interactions with their countries (in which bush foods are situated) and the 'land' and the manner in which people speak about and interact with it is both the symbolic and actual expression of that value. For example, what arises in the land may have been/may already be/could in the future be animate and/or inanimate, representing a dynamic interplay between cultural conceptions of past, present and future.

- Value arises from the actions that remote Aboriginal peoples take in relation to other people and to what arises within their landscapes. The manner in which all actions are enacted ('right' and 'wrong') arises from the Law, which in turn arises from the land and is specific to that place.

- Value arises from the relationships that exist between people and between people and other 'objects' and 'subjects' (including bush foods in both domains) in their life-worlds;

- Value that is monetary in relation to bush foods arises from the specific, objective construction of bush foods as commodities.

5.6 Discussion

Place-based identity and the centrality of the notion of place in all aspects of life have been expressed strongly in this case-study and have important implications for thinking about existing value chains incorporating the participation of remote Aboriginal peoples. Value chains, with their attendant focus on objects as commodities, have been developed from within a different ideation to that expressed in the place-based identity of remote Aboriginal peoples. Is it possible that a value chain as it has been developed and the ways in which it is understood to exist as a value chain might accommodate different understandings of bush

foods, beyond their focus as commodities? What emerges clearly from this case-study is the existence of domains arising from within a non-western cosmology that see bush foods as much more than commodities to be traded. This can be clearly seen throughout the coding process, right from the initial coding of the data, where the most consistent expressions of value were non-monetary. Bush foods were seen as an intrinsic part of people's cultural and spiritual attachment to their land, or 'country' and their value was primarily subjective. Indeed, the consideration of bush foods as commodities (objects) needed to be pursued by the researcher as a specific concept in the data gathering, in order to garner a response in this domain. Rather, bush foods were seen as part of the broader landscape within which people placed themselves, and imbued with identity in the same manner that people were imbued with identity. Thus, it can be argued that they hold an intrinsic and subjective (specific and contextualised), rather than an extrinsic and objective (detached and de-contextualised) value in remote Aboriginal people's lives.

Turner (2010) poignantly describes her understanding of what country (and the 'objects' therein) means:

> *"People really cry for it if they see a tree chopped down. It breaks their heart* – mape-arle angkeme *"*ay, Arne Akngerrepate atnyene-arle*, it's part of us". They cry bitterly when they see one of their own Ancestor Trees that's been fallen. And the* iwenhakweye ilerle*, they make a protest and they ring up and complain. "That's just an old tree", the whitefeller might say, because he doesn't really know what it is (Turner, 2010, p. 19).*

How do western ideas of commerce and the limitations imposed by considerations of 'objects' in the landscape as merely commodities in a value chain fit with such understandings of identity?

If, from a western perspective, one 'doesn't really know what it is' as Turner (2010) suggests, it follows that one also won't understand what bush food means from within a different worldview that sees it as much more than a commodity.

Any meaningful measurement of the 'value' implicit in this worldview then must be allowed to emerge from within this different worldview. Turner talks about the difficulties Aboriginal peoples face in trying to articulate for outsiders the precise significance of their relationships in country:

> *'…And that's how many, many things we as Aboriginal people have never described. Because it's really hard to describe to others the picture that we've got in our head. If they can't see that good picture, then there's no answer. Sometimes non-Aboriginal people go away with no answer then, and we're left with no answer as well' Turner, 2010, p. 19).*

Both Rose (1996) and Bradley (2008) also highlight the connectedness of all things in Aboriginal cosmology including time and space, and point to the difficulties in articulating these insights and perceptions within western worldviews. In particular, Bradley (2008 p. 636) points to the challenges of understanding and explaining attachment to country and in defining 'objects/subjects' and activities within a non-Aboriginal paradigm:

> [these are] *"…defined solely in terms of functional or material outcomes, as the object of practice, and only sparse (if any) reference is made to the particular social perceptions that inform both the historical and the contemporary understandings of these activities."*

The critical point here is that what may be seen as and imbued with particular meanings according to a particular worldview - e.g. bush food as commodities/ objects from within a western worldview - may be viewed as sources of quite different and dynamic meaning and of metaphor from within an Aboriginal cosmology (Bradley, 2006; 2008; *with* Yanyuwa Families, 2010). As the responses in this study suggest, the people interviewed imbued bush foods with such dynamic, cosmologically-based meanings, and ones to which pragmatically-minded Western-educated individuals would struggle to attune themselves. The importance of country and of 'belonging' – not just of people but of 'all things' - was very strongly emphasized by participants. Bush food was not seen or described solely in terms of 'functional or material outcomes' as Bradley puts it,

but rather in a richer, more holistic and definitely social way. Perhaps one might think of this as an eco- rather than ego-centric worldview, because 'all things that belong' are considered important in the landscape, as are the relationships between them, regardless of whether 'all things that belong' are animate or inanimate. Within the context of this Aboriginal worldview, people, as individuals, were not accorded any special place. Rather, they too were considered 'part of country'. This form of thinking seems alien to those reared in a worldview in which 'God' endows humans with a special place in nature, giving them stewardship over all other species, and the right to dispose of those species as they see fit. Such understandings of identity and belonging in place expressed in this case-study were clearly derived from historical perspectives. People talked about the 'knowledge handed down from Ancestors' and 'knowing the Law.' Behaviour, and knowing what this entailed in relation to caring for country, which includes caring for and thinking about bush foods and all else in place, was expressed as an important component of identity. This was expressed in terms of 'taking responsibility' as part of one's wider relationships with all things within country.

Expressions of 'value' articulated in this case-study clearly extended beyond economic considerations of bush foods as simple commodities, and this supports the findings in Chapter Four. While some people in the study had thought about and were able to articulate their thinking about the commodity value of bush foods, in all cases, this was overlain with socio-cultural meaning that is derived from a different understanding of value. For the overwhelming majority of participants in this study, bush foods held value that was intrinsic to their existence as a natural part of living in and feeling connected with, a specific place. Bush foods were valued for what and where they were, and in some cases for *who* they were or might have been, or even perhaps, who they could become. The Aboriginal notion of 'country' and all that is in it, was spoken about as a westerner might speak about living family, in the same manner as Bradley (2008) has articulated. 'Country' and what was seen as part of country, was not objectified. This understanding and expression of identification with country was 'taken for granted' or implicitly understood knowledge for the people who took

part in this study, articulated from within a worldview which sees such things as 'normal.'

For remote Aboriginal peoples then, there are alternative sources of 'value' that exist in relation to bush foods, and that once properly and richly conceived, such alternative value encompasses much more than the economic value that bush foods hold as commodities traded in the context of the bush foods industry. People in this study have articulated their understandings of value quite clearly.

Value chains on the other hand, are a construct formed from within a Western, and especially colonial understanding of 'landscapes' as objectified places that harbour either resources to be used or environments to be protected (Adams & Mulligan, 2003). From within this Western worldview, it follows that constructions of what is the 'taken for granted' constitution of a value chain will also be informed by this Western worldview. The value chain literature clearly demonstrates that the notion of 'value' is universally recognised and measured as an economic attribute in value chains. 'Products' are objectified as expressions of economic value. In such an environment, tools to analyse and assess chains to identify and optimise sources of 'value' continue to proliferate and develop, as Neilson and Pritchard (2009) highlight. It follows that *how* we measure what it is that we are measuring, has also incrementally shaped and defined our chain models to become the standardised regimes of representation that we currently understand to be 'normal' and, from within that worldview construct, valid. Figure 12 highlights the different 'subject'/'object' domains and the different forms of value associated with each.

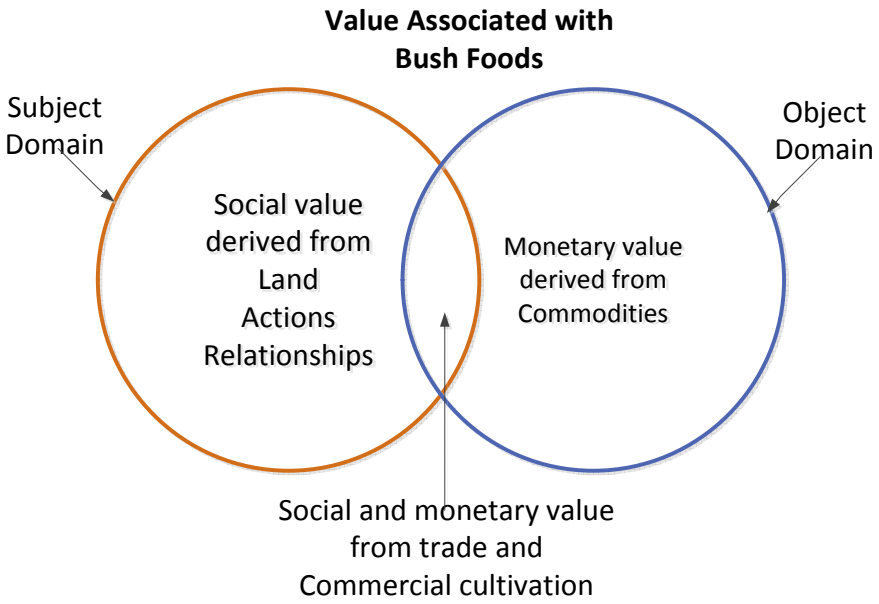

Figure 12: Subject/Object Value Construct in Relation to Bush Foods

For some remote Aboriginal peoples who do not currently participate in the bush foods industry, the value derived from bush foods sits exclusively in the 'subject' domain. For other remote Aboriginal peoples who trade bush foods, considerations of value overlap between subject/object. For other, non-Aboriginal actors in bush food value chains, bush foods sit firmly in the 'object' domain. In consideration of value chain renderings, the value associated with the 'subject' domain is not currently represented.

While contemporary value chain tools may differ in their design and application, they are universally constructed to fit the template of norms that constitutes our existing understandings of value chains, that is, that such chains describe and define economic structures. It could also be argued that to attempt to measure anything other than economic value and/or those things which impact upon that value, is to broaden the concept of what constitutes a value chain and thus falls outside these current standardised regimes of representation. In other words, challenging what constitutes a value chain and what and how 'value' is defined and measured may represent a completely new phenomenology that is unacceptable in the (constructed) norms of current value chain research.

However, a counter argument can be made, in that there are existing value chains in which remote Aboriginal peoples are participating, and that as highlighted in

Chapter Four of this thesis, these chains are seen to be in need of 'improvement' because, viewed from a predominantly economic perspective, some level of 'failure' has been seen to be occurring. Indeed, as has been highlighted elsewhere in this thesis, an entire body of research was developed to consider ways of improving economic returns to Aboriginal peoples participating in these value chains. The researcher posits that this need for improvement lies not in considerations that are simplistically limited to economic return, but requires a change in thinking about firstly, what constitutes value in these value chains, and secondly, how such value can be considered and incorporated in the pursuit of 'improvement' strategies. In so doing, a more holistic picture of value might be drawn, one that is inclusive of different worldviews and thus one which valorises different, but co-existent constructions of value. In this manner, we might, in the context of bush foods and remote Aboriginal participation in the bush foods industry, begin to deal with the 'cognitive apartheid' described by Cobern (1996) in the introduction to this thesis. Recognising that there may be different understandings of value is important, because in existing value chain models, if economic considerations are the only considerations for 'improvement' strategies, then other forms of value that are arguably more important to some actors in the chain may either be neglected, or worse, perhaps damaged by such strategies. It is clear that bush foods have differing forms of value for different actors, dependent upon whether the bush foods are perceived as 'objects' or 'subjects' or as both. The idea that bush foods can be considered from a subjective position in relation to their placement in a value chain is a new one. Such renderings of bush foods as 'subjects' will require a new kind of framework through which different forms of value related to bush foods' status as both 'subjects' and 'objects' can be considered. Theoretically, such a framework would occupy the overlapping space in Figure 12. Chapter Six considers how such a framework might be developed.

5.7 Chapter Summary and Conclusions

This chapter has presented the results of research undertaken to more deeply explore the notion of 'value' and the meanings this has for remote Aboriginal peoples in relation to bush food.

The chapter has articulated this alternative value across four domains that can be summarised as 'Land,' 'Actions,' 'Relationships' and 'Commodities.' The research presented in this chapter also confirms the findings in Chapter Four, in that the alternative forms and sources of value that have been articulated, are unable to be captured in conventional value chain analysis tools, as such constructions of value sit outside the reach of conventional value chain tools.

From a more abstract, theoretical standpoint, the two categories of 'Subject' and 'Object' have emerged from theoretical coding.

Chapter Six:
Case Study Two, Part II: The LARC Value Framework

6.1 Introduction

In the previous chapter, a case was made for developing a new way of conceiving value in value chains in which remote Aboriginal peoples participate.

The work articulated in Chapter Five found there are four domains from which the 'value' placed upon bush foods by remote Aboriginal peoples arises. These four domains have been summarised as 'land,' 'actions,' 'relationships' and 'commodities' (LARC). Also articulated in this chapter was the concept of 'subject'/'object' value, as a way of theoretically categorising social and economic forms of value.

The purpose of this chapter is to consolidate the findings from Chapter Five, in order to develop a value framework that is able to consider the four domains in which value arises as a means of identifying where alternative forms of value need to be considered in value chains. Such a framework could then be used alongside other, conventional chain analysis tools in the analysis of value chains in which remote Aboriginal peoples are participating, so that alternative, non-economic forms of value are not lost or not considered.

The chapter begins by further articulating the four value domains. These value domains are then conceptualised as the LARC Value Framework. The generic bush harvest value chain first analysed using Netchain Analysis in Chapter Four is then re-examined in light of the new understandings of value subsequently articulated. The chapter concludes by reflecting on how the LARC Value Framework might be thoughtfully applied in further research with remote Aboriginal peoples.

6.2 Reframing Value

6.2.1 Land

Place-based identity through attachment to country is a consistent theme that has been referred to frequently throughout this study and was most strongly highlighted in Chapter Five. Such identity in place can be seen to contextualise all else. Participants interviewed in the work reported in Chapter Five have expressed that 'people and all things' (Dobson and Walsh, 2009) are situated firmly in place, belonging in particular spaces. What is also evident is that it is from one's 'country' that Law arises and that it is the Law which drives cultural imperatives associated with how all things interact and relate in 'country.' The power and importance of the land as a place of meaning as expressed by those in the study can thus be seen as a primary consideration in seeking to identify alternative forms of value. Bush foods have cultural and spiritual value that arises from their 'belonging' in country. Value is also attached to the cultural responsibilities that people hold in relation to caring for bush foods and all else that belongs in 'country.'

The idea that place, place-based identity and attachment to country are important in the lives of remote Aboriginal peoples is not new, and indeed this is strongly and consistently reflected in the literature (Alyawarr Speakers from Ampilatwatja et al., 2009; Bain, 2005; Bannerjee & Tedmanson, 2010; Basso 1996; Bell, 2002; Berkes, 2008; Rose, 1996, 2000, 2007; Boroditsky & Gaby, 2010; Bradley, 2001, 2008, 2010; Drahos, 2011; Mearns, 1994; Flood, 2006; Lourandos, 1997; Ross et al., 2011; Stanner, 1979; Walsh & Douglas, 2011).

Land thus gives rise to both economic (whether this is monetary or non-monetary) and non-economic value. Some of the ways in which this socio-cultural value that is derived from the land and from belonging to it have been expressed in this study include: *Spirituality; Law; Culture; Family; Health and Wellbeing; Sacred objects.*

6.2.2 Actions

'Actions' define the manner in which interactions between people occur, i.e. the behaviours that are exhibited between people. In the context of the findings of this study, 'Actions' may also be seen to encompass the manner in which people interact with other aspects of their life-worlds, including other animate and inanimate 'beings.' For some, those 'beings' might include mountains, rocks, waterholes, plants and animals. The land and itself may be viewed as living and imbued and infused with emotions and feelings. This conception of relationships, which can exist between 'people and all things', is also not new. For example, Bradley captures the very idea in the title of his work 'When a Stone Tool is a Dingo.' Bradley argues that in order to understand an indigenous purview of the land and what it means one must move beyond looking at geological features and even ecological processes. He argues instead for an examination of the subjective and emotional interactions of people and their land. Further, such expressions of subjectivity might be accounted for in Western, scientific terms as 'imagined phenomena' rather than the expression of an engagement with the concrete and 'real' world that they are for indigenous peoples (Bradley, 1999; 2008).

In the context of bush food harvest and trade, people articulated and emphasised the importance of particular behaviours that are driven by cultural imperatives. The manner in which harvesting takes place, for example, with the requirement for particular people to be present, for food to be picked in the proper manner and for the plants to be treated with respect were repeated themes. Both Dobson & Walsh (2009) and Turner (2010) have highlighted this aspect of harvesting and especially of according respect to plants.

Other actions (specifically in the context of trade) might include how transactions are undertaken, and with whom. Trust and the important role it plays in relationships was clearly expressed in the study. Even in those cases where people had no experience in the commercial aspects of bush food, their consideration of selling as a potential activity included comment about how this might occur. These considerations were strongly themed around dealing with 'people we know' and 'finding people we trust to help.'

Ceremony too, while not articulated specifically by those interviewed in this study, is another area in which actions are particularly important. Rose (2007) describes in great detail the specific (and gendered) roles and behaviours (actions) expressed in 'dancing up' country. Making rain, as articulated by Banjo Morton in Alywarr Speakers from Ampilatwatja et al., (2009) was also described in terms of the correct actions to be performed by specific actors.

Taking responsibility was very strongly expressed in this study and this was articulated in terms of an active rather than a passive expression of that responsibility. For example, the actions taken in caring for country as both nurturing and stewardship were expressed as important to the people in this study. These actions of nurturing and stewardship and the manner in which they were performed were described as cyclic and dynamic in nature. People most often expressed the idea of 'active' and dynamic caring by articulating the consequences of 'right' and 'wrong' actions. For example, caring for country in the 'right' way, meant that country would, in response to such actions, provide what was required to sustain itself, and all who were part of that country, both animate and inanimate. In contrast, if country was not cared for, or treated in the 'wrong' way, then country 'could play tricks' or with-hold sustenance. Country, as well as people, was imbued with agency, emotion and feelings. Actions, and their performance, were thus not restricted only to people.

'Actions' then, give rise to both socio-cultural and economic 'value.' Given that *both* of these forms of value are important to remote Aboriginal peoples, then *all* actions from which value is derived, must be visible in structures in which remote Aboriginal peoples engage and their operational manifestations. Clearly, one example of such structures is the value chains in which remote Aboriginal peoples are active. Consideration of only economic value derived from actions, or of how actions impact on economic performance alone in these chains, will fail to recognise the alternative forms of value that are important to Aboriginal peoples. Further, where considerations of actions are limited only to the actions

of people, such considerations will fail to recognise the value placed upon the subjectivity that remote Aboriginal peoples attribute to country.

6.2.3 Relationships

The 'relationship' domain encompasses the nature of the interactions between people, but not solely as 'interdependencies' as conceived in the NCA framework, or other commodity network analytical tools. That is to say, in our current understandings of these tools the relationships are considered in analysis inasmuch as these relationships are seen to impact upon the economic value that is the focus of such tools. In this study, people have articulated that relationships hold an intrinsic value that is non-economic. Such relationships between kin, for example, were expressed as being vitally important. Such understandings of the value of familial relationships and the obligations and responsibilities associated with such relationships in Aboriginal society is also well documented in the literature (see, for example, Bell, 2002; Elkin, 1954; Hoogenraad & Thornley, 2003; Keen, 1988, 2004; Wafer, 1982).

In this study, people clearly articulated that relationships also exist between people and 'things' both animate and inanimate in the landscape and that value may be derived from such a relationship. For example, one person in the study in discussing their thoughts about the idea of planting bush food and reflecting on their relationship with existing bush foods in their country: *'Too strong a spiritual connection – it* [bush food] *is like the 'flesh of me' so putting seeds in the ground is not 'of me.'* Clearly, this person was reflecting on an intimate relationship with their country and that this was vital to them. In another example, one person reflected that 'trees could be ancestors' and another person, in thinking about selling bush food, described selling the food as being like 'selling her own son.' As with 'actions' so too, 'relationships' have meaning for remote Aboriginal peoples that moves beyond the idea of relationships existing solely between people. For remote Aboriginal peoples, relationships can encompass animate and inanimate 'things' as well as people. In contrast, there is currently no conception in our 'standard' representations of value chains that an intimate relationship might exist between an actor or actors in the network and

the commodities represented in the value chain. In value chains, relationships exist between actors in the chain. Further, the value of such relationships is considered in value chain analysis, only inasmuch as the state of the relationship impacts upon economic value in the chain.

Relationships can be described as 'enablers' because in part, they provide context in which and through which actions occur. For example, the relationships between the harvesters and the traders described in Chapter Four are built on understanding and respect. Within this respectful relationship, the traders are able to recognise the importance of cultural imperatives and the value that is derived from these by the harvesters, and thus 'act' accordingly, in not exerting pressure on the harvesters to supply fruit when this is culturally inappropriate for the harvesters to do so. From the perspective of relationships between people and 'objects' the same element of 'enabling' is evident. It is through the relationships that people have with their country, for example, that determine the nature of their behaviours towards objects within their country.

In the context of value chains in which remote Aboriginal people are participants, relationships between actors in a value chain, as well as between actors and other 'objects' that are important to them need to be considered as potential sites for enabling both economic and socio-cultural forms of value. Failure to consider relationships from the perspectives of their function as enablers of both economic *and* socio-cultural value may negatively impact the socio-cultural value that is derived from the relationships that remote Aboriginal peoples consider to be important to them.

6.2.4 Commodities

The 'commodities' domain fits most easily within existing models of production systems. This domain incorporates the products themselves, e.g. in the case of the bush tomato chain examined in Chapter Four, the bush tomatoes as commodities. Commodities give rise to economic value.

Figure 13 provides a visual representation of the LARC Value Framework illustrating where value is derived in each domain.

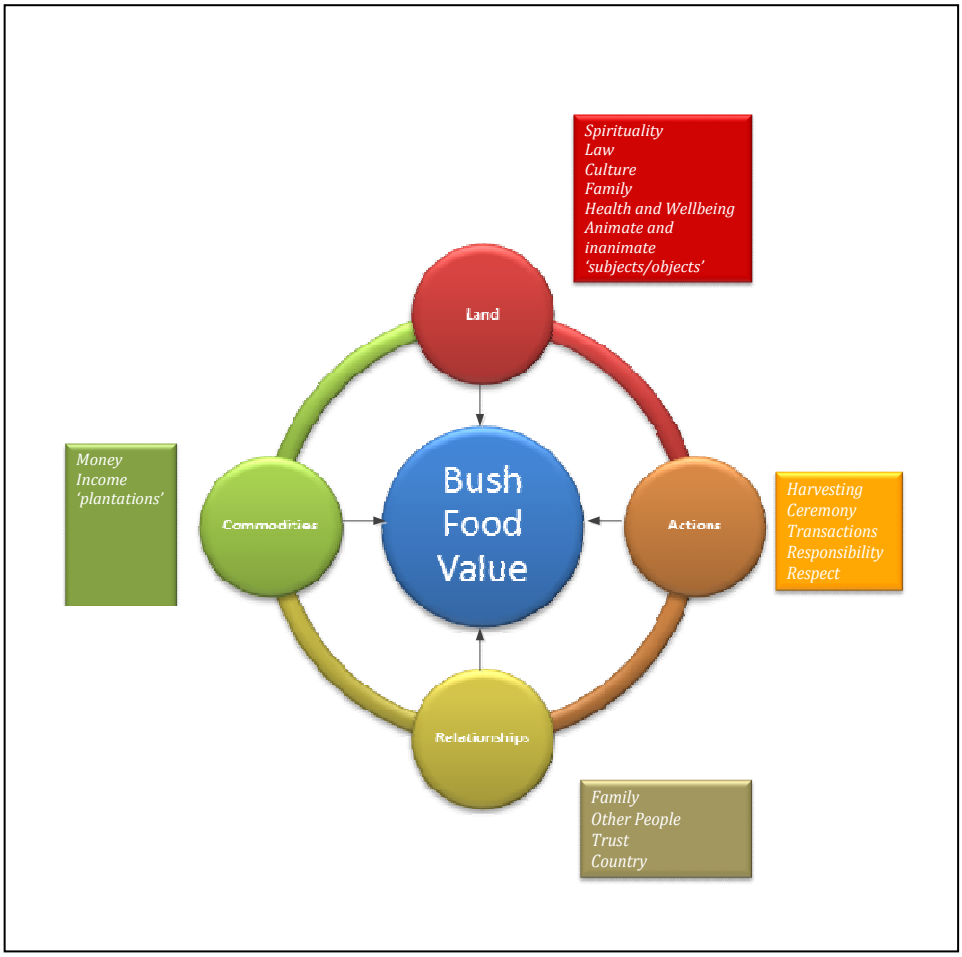

Figure 13: LARC Value Framework

6.3 Applying the LARC Value Framework to the Generic Bush Tomato Chain

Together, these themes of Land, Actions, Relationships, Commodities (LARC) can be thought of as domains, which, when considered together, might be used as a framework for categorising 'value' in relation to bush foods, in their functions as both cultural icons and cash commodities. The framework enables the incorporation of different representations of 'value' that might be both subjective and objective and arise from differing worldviews. Such subjective and objective representations are not captured by other value chain analytical tools or processes.

If the LARC Value framework were to be applied to the value chain previously analysed in Chapter Four, *alongside* the conventional NCA framework, how might the alternative forms of value be identified and categorised?

6.3.1 Land

Firstly, let us consider the 'land' domain. The bush tomatoes (*katyerr*) are found in country, and are recognised as 'belonging' there. The harvesters know exactly where the fruit might be found, and when. As the researcher was told on one harvesting trip, '…*they* [katyerr] *are good to eat and fill you up. We have always eaten them. This is our country and they belong here.'* Thus, the *katyerr* is clearly part of the 'land' value domain and has a spiritual value that arises from this belonging. *Katyerr* is also an expression of 'country providing.' It is subject to the Law and the cultural imperatives that arise from its belonging in country. Eating *katyerr* also promotes health and well-being, according to the harvester statement above, and in the observations of the researcher on other harvesting trips, where this belief has also been expressed. Such expressions of wellbeing and 'being strong' are considered important not just as they relate to the individual being well, but also in the broader context of maintaining the health of country, of which humans are a part (Bradley, 1999). So, being well and staying well is also, in a sense, part of one's responsibility for caring for one's country.

6.3.2 Actions

With regard to the 'actions' value domain, the women have cultural responsibilities in relation to the *katyerr*. The harvesters' actions in relation to harvesting the bush tomatoes are informed by cultural imperatives and the subsequent responsibilities attached to these imperatives. The importance of these actions was clearly expressed in the statement '*We will go harvesting today, because it is the right time. Everyone is here, too and we know where to find some katyerr. It might be on [name]'s country or my country. Could be some there. All the kids are coming too. We are not sure when [name of trader] is coming, but we'll have some for family and some for him if he comes soon. He pays each of us for the katyerr we pick and then he goes"* (JH, NT). The actions that reflect the cultural imperatives of the women are that they will 'go together'

thus ensuring that everyone who should be present for harvesting to occur on particular countries is present. Additionally, the children will accompany them, maintaining the kinship ties to country, and passing on knowledge, as is required under the Law – thus the Law is valued. Harvesting is a manifestation of caring for country and of maintaining kinship relationships, as well as an activity undertaken to gather food.

6.3.3 Relationships

In the 'relationships' domain, the relationship between the harvesters and their countries facilitates the socio-cultural value that occurs through the actions they take, and through the actions they attribute to their countries. Also in this domain, the relationships amongst the harvesters facilitate the sharing of resources and knowledge, in that they travel out to harvesting sites together and they share knowledge about where *katyerr* might be found. Relationships between the harvesters and those with whom they trade have facilitated a deep understanding of the cultural imperatives attached to harvesting, and, as indicated above determine the manner in which the traders behave toward the harvesters, in not exerting pressure on the harvesters to 'perform' in an economic sense of consistently producing a supply of bush tomatoes. Instead, the 'ad hoc' manner in which trade occurs enables the harvesters to maintain their cultural obligations.

6.3.4 Commodities

Within the 'commodities' domain, bush tomatoes are a product that is traded. Economic value is derived from the bush tomatoes. The income from the sale of their *katyerr* is valued by the harvesters. As indicated above, this value domain sits most easily with other value chain analysis tools, and it is possibly here that the LARC Value Framework intersects with other tools.

6.3.5 Summarising Value in the Wild Harvest Bush Tomato Chain

In consideration of the bush tomato wild harvest value chain, Table 5 summarises the nature of value uncovered in the generic wild harvest bush tomato chain examined in Chapter Four.

Table 5: LARC Summary of Value in the Wild Harvest Bush Tomato Chain

Land	Actions	Relationships	Commodities
Bush tomatoes have cultural and spiritual value that is related to their 'belonging' in country.	Value is attached to cultural responsibilities in relation to stewardship of land.	Development of social norms, e.g. trust is valued. The relationships provide important bridging social capital between the harvesters and the monetary economy. The 'value' is the relationship.	Bush tomatoes are a product from which economic value is derived.
Country, and the manner in which it responds to nurturing and stewardship is valued	Family groups can gather fruit together. Kinship knowledge structures can be maintained.	Relationships with cultural objects both animate and inanimate are valued.	Forward flow of resources which attract further economic value.
Value is attached to the Law, which is derived from the land.	Value (respect) arises from the actions between harvesters and traders. Current 'ad-hoc' methods of trade which produce less pressure to perform than might be seen in a more 'conventional' agrifood chain, e.g. recognition that consistency of providing supply might be	Traders develop insight into the cultural meanings of the 'product' through repeated transactions, thus further deepening the relationships. Culture is valued.	Income from the sale of bush tomatoes is valued.

	difficult within cultural		
	The Law is valued. 'Right and wrong' times to harvest, based on Aboriginal cosmology, e.g. if 'correct' people are not present or increase ceremonies not performed, may be 'wrong' time to sell harvested fruit.	Kinship and spiritual ties associated with relationships are valued. Such value is easier to maintain in current harvesting processes.	
	Health and wellbeing, arising from harvesting and eating bush foods is valued.		
	Cash payments are valued. Harvesters are more easily able to disburse/share cash with family members		

In recognising that value in the bush tomato value chain analysed is more than economic value, the LARC Value framework raises important considerations for how one might make 'improvements' to the value chain. As raised in earlier chapters of this thesis, such improvements are premised upon interventions that create, add or increase economic value. There may be significant consequences with regard to how alternative forms of value might be impacted if these improvement interventions in the value chain consider economic value alone.

6.3.6 Using the LARC Value Framework to Identify Value Conflicts

Under conventional value chain analysis, a number of issues that impact negatively upon economic value were identified in the bush tomato value chain examined in Chapter Four. For example, the harvesters selling individually to the traders have created an atomised supply of product that would be considered not cost-effective for either the harvesters or the traders, in a conventional value chain. Economic value is potentially being lost, as these costs would be added to the end product, thus decreasing returns. The most usual response to this supply issue in conventional value chain thinking would be to create a supply cooperative and to collectivise the harvest, where costs could be shared between the suppliers, in this case the harvesters. Costs would also be decreased for the traders, because they would have to expend fewer resources in collecting fruit from a single entity in a single location, than they currently do in collecting from individuals in many locations.

However, the potential consequences in relation to how alternative forms of value identified under the LARC Value Framework may be affected by taking such actions may be quite negative. Creating a formal supply cooperative over-rides the individual rights and cultural stewardship responsibilities for plants and country that are held by remote Aboriginal peoples. Additionally, collectivizing the fruit would make it impossible to identify on whose country the fruit originated, that is to say, 'where it belongs.' Thus, individual responsibility in relation to ensuring the fruit is properly respected and 'cared for' is removed.

Payments also, would be difficult to disburse without the presence of a formal management system. A formal cooperative structure also creates an expectation for a consistent economic 'performance' culture that may interfere with existing cultural obligations on the part of the harvesters. For example, if there were to be a death within the family group, then very probably no harvesting would take place until cultural obligations associated with the death had been properly observed. If a formal cooperative existed, with attendant supply contracts and formal connections to others at the downstream end of the value chain, the actions on the part of the harvesters may well be seen by others to be a 'failure' to deliver on their supply obligations. As highlighted in Chapter Four, under the present arrangements, the traders understand the cultural obligations of the harvesters and these are respected as part of the relationships that exist between the harvesters and traders. The traders' actions therefore, are performed according to the understanding that they have of the harvesters' cultural imperatives. Other buyers, without the same understandings as the traders, or who may have a higher dependence upon the income they derive from bush foods, may not so understand, and thus their actions may reflect their lack of understanding.

A further example of consequences that might arise if economic factors only are considered in the value chain examined, lie within the realm of consistency of supply. Currently, the chain depends heavily on supply from the wild that is gathered by the harvesters. Such supply is subject to the vagaries of climate and seasonal conditions. Domestication and horticultural production has long been the response in providing a higher level of control to agricultural resources. A range of input factors can be controlled, including water and soil management. Additionally, crops produced horticulturally can be manipulated through breeding programmes to produce higher fruit yields, or other consumer-demanded characteristics. Mechanised harvesting systems can also be designed, where crops are planted to suit such regimes. Post-harvest handling and pest management can also be better managed in horticultural production systems. To fix the 'problem' of inconsistent supply in the bush tomato chain, horticultural production could be developed. Crops could perhaps be grown in remote Aboriginal communities, thus 'benefitting' these groups (economically).

However, if one considers the findings in Chapter Five, this idea was, for the most part, considered quite negatively by those interviewed. The idea of growing bush food on country when country *was already providing* was considered something of an anathema, summed up perhaps in this response: '[if] *something was meant to be growing there, it already would be'* (RG, NT). To further illustrate this point, it is worth also considering the 'failure' of a major initiative in the Anangu Pitjantjatjara Yankunytjatjara (APY) Aboriginal Lands in remote South Australia. The South Australian Government announced a $250,000 project to establish market gardens in the APY Lands in 2010 to produce fresh fruit and vegetables for Aboriginal peoples in these communities and to provide employment opportunities through local Aboriginal peoples working in the gardens (Portolesi, 2010). However, to date, very little has been produced and the gardens have not been maintained. According to the APY Executive Council, there had been little consultation with people in the APY Lands about the nature of the project, and they felt that the gardens had been 'foisted upon' them by the South Australian Government (The Australian, Feb 26, 2013). The 'Anangu Paper Tracker', an online publication of Uniting Communities that has as its aim the monitoring of government commitments to Aboriginal peoples in the APY Lands, reported that the 'SA Government's market garden program was misconceived from the start.' Why was it misconceived? Could it have been a lack of understanding of the ways in which Aboriginal peoples 'value' what occurs naturally 'on country?'

It follows then, that for those interviewed in this study, and those in the bush tomato bush harvest chain, horticultural production is unlikely to be an option. The idea of horticultural production raises concerns in relation to alternative forms of value because what grows on country is already valued, and is valued from the perspective that it is seen to 'belong' where it grows. It is unclear how horticulturally produced fruit (in the case of bush tomatoes) might be valued, particularly if manipulation were to occur in the form of hybridizations created from 'crossing' plants from different 'countries', for example. Certainly, economic value might be increased from such actions, but alternative forms of value may well be lost in the process. Where would the fruit 'belong' and who

would be related to it and thus assume responsibility for caring for it, for example? Additionally, we can see from Chapters Four and Five that harvesting is done 'when it is the right time' and harvesting also follows a process that is set down in the Law. Introducing mechanical harvesting, for example, may well be seen as interfering with this process, and thus be viewed with trepidation in relation to how 'country' might respond. Again, a broader, alternative-worldview-encompassing purview of value that is derived from bush foods needs to be considered.

Clearly, there are a number of consequences that may impact on alternative value in the bush tomato value chain analysed and that therefore would need to be considered prior to any intervention aimed at 'improving' the chain. Table 6 summarises some of the issues in the bush tomato value chain examined in Chapter Four that are currently affecting the economic value in the chain (Column 1). Column 2 lists the changes that could be potentially implemented in the chain to effect economic efficiencies (and based purely on economic rationale). These potential changes have been in part identified in the value chain analysis undertaken in Chapter Four, and from work outlined in Chapter Five and in this chapter. The possible consequences of implementing the intervention are then identified (Column 3) and the LARC Value Framework rationale for considering the maintenance of the status quo, or for implementing alternative actions are outlined in Column 4.

Table 6: Possible Consequences of Implementing Value Chain Efficiencies in Light of the LARC Value Framework.

Value Chain Challenge	Possible Intervention	Possible Consequences	'LARC' Alternative View
Atomised supply as a result of harvesters selling individually to traders. This is not cost-effective for either harvesters or traders. Adds cost to the end product.	Develop supply cooperative to link harvesters to each other economically to enable them to trade as a single entity, thereby reducing operating costs for both harvesters and traders and reducing cost of end product.	Overrides individual rights and cultural stewardship responsibilities for plants and country. Impossible to identify whose country fruit is from. Payments difficult to disburse – no management system. Formal cooperative structures require consistent economic 'performance'	Harvesters have many reasons for individually harvesting, and these are firmly entrenched within cultural rights and responsibilities. Value Domains: (L, A)
Regional control of resource and resource flows (including knowledge and information) by traders jeopardises ongoing development of industry. Harvesters poorly connected to rest of chain, thus their links to external knowledge and information	Directly connect actors downstream in the chain to harvesters and 'bypass' traders, thereby creating more 'weak ties' between actors in the chain	Limited capacity to develop trust relationships with multiple buyers because of the challenges of remoteness. More buyers with limited understanding of cultural imperatives creates economic performance culture that in turn creates performance demands.	Harvesting part of holistic worldview and cosmology. 'Proper' time and place for harvesting; trade deeply embedded in strong trust relationships with traders. Trust relationships based on cultural understanding reduce pressure on harvesters to perform economically where this might compromise cultural value and spirituality. Value Domains: (L, A, R)

severely limited. Heavy dependence upon traders.			
Poor infrastructure and remoteness creates production challenges	Develop bulk storage facilities and improve transport options	Bulking up removes individual responsibility for fruit (as above)	'Remoteness' may have potential as alternative value source in a place-based model of industry participation, but this is not yet realised[10] Value Domains: (L, A, R, C)
Supply from only bush harvest limits full domestication of bush tomato, and potential for consistent supply.	Develop plantations and develop new varieties with consumer demanded characteristics; Use plant breeding rights (PBR) to protect IP (for Aboriginal growers)	Marginalization of harvesters who probably wouldn't grow fruit. Current supply from bush harvest is not differentiated as high value product. This would be unlikely to happen if supply were derived from plantations. 'Hybrid' plants don't belong to particular people and 'countries' Plants won't have proper dreaming. People won't know who is responsible for them.	The plants belong in Country and already fit within an existing governance system, i.e. Aboriginal Law; Plants are valued as they are in their current 'rightful place' and don't need improving; What will the stories be for the new plants? Will they have a dreaming? Who are they? Who can 'speak for them?' How will people relate to them? Value Domains: (L, R,)
Value-adding does not occur in	Training e.g. Hazard Analysis Critical Control	Devalues traditional methods of picking, storing,	Fruit is already picked, cleaned and prepared within

[10] This is further explored in Chapter Nine

remote areas and thus opportunity for creating better return for harvesters is lost.	Point (HACCP); Food Standards Australia & New Zealand (FSANZ); development of value-adding infrastructure, e.g. mechanical harvesters; roasters; drying racks; vacuum packers.	cleaning and preparation that already have cultural value and meaning under Law.	existing regulatory framework, i.e. Aboriginal Law. Value Domains: (L, A, R)

6.3.7 Research Process and Questions of Worldview

As can be seen in Table Six, there are complex value associations that remote Aboriginal peoples hold in relation to bush foods. Uncovering these alternative forms of value during the research process occurred as part of that research process, and in that regard, applying grounded theory techniques was useful and appropriate. However, in reflecting upon the research process, a number of further challenges became apparent. This section now considers these challenges.

6.3.7.1 Whose Research Is It?

Ethically, the research was conducted within the guidelines of both the University of Queensland (where the candidature was begun) and the University of South Australia (where the candidature was completed). Parts of the research were further approved by the Central Australian Human Research Ethics Committee (CAHREC)[11], and all research was conducted within the guidelines set down in the DKCRC Research Protocols (DKCRC, 2006). Clearly, the research was conducted in accordance with standards that ensured it met stringent ethical requirements. The intended outcome from the development and future application of the LARC Value framework is that it will enhance knowledge and understanding of 'value' that remote Aboriginal peoples derive from bush foods. A further intended outcome is that remote Aboriginal peoples will benefit if the

[11] The work reported in Chapter 7

LARC Value framework is applied with regard to bush food value chains in which this group participates. However, the conception, development and subsequent articulation of the LARC Value framework in this thesis was clearly a product of the researcher's interpretation of what was seen and heard and then subsequently constructed. This begs the troubling question of 'whose research is it, and does this matter?'

In Chapter Three, the term 'participatory research' was used, to describe the manner in which the research would be undertaken. As articulated in that chapter, such research approaches aim to be sensitive to context and cultural difference, particularly (Fuller & Mellor 2008; Herlihy and Knapp 2003; Kindon, 1998) and that enable the researcher to be mindful of place-based connections that participants might hold (Pain, 2004). Such approaches are therefore always context-specific (J. McIntyre, 2003). Working in this manner provides the researcher opportunity to become immersed in the specifics of the data to look for themes and patterns and then to construct meaning from within the data (Johnson and Christensen, 2004). In that regard, this process of becoming immersed in the data and subsequently reconstructing meaning from it is what occurred in the study and thus fulfilled the intent to be undertaken in a participatory manner.

However, one might ask, 'What if the research was able to be *conceived* from within the worldview of research participants, rather than first being conceived by the researcher and then undertaken, albeit in a participatory manner? Would such an approach have produced something entirely different? In the context of ongoing research with remote Aboriginal peoples in relation to bush foods, and especially in broader considerations of research about questions of 'development' would such an approach that attempts to conceive the research from within the participant worldview be useful? That is to say, can the voices of the 'researched' be heard before they become the 'researched?'

Despite the potential benefits of constructing an instrument such as the LARC Value framework it remains important to continue exploring inclusive ways of

knowledge gaining and sharing, especially in light of the questions raised above, which will help inform the further development of the LARC Framework, and other, ongoing bush foods and broader 'development' research with remote Aboriginal peoples. Therefore, there is a strong argument that knowledge gathering and sharing for the purposes of 'development' with remote Aboriginal peoples should be able to be articulated from within the worldviews of this group. Further, exploring how these forms of knowledge and knowledge sharing might be incorporated into the conception of the research, and the research process is important.

6.3.7.2 What Impact Does Dynamism Have on the Research Process?

In conceiving the LARC Value Framework, the researcher has strived to understand and faithfully reconstruct the realities of what was understood to be 'true' from the perspectives of those individuals with whom the researcher worked. As articulated above, there must, nevertheless, be an acknowledgement that such reconstructions have occurred through the lens of interpretation applied by the researcher. In relation to the fundamental question posed in this thesis: 'How do you understand your world in relation to bush foods, and what does this mean to how you participate in the economic area of your use of bush foods?' there is a recognition that whatever understandings have emerged in this work are overlaid with the subjective renderings of the researcher. As stated, this sits very comfortably within the constructionist theoretical framework underpinning the work and, from that perspective, does not invalidate the findings. However, as well as recognizing that the results are interpreted, it is also important to recognise that what has been articulated has also been articulated at a specific point in time. The notion of dynamism, i.e. that we change, that our world changes, and that therefore perhaps so too does our worldview, is something which must be taken into consideration.

In the context of this study, this dynamism is very aptly illustrated by the differences expressed by Aboriginal peoples interviewed in relation to the idea of selling bush food. For one family group, the idea was abhorrent. They had never been exposed to it, and they were vehemently opposed to it. Bush foods as a part

of their life was viewed as something completely separate to that part of their life that is lived in the white economy. For them, this separation is very real, and explained from within their worldview. For example, on the one hand, they articulate that they can sell cattle 'because [cattle] have no dreaming' but to sell bush foods was expressed as 'it would be like selling [a] son.' For other Aboriginal peoples however, selling bush foods is an activity that has been occurring over the past thirty or so years, and so, over time perhaps, it has come to be incorporated into everyday experience, and has thus become 'normal.' Observing these apparent differences in attitudes does not diminish the 'value' that either one group of people or another might attribute to bush foods. Rather, it highlights differences in the way that bush foods might be viewed, across different groups and within a single group across time, and thus, the fact that dynamism is an important parameter which must also be considered in implementing models, tools and frameworks, aimed at promoting economic development for remote Aboriginal peoples.

In terms of the change that is associated with dynamism, it is important to consider how research and research development might be able to recognise factors influencing dynamism, and thus be able to be sufficiently flexible to accommodate worldviews that may be divergent, or that may change.

Again, one might turn to participatory approaches to consider research which enables dynamism to be considered. The notion of a research approach that is 'context specific' as J. McIntyre (2003) points out should be able to consider worldviews that might change over time, or that may differ across various research participants.

In consideration of both of the challenges raised in this section - of research ownership and questions of dynamism - one might ask how participatory approaches respond to these challenges. After all, the research articulated in the thesis was conducted in a participatory manner, and yet these challenges were still evident. Perhaps the answer lies in using a particular form of participatory

research, that enables both conception of the research questions and that may also accommodate changes in worldview over both time and location. Participatory Action Research (PAR) has been promoted by its proponents as one such approach, and Case Study Three, articulated in the following two chapters, turns to examining how PAR might fare as a vehicle to take forward both the application of tools like the LARC Value framework, and more broadly, further research for remote Aboriginal 'development.'

6.4 Chapter Summary and Conclusion

The LARC Value framework has been developed as an addition to existing value chain tools as a means of representing value related to bush foods harvested by remote Aboriginal peoples. Existing analytical tools focus predominantly on economic value that considers commodities as 'objects.' The LARC Value framework enables other 'subjective' forms of value inherent in bush foods to be clearly identified and made apparent where they otherwise may not be visible to those who do not share or understand the cosmology from within which the value is derived. As such, the framework may be used as a tool to bridge differing understandings of 'subject/object' value (Figure 12) that may be held by those with differing worldviews. Fully understanding where alternative forms of value lie in relation to bush foods matters a great deal where changes to existing value chains in which Aboriginal people are already industry participants are promulgated. This is so because such changes are likely to be premised upon success metrics derived from within existing value chain analysis tools which focus almost exclusively on improving economic return, that is to say, such tools exist exclusively in the 'object' realm. While improving the financial status of remote Aboriginal peoples in itself a worthy aim, to do so without consideration of the impacts of such actions on other forms of value that exist in the 'subject' realm and that are important to remote Aboriginal peoples may in fact be detrimental to the continued participation of those people in the bush foods industry. Identifying where conflicts may be apparent between different forms of 'subject/object' value is thus an important function of the LARC Value

framework. If such conflicts can be identified, then they may also be understood and dealt with accordingly.

Of critical importance and concern, will be the manner in which the LARC Value framework might be applied. The process of arriving at the findings in this chapter particularly, but the thesis more generally has created an understanding that the research methodologies one might use in continuing bush foods research should be thoughtfully considered. The participatory nature of the field work undertaken for the work produced in this chapter and the previous chapter, has provided valuable insights into the importance of more fully understanding the challenges of communicating ideas and concepts inter-culturally and the manner in which it is very easy to misinterpret, misunderstand or miss completely the importance of what is being communicated. Further, the idea of how the research might have been differently conceived from within the worldview of those who became research participants and the differences articulated from within this group in relation to dynamism are important. It is therefore important that the thesis deals with these questions. In so doing, the thesis turns its attention to the final research question articulated in Chapter Two:

'How might exploring these questions impact upon further research with remote Aboriginal peoples with regard to bush foods, and perhaps have implications for 'development' considerations more generally?'

Chapter Seven:
Case Study Three Part I - New Ways of Looking

Chapter Note: Material from this chapter appears in a peer reviewed book chapter first published in 2012. Publication details: Cleary, J. 2012. 'It Would Be Good To Know Where Our Food Goes': Information equals power? In Drahos, P. and Frankel, S., (eds) Indigenous Peoples' Innovation, Intellectual property pathways to development, ANU EPress, pp. 53-71.

7.1 Introduction

Previous chapters have examined the value associated with bush foods in both commercial and cultural settings and reflected on the complexity of where these two 'worlds' intersect for remote Aboriginal peoples. The beginnings of the extent of this complexity were revealed in Case Study One through the difficulties encountered in attempting to analyse the generic bush harvest value chain in central Australia using a conventional value chain analysis tool. This case study revealed that conventional chain analysis and chain representations were insufficient to adequately explain, define and understand the 'value' associated with bush harvest and trade for both remote Aboriginal peoples and those with whom they trade. Case Study Two explored more deeply the concept of 'value' and how it might be understood differently from within alternative worldviews that can consider both 'subject' and 'object' realms. Case Studies One and Two together have generated the conceptualization of the LARC Value Framework. The LARC Value framework is a tool intended to assist in identifying (a) other forms of value that are important to Aboriginal peoples in relation to bush foods and (b) where these sources of value might occur.

The framework may also prove useful in mitigating the effects of economic 'development' interventions that, according to the discussions of Gorman and colleagues (2008) as well as Whitehead et al., (2006), have largely 'failed.' Arguably, one of the reasons for such failure could be that such interventions

have been constructed from within a worldview dictating its own conceptions of what constitutes 'success' and 'failure' and thus do not recognize that this externally applied process is itself a product of a worldview potentially laden with white normative social and cultural meanings (Nakata, 2003). One of the concerns raised in the thesis introduction, and further articulated in Chapter Six, was the idea that research, and knowledge acquisition - particularly academic knowledge acquisition - is also a product of worldview, and thus subject to the same concerns raised by Nakata (2003).

At this point in the thesis, it is time to shift focus, to consider the question of how research for 'development' might be undertaken into the future.

7.2 Researching Research

This chapter and the next now focus on the fourth research question raised in Chapter Two:

- How might exploring these questions (Research Questions 1-3) impact upon further research with remote Aboriginal peoples with regard to bush foods, and perhaps have implications for 'development' considerations more generally?

In the context of the thesis, this is an important question to address, especially when one is mindful that the research undertaken in the production of the thesis is being conducted from within a constructionist paradigm. From this position, it is important to recognize and acknowledge that 'reality' arises out of the meanings we ascribe to our actions and interactions with our lifeworlds, and that by definition, this must include the action of undertaking research.

Chapter Three suggested that participatory approaches as promulgated by various scholars are one means of paying careful attention to cultural and context sensitivity and ensuring that the voices of the 'researched' are heard (Fuller & Mellor 2008; Herlihy and Knapp; 2003; Kindon, 1998). Throughout the production of this thesis, attention has been paid to ensuring the research undertaken was done in a participatory manner. This involved building upon

existing relationships and in paying particular attention to cultural sensitivity and place-based context and in making explicit the purpose of the research. However, is there a case for extending the notion of 'participation' further?

In the context of the bush foods industry as a potential vehicle for economic development with remote Aboriginal peoples, the application of tools like the LARC Value framework could be no different to other, externally applied interventionist model, tool or framework in that, used inappropriately, it too has the potential to be imposed upon remote Aboriginal peoples without any input from this group. Considering the ideas raised in Chapter Six, that the conception of the research undertaken in the thesis was a product of the researcher's own worldview and that dynamism is an important consideration in any ongoing research, one might ask: 'How can research be undertaken that avoids the pitfalls of imposing particular values, culture and practices? How might research participants engage, and be engaged in research that is meaningful to them?' Such research might include for example, further work on developing and applying the LARC value framework, or other tools and processes aimed at aiding interventions for development. Or, importantly, it might be about none of these! The point to be made here is that research that is conceived without the inclusion of the worldviews of people, for whom the research is intended to benefit, may provide no benefit at all. Just as western conceptions of a value chain with its view of what constitutes value has been shown to be limited and limiting, so too, might conceptions of research where the 'researched' are not part of the initial construction of that research.

This question is particularly important in consideration of Indigenous knowledge and Indigenous ways of knowing. For the most part, development research and its subsequent interventions is currently formulated from within the conventions of discipline specific and broader academic traditions and culture that can, at best, only interpret Indigenous knowledge from within established Western ways of knowing (Tuhiwai Smith, 1999). Tuhiwai Smith, from a Maori perspective, argues that these ways of knowing cannot be anything else but culturally

insensitive and colonialist. In the Australian context, Rigney (1999) has long argued that Western research continues to oppress and subordinate Indigenous Australians (p. 113). Other Indigenous scholars too, have expressed the view that there is now an imperative that research with Indigenous people should be based on Indigenous ways of knowing (Battiste, 1998; Blackford, 2003; Bocking, 2005; Cardinal, 2001; Grande, 2000; Pulitano, 2003; G. H. Smith, 2000).

In Chapter Two, concerns were raised about how remote Aboriginal 'development' has come to have a meaning that has arisen from the dominant, colonial understandings of what 'development' signifies. Chapter Two also raised the question of how 'development' might come to be understood from within a perspective shaped by shared understandings of differing worldviews as suggested by Cameron & Gibson, 2005, and Guilfoyle and colleagues (2008). This chapter also highlighted that unless such a position could be attained, then remote Aboriginal peoples would be left with little choice but to define 'development' and their roles within it, using the terms and categories imposed by the prevailing academic discourse (Nakata, 2003). If we are seeking answers to questions about what constitutes development and how to begin such a process, then we must consider the impact that worldview with its attendant assumptions brings to bear in research processes associated with such development attempts, and the research upon which such development attempts might be justified.

In considering how the idea of 'participation' might be extended in terms of research, participatory action research (PAR) has gained prominence as a research approach which takes as its mission the imperative to support and accommodate differing worldviews and different ways of knowing. PAR approaches also purport to include the 'researched' throughout the entire research process from conception to application (Reason and Bradbury 2001).

In consideration of the fourth research question raised in Chapter Two and articulated above, this chapter and the next investigate the extent to which PAR lives up to its ideals, by exploring how PAR approaches might contribute to

ongoing research with remote Aboriginal peoples. This chapter outlines something of the historical development and the key characteristics associated with the research approach that has come to be known as Participatory Action Research (PAR), as well as considering and answering some common criticisms that are made of PAR. This chapter provides the contextualizing literature for Part II of Case-study Three, which is articulated in Chapter Eight. Chapter Eight reflects on a research project undertaken with remote Aboriginal peoples active in the bush foods industry, to critically examine the extent to which the project meets its claims of being 'participatory.' The reflection is then used to continue the discussion of PAR's utility in conducting inter-cultural research with remote Aboriginal peoples.

7.3 Participatory Action Research

PAR is a research process which utilizes the active participation and intervention of the social actors who are the 'subjects of the research (Reason and Bradbury 2001). The research process is aimed at identifying a problematic social situation or existing phenomenon, understanding it, and then taking some action to rectify the problem, or change the situation. The level of participation appropriate to PAR research approaches is not simply 'involvement in' the research process, but full participation and sharing in the ways in which the research is 'conceptualised, practised and brought to bear on the life-world [of participants]' (McTaggart, 1997 p. 28). 'Involvement' on the other hand, does not imply such action or agency ownership, for as McTaggart explains; 'involvement' as opposed to 'active participation' can actually lead to the risk of co-option and exploitation of people in the fulfilment of the plans and agendas of others (McTaggart, 1997 p. 28). PAR approaches aim to integrate experience, action and reflection in the active research process, with a view to producing both knowledge that is directly useful to those engaged and working together on the research activity, and also consciousness-raising that creates empowerment (Reason, 1994).

At an ontological level, PAR views social reality, not as something pre-given or pre-defined or that is extrapolated from within a single worldview, but something

that is co-created by social actors (Breu & Hemingway, 2005; Kemmis and McTaggart, 2000). Epistemologically, PAR implies a methodological approach at the macro or 'stage-setting' level (Kidd & Kral, 2005) that favours collaborative forms of inquiry as the means for gaining knowledge and applying it (McNiff & Whitehead, 2009; Reason 1993). PAR is at once constructionist, dialogical and proactive, attempting to centralise participant and researcher values (Kidd & Kral, 2005), and falls most easily within the critical theory paradigm (following Ponterotto, 2005; Kemmis, 2009) in that such approaches include a reflective critical examination of actor practices which build knowledge (or perhaps a form of meta-knowledge) about the knowledge generated within the social inquiry.

Three characteristics are often used to distinguish between participatory research and other more conventional forms of social research. In the case of PAR, the ownership of research projects is shared; the analysis of social issues occurs at the community level; and community-based and research projects typically adopt an orientation towards community action (Kemmis and McTaggart, 2007, p. 273). Within the field of human geography in particular PAR is increasingly being seen as a preferred research approach (Kindon et al., 2007) and there are a number of examples of its use within the discipline (see for example, Cameron & Gibson 2005a; Pain 2003; 2004; Pain and Francis 2003).

7.3.1 PAR Development

7.3.1.1 Lewin

Kurt Lewin (1890-1947), a psychologist concerned with social organisation, is generally credited with coining the term 'action research' (Smith, M, 2001; 2007). His contributions are particularly recognised in the area of the study of work and workplace organisation. However, Lewin's early work was criticised by some as being too linear. Lewin's model seems to presume at the start that the initial idea could be fixed in advance, and that a simple process of fact-finding and application would or could lead to change (Elliot, 1991). Lewin's work also did not account well for differences of perception between individuals. Where Lewin recognized such perspectival differences, it was only for instrumental

reasons, i.e. inasmuch as these influenced behaviour. Lewin did not assign any intrinsic value to such disagreements as reflecting differences in worldview between actors Whilst this failure to consider disagreements might be appropriate to a workplace setting, where agreement is either assumed or imposed for the purposes of organisational coherence, failure to recognise difference is more significant in the more complex real-world social settings, for example, in the context of this study, in considerations of what might constitute 'development' with remote Aboriginal peoples.

In Lewin's theoretical conceptualization, 'development' was assumed to be along a single trajectory which was fixed, albeit waiting to be discovered. The criticism of Lewin's work as being too linear is important in the context of this thesis, as this concept of 'single trajectory' development can be seen as one of the impositions made upon remote Aboriginal peoples (often with good intentions); and this point is explored further on in the chapter.

7.3.1.2 Freire

Following Lewin's work, the further emergence and development of PAR can be seen in the critical pedagogy promulgated by Paolo Freire (1921 – 1997) which challenged the prevailing formal models of educational relationships of 'expert' teacher imparting knowledge to 'passive' student (Freire, 1970). Freire recognised the nature of 'silence' as he described it, in power relations and politics of education. The voices of those holding power as 'experts' were those most often heard. Silence and submission was thus the realm of those to whom knowledge and learning were being imparted. Freire argued that the processes of education were never value-neutral, but were always a political act, and one that served the agendas of the powerful. Operating amongst the poor in Brazil, Freire predicated his own work upon the notion that education should serve to liberate the oppressed. He further suggested that the most critical forms of learning related to understanding the power of knowledge and what attaining it could mean for the learner.

Freire's most radical idea was the notion of role-reversal in teacher-student relationships. While acknowledging that 'teachers' would always hold some element of authority, such authority should not degenerate into authoritarianism, but instead should be engaged to assist the learner to be liberated, and 'for the recovery of [their] stolen humanity' (Freire, 1970, p. 95).

7.3.3.3 Fals-Borda

At the time that Freire's work was gaining prominence in the 1970s, a growing and radical critique of social theory emerged within the social science community, originating from those theorists engaged in researching the developing world. This critique – most closely associated with the fields of sociology, anthropology, education and theology – targeted the prevailing academic insistence upon the virtues of value-neutrality and objectivity in research, and certain forms and notions of academic rigour in the pursuit of 'science' knowledge. Fals-Borda was a prominent critic of the prevailing norms in (scientifically based) academic research and argued that objective positions were impossible in a context where social researchers were confronting situations of massive structural crises, oppression and social change related to the forces of capitalism and increasing processes of modernisation in the developing countries in which they were engaged in social research (Fals-Borda, 2001). The result was a move away from notions of academic aloofness, towards personal positions enabling researchers to take a new view of knowledge. Techniques were developed allowing researchers to apply knowledge in social and political situations to effect transformation, leading to the development of participatory methods of social inquiry (Fals-Borda, 2001). The primary aims of this new epistemologywere to make knowledge more accessible to research 'subjects.' Fals-Borda's work ensured that the ideas of 'knowledge for action' and the manner in which researchers could contribute to both creating knowledge and facilitating its use were made explicit. Further, and in line with Freire's work, Fals Borda worked to help research subjects to understand that knowledge could be used as an instrument of power and control (Freire, 1970).

It is this deep-seated notion of rebalancing the power differential between 'teacher' and 'learner' 'researcher' and 'research subject' that is most often expressed as a motivation for researchers seeking to practice PAR. Baum and colleagues (2006) pay particular attention to this factor as they see the purpose of research as one of enabling action. This is achieved through a reflective cycle in which power relationships between researchers and the 'researched' are removed. In this cycle, research participants collect and analyse data, then decide what actions they should take based on that analysis. These actions are then further examined and acted upon in an iterative reflective spiral. Participants are actively involved throughout the research process in its various stages including problem identification and definition, collecting and analysing data, and applying research results (Ozanne and Saatcioglu 2008). Research participants cease to be objects but rather become partners in the research as power becomes something that is deliberately shared between researchers and 'participants.' It is this element of conscious research participation which also differentiates PAR from other forms of social enquiry e.g. the 'participant observation' approach mentioned earlier. Indeed, these same non-PAR research approaches have been employed by the researcher in the production of the research in this thesis. In 'participant observation' the research process itself is a shared activity, but there is no recognition that the research may also be a shared endeavour with common goals, with participants shaping the nature of the research and what it seeks to achieve. The difference in these positions of participant observer and participatory researcher is that under the former research paradigm, the researcher merely thanks the informants for their participation at the end of the process (Swantz, 1986) and the relationship remains defined as one between researcher and research subject, and those who are researched remain in some way objectified. Under the participatory researcher paradigm, both the process and its outcomes become jointly owned.

7.4 A New Way of Conceiving Research

For Wadsworth (1998), PAR constituted a completely new scientific paradigm in that it acknowledged the possibility of undertaking research which adopts and accommodates multiple views of reality, in contrast to the positivist view which

sees the world as having a single reality that can be *independently observed and measured objectively,* and which suggests that variables can be controlled to determine causal connections. PAR on the other hand sees the researcher as always having an influence on what is being observed and measured. PAR approaches emphasize that particular values held by researchers inevitably will influence the study (Wadsworth, 1998). PAR approaches thus seek to *centralize* researcher and participant values in a conscious attempt to both recognize and use the many different understandings of the research situation that can be brought to the situation by all participants in the research. PAR practitioners seek to engage *in* the social situations they seek to understand, not as participant observers, but fully cognisant that their presence and participation will bring to the inquiry values, norms and beliefs that will exert some influence on the study (Baum et al 2006).

In short, PAR ignores the 'rule' of passivity inherent in positivist research approaches. Rather, it acknowledges the dynamism of social realities and actively seeks to *make* changes while examining current realities. PAR proponents are usually actively driven by a personal position or stance that commits to human betterment (Reason and Bradbury, 2009). PAR practitioners accept that the trade-off between academic aloofness and full participation as simultaneously co-researcher/co-learner is worthwhile in the pursuit of knowledge that is useful to all those engaged in that set of circumstances. In all, there is recognition that PAR is more than anything else, a social movement, in which practitioners develop a life position with regard to how they practice PAR. Tandon has described this as 'making the road while walking' (Tandon, 1983). Such positions and the movement itself continue to evolve and develop (Reason and Bradbury, 2009).

7.5 Countering the Criticisms of PAR as a Research Approach

7.5.1 Validity and the 'Problem' of Subjectivity

The very 'lack' of objectivity that forms such a critical part of the value of PAR for PAR practitioners, is viewed as being most problematic for those critics of PAR who are operating from a positivist view of research. These critics

understand objectivity to be essential to defining any activity as a piece of 'research.' The positivist position underlying such critiques assumes a research paradigm which aims to move towards 'increasingly accurate accounts of the world' (Gergen and Gergen, 2009 p. 166). The possibility of forming such accounts presupposes the existence of 'facts' that can be disengaged from the contextual meanings that persons place upon events. These facts then form the content of propositions that everyone can assent to as being 'true'. Gergen and Gergen (2009) argue that to assert a position of decontextualised truth, or a truth stripped of context, is meaningless. Such 'truths' gain whatever traction they possess because they are offered to other individuals who share the worldview within which the position of truth is arrived at. Positivist models rely on achieving an end-goal of generalizable theories based upon hypothesis testing as a means of validation.

The constructivist critique of the positivistic approach to conducting social science research is that such methods typically are removed from life and laid bare of cultural significance. From this perspective, it could be argued that certain things lend themselves to scientific testing (in the positivist traditions) but that others, including particular social situations, do not. Advocates of PAR methods take this critique a stage further when they consider the moral dimension to conducting socially-based research. In the eyes of PAR practitioners any positivistic research stance has the effect of positioning science as a mapping enterprise, where the goal is the mastery (by the scientist) of his or her objects of study. Under the positivist model, knowledge is sought by studying the object to uncover all of its component parts in a reductionist manner (Reason and Bradbury, 2001). For proponents of PAR, any attempt to 'master' the objects of study or to disaggregate these into constituent parts is ethically inappropriate in those cases where the focus of research is human beings and their social dispensations (Fals Borda, 2001).

What happens to notions of research validity if we eschew a positivist paradigm in favour of PAR-based methods? The end-goal of positivist models is to generate

generalizable theories which utilize hypothesis-testing as the means of validation. According to House (1991) rather than validity existing merely as a property of research or research design, it is the interpretations, inferences and conclusions that can be drawn from a piece of work, alongside the methodological framework which has guided its production, that attest to the validity or non-validity of that work. The validation of knowledge claims in PAR can be achieved through a variety of methods, including the triangulation of observations and interpretations, and by establishing credibility for the research findings among participants in the research process. All those involved in the research process as equals will confirm or reject the research outputs. A critical point to be made here is that PAR does not attempt to make statements that can be generalised to a very wide range of circumstances, nor do PAR practitioners consider that this in any way invalidates the results of their work.

Deliberately establishing and maintaining an 'audit trail' (McTaggart, 1997 p. 13) of data and interpretations, plus testing the strength and meaningfulness of arguments developed through the research process, is also another technique that can be used to ensure research validity. Validation, like other aspects of PAR, is cyclic and ongoing. What is most important is that validation is an 'explicit process of dialogue' (McTaggart, 1997 p. 13) between those involved in the research process and those affected by it, rather than some form of 'stand-alone' set of rules externally imposed. Validation is usually a dynamic process that can be extended and iterative, moving between the data generated and the literature that informs the study (McTaggart, 1997).

7.5.2 PAR as a Cloak for Activism and Intervention

Critics also point to the oppositional politics often inherent in PAR situations as being problematic because they are seen as a cloak for activism. Some commentators adopting this line of criticism would contrast the sometimes politicized situations appearing under the umbrella of PAR with what they deem to be 'legitimate' research. While politics may well be in play and be highly visible and thus declared (especially in those PAR situations where participants are actively seeking change), PAR is no more politicised than other forms of

research. The difference is that in other forms of research the politics may often be submerged or undeclared under 'spurious guises of objectivity' (McTaggart, 1997, p. 7). In particular, certain discipline-specific traditions and cultures that privilege particular forms of knowing and the ways in which knowledge is sought and acquired (Du Bois, 1983) may serve to disguise the political nature of much so-called 'objective' research. Furthermore, it might be argued that the political agenda underlying PAR (in those cases where a political agenda is indeed operative) often takes a benign form. This is because PAR approaches aim to promote transparency and to make known political positions and sometimes to actively work to change them, as is seen in the work of Freire and Fals-Borda. PAR is about centralizing participant worldviews – not subjugating one to reify another, but seeking to co-create a shared understanding of the situation that participants seek to change. To this extent, PAR is about transformation.

PAR approaches have as an ideal the realization of democratically negotiated processes between academics and other participants in the research (Green, et al., 1995). Kemmis and McTaggart (2000) propose the use of social research approaches which seek to understand practices dialectically, i.e. as being mutually constituted. Such approaches require from all participants deep engagement, mutual trust, respect and honesty. They also require a high level of reflexivity and willingness to recognize, acknowledge and 'work through' tensions that may present during establishment and conduct of the research activity. Reason and Bradbury (2009) cite this as one of the important defining elements of PAR projects. It may also be the case that when tensions cannot be resolved, then the PAR process may not proceed. Recognising that this may be an outcome is an important aspect of PAR projects that needs to be forefronted and considered as a real possibility, if transparency is an ideal (Kemmis and McTaggart, 2000).

7.5.3 Power and Power Relationships

One prominent line of criticism that has been raised against PAR relates to the balance of power in PAR research partnerships (see for example, N. Smith, 1999). PAR treats equal participation between researcher and research subjects as the ideal. Some critics of PAR have wondered whether it is indeed possible to achieve true partnerships where power is shared equally, particularly in those cases where co-participants in the social inquiry may occupy different social worlds.

Power, and the challenge this presents to the democratic ideal of equal participation, is related to the level of influence different participants are able to wield within any social inquiry (Cargo, et al., 2008). Influence may take many forms. Identifying the ways in which power is wielded through influence is an important consideration in understanding the power relationships in research partnerships. In this context, a number of external influences such as language (Cameron & Graham 2005a), funding and institutional and organizational settings need to be considered. These are all areas potentially affecting the levels of influence participants may each bring to bear in shaping and participating in PAR activities.

One important power consideration in working with remote Aboriginal peoples must be language. This includes the issue of 'whose language?' is used to discuss and formulate the research. For many remote Aboriginal peoples, English is a second or third language and even then can exist as a form of Kriol, or Aboriginal English, as it has sometimes been described. How can one be sure that mutual understanding has been arrived at in conversations where the participants might not be sharing mutually understood, language-derived concepts, and where it might not be obvious to some or all of the participants that this is happening?

In the context of working with remote Indigenous peoples, Boroditsky and Gaby (2010) conducted a study with Pormpuraawan language speakers in Pormpuraaw, a remote Aboriginal community on Cape York, Australia. They demonstrated

differences between the way Pormpuraawan speakers and English speakers spatially represented time. They concluded that cultural difference in thought is more than a matter of style or preference but rather, is intrinsically related to the language used to shape the thoughts expressed. If language plays such a critical role in shaping thought, which in turn helps to define the discourse, it ffollows that language helps to define the parameters of the discourse within which social inquiry will be situated, and thus the power and influence that participants in the social inquiry each may be able to bring to bear within it. Understanding that what we think is based on the language in which we think is thus critical to developing effective co-created participatory research environments.

One implication of the PAR ideal is that power transference will take place, enabling 'empowerment' of previously disadvantaged individuals and groups. However, the 'researcher' at some level remains essential to the process in a way which might carry implications for continuing differential power relations. It is therefore not surprising that institutional or organizational attempts at 'empowerment' through emancipatory PAR approaches, have attracted criticism (Leyshon, 2002) on the grounds that, while their intent may be emancipatory, a paternalistic relationship between 'researcher' and 'research participants' nonetheless is still implied. Funding, and who provides it, must be a consideration in identifying the power brought to bear in developing research; as must be the extent to which the proposed research sits within a broader institutional research framework or context, e.g. that of the state.

Political internalities and local advantaging, such as in the payment of wages or in paying for knowledge-sharing, may also influence participation, providing local participants with very good reasons to feign unrealistically high levels of commitment and participation (Mosse, 2001). A real danger for example, lies in ignoring the internal structure of those existing power relations that may be present at the local level, and in assuming that all participants at the local level are seeking the same outcomes and share the same 'local' knowledge (Mohan and Stokke, 2000). Local knowledge itself is shaped by the micro-politics of power

(Thompson, 2004). Too often, a multiplicity of voices will ultimately determine what gets counted as local knowledge, with local elites sometimes disproportionately shaping its expression. With many differential interests being promoted, it seems reasonable to conclude that participation in the research process can never be seen to be politically neutral (Cornwall, 2004).

Cooke and Kothari (2001) have attacked PAR approaches as 'yet another' example of where the language of participation and inclusion is used to mask power relations. Indeed, a strong argument can be made that it would be naïve to suggest that power influencers can be entirely eliminated. PAR proponents counter, however, that the development of mutual trust and respect, built up over time through enduring relationships, are a feature of PAR approaches and require co-participants to engage deeply with each other. This engagement serves to create an environment in which actor practices can be (safely) critically examined, thus contributing to the meta-knowledge of the social enquiry, as McTaggart (1997) has termed it. Identifying the meta-knowledge, i.e. the knowledge about the social enquiry including the external and internal power relationships and influencers through such reflective practices, will assist in fore-fronting these as a 'known' part of the social enquiry. While power wielded through internal and external forms will undoubtedly always have some level of influence upon the shaping of the research process and its goals (Greenwood and Levin 1998), Kemmis and McTaggart (2000; 2007) suggest that exposing such forms of power and fore fronting them as a critical part of the research process will assist in identifying (and perhaps mitigating) the impact they may have on the research process and the research outcomes and actions.

It can be said, that those seeking to practice PAR should be prepared for all the consequences that might arise from the forms of engagement processes that PAR proponents suggest is a requirement of such research relationships. The consequences of the deep engagement processes necessary for properly-conducted PAR relationships can be illustrated by the way in which the researcher's ongoing (research) relationship with a group of Aboriginal women has developed over the past four years.

Having been incorporated into this family's kinship system, the researcher has acquired a series of obligations and responsibilities that have arisen from that relationship. For example, as member of the community she is treated as a 'family' member living non-remotely. There is an expectation that she will support younger family members who leave the remote community to attend school in the city. This might involve visiting, taking them out for weekends, providing moral support and resources and being available in emergencies. The relationship does not increase any power the researcher might have in subsequent ongoing research activities. On the contrary, it could be argued that the researcher's obligations have placed her in a position where her 'power' as a researcher and as a member of the colonizing society has diminished, if she wishes to continue to honour, acknowledge, respect and accept the familial status she has acquired.

Pain (2004) argues that despite strong critiques and what she acknowledges as 'ultimately irresolvable debates over whether a non-hierarchical academic/subject relationship is possible' (p. 659), there are definite benefits for geographers and others in using participatory approaches, because these approaches provide access and pathways to forms of shared knowledge that are co-created and fit for purpose. From a slightly different and perhaps more radical perspective, Fuller and colleagues (2006) and Wilton (2004) actually advocate using academic 'status' and the power this provides, to facilitate engagement in scientific discourse, as an active measure to work against power imbalances and inequality.

7.5.4 The Challenges of Reflexive Practice and Representation

An important set of questions raised by critics of PAR is how the outputs and findings of the research are presented. The question arises, *whose* position is being represented in the findings; and how these findings can be related to theory. Pain and Francis (2003) for example, point out that there is a tendency for PAR outputs to be reported ostensibly from a purely 'community' perspective and often with a lack of researcher voice apparent (Pain, 2004). In this respect, it is

instructive to recall the original ideas expressed by Lewin (1946) on taking theory and applying it in the field to actively create change and then feeding the results of these 'experiments' back into theory through reflexive practice (Gustavsen, 2006) in order to further build theory and so on in a cyclic manner. Gustavsen (2006, p.17) argues that relatively few contemporary practitioners of PAR would accept the original assumption underlying Lewin's work, that the 'action' in PAR is a direct expression of theory alone. Gustavsen further argues that in PAR, the relationship between theory and action is much more complex than one constituting a direct expression of the other. For Wilton (2004) critical reflection is an essential part of PAR practice in that at the very least, it makes explicit the researcher's position in the research activity and the knowledge they bring, thus contributing to PAR ideals of transparency. Even so, as Pain (2004) points out, there is not a long tradition of reflexivity in participatory research.

For academic researchers, the publishing requirements of the institutions within which they practice PAR may serve to create an uncomfortable tension between their espoused goals of co-research, co-representation and full participation; and the requirement to publish in academic journals. Co-authoring is seen as one way of representing all voices in the research. However, here too, problems may still arise in those cases where there may exist differing perceptions of the activities undertaken. This would particularly be the case in those instances where divergent participant perceptions are derived from divergent cultural understandings and worldviews. Such divergent perceptions may be difficult to represent in a form that is coherent to all participants or that adequately reflects their positions in the research. Questions of language and in whose language such representations are made, once more must be considered.

For some researchers, adopting different positions at different stages in the research activities enables them to overcome some of the difficulties they face with regard to self-representation and reflexivity. First-, second-, and third-person inquiry is one means of adopting conscious positionality (Herr and Anderson, 2005) in the research process (Coghlan and Shani, 2009). Adopting a first-

person voice/practice enables reflection on the values and assumptions one brings to the research and how one will behave. Second person voice/practice enables engagement in inquiry with others and working to create a community of inquiry. Engaging with others involves both the processes of collaboration and the design and management of shared responsibilities in the research activities. In a sense, such engagement constitutes the actual 'doing' of the research. Third-person voice/practice enables movement beyond immediate first- and second-person audiences to the wider community, including the academic community, as a means of communicating the research and contributing to knowledge making (Coghlan and Shani, 2009 pp. 644-645). Such positionalities enable the researcher to consciously and transparently move between modes of practice and voice.

In considering issues of positionality, voice and representation, it is instructive to consider how Herr and Anderson (2005) describe the different ways that participants might relate to each other within the constraints of any participatory inquiry. They propose a continuum of stances that move through five positions:

(1) an insider studying one's own practice
(2) insiders and other insiders collaborating
(3) insiders collaborating with outsiders
(4) insider/outsider teams working in reciprocal collaboration; and
(5) outsiders working in collaboration with insiders.

Making such positions conscious and maintaining awareness of what each entails, whilst also acknowledging that positionality may shift in response to different tensions and demands, enables a better understanding of the requirements of each approach (Ospina et al 2009).

McTaggart (1997) in particular has been most explicit in expressing what he sees as criteria for PAR research reporting. These criteria address many of the points made above, and are summarized below:

- Recognition that the account presented of the research activity is simply one among a number of defensible accounts which might be presented;

- Ensuring that all participants (including the otherwise unheard and quiet) are 'heard' in the account and that both agreements and differences are presented;

- Theoretical attention is paid to understanding the ways in which participants have come to describe their life-worlds and enact their practices (e.g. through processes of deconstruction and ideology critique);

- The relevant substantive and methodological literature is presented, along with the ways in which these frame both questions and practices. Additionally, the external factors that may have impacted on both the framing of the research question and the methodology such as the relationship between the author/researcher and the institutional setting and obligations in which he/she might be situated are also presented.

- Iteration between the data, literature, and practical and interpretive activities of the researchers is made explicit;

- Deliberate attention is paid to the planned (and incidental) reflexivity of the study, its catalytic effect on change and improvement, through intermediate reporting to its audiences, and through the relationship between the researcher (s) and others whose work is reported (or otherwise affected).

(McTaggart, 1997, p. 13).

These criteria, while not framed so explicitly by other PAR proponents are, nevertheless, evident in the PAR literature and in accounts of PAR activities (see for example, Cameron & Gibson, 2005; Cargo et al., 2008; Kemmis 2009; Pain, 2003; 2004) and they reflect the key attributes of effective PAR practice and reporting.

7.6 'Doing' PAR

There are many examples of participatory approaches in co-research between Indigenous and non-Indigenous peoples, both in Australia and internationally (see for example, Cargo et al., 2011; de Crespigney et al., 2006; Getty, 2010; J. McIntyre, 2003; Mohatt et al., 2004; Taylor et al., 2010; Tsey, et al., 2002; Tsey et al., 2004; Tuck, 2009; Wallerstein & Duran, 2006; Walsh and Douglas, 2011) However, PAR projects with Indigenous participants reported most frequently in

the literature relate to the fields of health, community health, education, social work and community development. There is little to be found that reflects PAR approaches adopted as part of research into economic development with Indigenous peoples, especially in the Australian context. In order to present examples of 'PAR in action' the following section briefly highlights two projects explicitly presented as featuring PAR approaches – 'The Yarrabah Men's Health Group' and 'Alternative Approaches to Economic Development in the La Trobe Valley.' The first project involved the development of an Indigenous men's health group in a remote Aboriginal community using a PAR approach. The second project documents a PAR project aimed at creating alternative pathways for economic development in the La Trobe Valley in Victoria, Australia. Given the dearth of PAR literature relating to economic development with remote and Aboriginal peoples, a review of both projects was included in this chapter to illustrate PAR in action in two areas: a remote and Indigenous context; and from an economic development perspective.

7.6.1 Yarrabah Men's Health Group

Yarrabah is a small Aboriginal community located in Far North Queensland, Australia. In 1998 a men's health group was formed as a response to increasing suicide and suicide attempts in the community (Tsey, et al., al. 2002). The group was established to provide voluntary support to male community members through health education, counselling, development of social skills and the conduct of men's health clinics supported by a visiting Aboriginal doctor (Tsey et al., 2004). A feature of the project was the PAR approach used in its establishment, involving a partnership between a group of external researchers/facilitators from the School of Population Health at the University of Queensland and members of the Yarrabah community. Together, the group worked to establish the parameters of the group and its operations. The major outcome of this initial PAR process was the development of a two-year operational plan which focused on four key priority issues to guide the group's activities (Tsey et al., 2004). As part of the PAR process, the group established a cycle of participatory planning, acting, observing the results of the action and reflecting on the process (as input for the next cycle) in the manner first described

by Lewin (1946) and others including McTaggart (1997) and Reason and Bradbury (2001).

An account of the Yarrabah Men's Health Group project, co-authored by the university participants and the community researchers, is presented in Tsey et al., (2004). From the account, the voices, opinions, ideas and descriptions of the group may be traced both in the establishment of the research aims, goals and methods, and in the broader functioning of the group. For example, the team determined that project workers would keep diaries that focused on the positive effects in the community of the men's health group; plus the challenges involved in implementing the men's group and the strategies developed to overcome these challenges. Additionally, other participants in the wider group were able to provide feedback through feedback boxes labelled with the same themes. Both sets of data were collated and presented at monthly meetings of the group and these became a source of data in reporting the account of the project (Tsey et al., 2004).

This paper, while highlighting the successes of the project, also reflects in detail on the nature of the challenges encountered in the first twelve months of operation and credits the PAR process and the commitment of the group to its principles of planning, acting, observing and reflecting, as critical in uncovering these challenges and in finding their solutions. For example, the group reported as one of the challenges the perceived problems caused by receiving external funding and subsequently being able to pay workers as opposed to the completely voluntary nature of the project when it was first established. The group identified that increased accountability tied to the receipt of funding impacted directly on the goals and aims of the group. In the paper, the voices of community participants expressing their concerns about this were clearly heard, as was the manner in which this was being addressed using the PAR process.

Close reading of Tsey et al., 2004 indicates that the university researchers engaged in the project were not attempting to 'solve' the problems of the group

on behalf of the community members or any other agency. Rather, these university researchers adopted the role of external facilitators assisting community members to achieve the goals and aims established by the group – What is most evident in the paper is the careful attempt of the university researchers to ensure the non-imposition of their values and beliefs on the group (Patterson et al., 2002). At the same time, the university researchers recognised that they had a legitimate role to play in assisting the group in undertaking the PAR process; that they were a part of this process; and that contributing their own knowledge to the collective knowledge generated by the broader group formed an important part of the PAR approach.

However, what appears to be missing from the account of the project written by Tsey and colleagues (2004) is any explicit expression of Indigenous ways of knowing that may have been used within the group. It may well be that this was simply not expressed by participants. However, one (rather oblique) reference given as feedback to the group that 'there could be a spiritual side to the men's group' (Tsey et al., 2004 p. 69) inferred that not all belief systems and backgrounds were being included by the research group. This was not further examined in the paper, so no firm conclusions can be drawn from the inference. However, that this inference was not further explored in the paper perhaps highlights in itself, the importance of the need for an awareness of the impact that differing worldviews may have on both actions and the reporting of them in research activities. For the most part however, the account of the Yarrabah Men's Health Group presented by Tsey et al., (2004) exemplifies the elements of PAR approaches that the literature expresses as being characteristic of these approaches and it provides an excellent illustration of some of the benefits of a properly participatory form of PAR.

7.6.2 Alternative Economic Development Pathways in the La Trobe Valley

In this project, a PAR partnership involving academic researchers, community members, and a local Council was formed. The project aimed to challenge and change the prevailing popular representation of the La Trobe Valley as a place of

economic disadvantage to a representation of the community as a place where residents were engaged in alternative and various forms and definitions of diverse economic activity (Cameron and Gibson, 2005a).

The La Trobe Valley is situated in rural Victoria, some two hours' drive by road east of Melbourne, the State capital city. The region over time came to be dominated by the power generation industry, built on the region's large reserves of brown coal. Over the last twenty years, this situation has changed, as the coal mines and power generation stations have been privatized by the State Government (Cameron and Gibson, 2005a). There have been many studies conducted in the region by private consultants and academics aimed at determining the impact of these changes upon the communities of the La Trobe Valley. According to Cameron and Gibson, these studies in large part firstly, underestimated the negative economic impact that the changes wrought by privatization and the subsequent restructuring would have on the communities; and secondly, then focused primarily on the negative task of documenting the extent of the devastation. Cameron and Gibson (2005a) explain that, as a result of such interventions, a quite negative attitude towards research and researchers arose within the community.

Cameron and Gibson highlight that their research relationships in the region have developed over time, after an initial engagement in 1997, where they documented the community narrative of the changed economic circumstances in the La Trobe Valley using a focus group approach. The researchers were concerned not to leave the community at the point of merely further documenting the negative aspects of economic downturn. From this initial engagement, the researchers developed a 'bottom up' research process, as the university researchers have described it (Cameron & Gibson, 2005a p. 316). In the course of conducting focus groups, a number of largely unseen economic activities emerged as part of the narrative process. These activities were apparently invisible because the region had come to be economically defined by its major enterprise, i.e. power generation. Following a further research intervention that involved video-

conferencing alternative economic 'success' stories from across Australia, the university researchers then began working with the local Council and community members to develop the 'Community Partnering Project' which aimed to develop and test a new approach to economic development, based on projects developed within the community (Cameron & Gibson, 2005a p. 317) and identifying and utilizing existing community assets. The research team comprised the university researchers and four community researchers, together with representatives from the local Council. In total the project involved approximately 80 people and spanned a two-year period.

The project had four stages which were developed through the active engagement of the entire project team. The first stage of the project aimed at 'acknowledging existing representations'. It utilised the visual technique of photo-essays and involved working within the community to document and acknowledge the power of existing negative representations. The second stage of the project aimed at generating new representations within the community. This was achieved through workshops intended to highlight and document assets already existing within the community, and through highlighting the diverse economic activities that were already taking place within the community. This stage involved documenting the skills, abilities, capabilities, passions and aspirations within the community and the ways in which these could be mobilized to generate social and economic activity. The third stage of the project involved 'creating spaces of identification' aimed at mobilizing the shared knowledge revealed in the earlier stages of the project for the development of opportunities based on that knowledge. Opportunities were documented. Stage Four of the project involved 'acting on that identification' to build new community initiatives. Four new initiatives were established, with varying levels of success. One of these remained operational at the time of publication of the research account.

While not explicitly using the cyclic terminology of 'planning, researching, doing and reflecting' of PAR approaches, nonetheless these attributes can be clearly seen in the accounts of this project presented by Cameron and Gibson (2005a;

2005b). One paper (2005b) also rigorously documents the 'bottom up' development of the project. In that sense, the project can be seen to emerge from a desire, grounded in the community, to change a problematic social situation through research geared towards action. However, while the project quite clearly reflects the principles of PAR approaches presented in this chapter, there is one area in which perhaps it might have reflected a more participatory approach. Neither account of the project reviewed here (2005a; 2005b) includes any of the community participants as co-authors. This may be the choice of these participants, or these participants may have elsewhere expressed an account of the project. However, this is not documented in the accounts of the project presented by Cameron and Gibson (2005a; 2005b) and one is left to wonder why these community voices, while heard in the account, are not explicitly represented in documenting the account. Perhaps it is because academic authorship tends to remain in the hands of academics, simply because publishing is one of the imperatives for academics, where it is not necessarily so for community participants. From this perspective, the fact that the account is documented by the academic researchers does not necessarily reflect a power imbalance; it may simply reflect the differing interests and imperatives of different individuals and groups involved in the research process.

7.7 Discussion

Each of the two projects reviewed above largely reflect the criteria established by McTaggart (1997) and highlighted earlier in this chapter. Both projects have in common the goals of centralizing participation; they feature the development of strong relationships, and demonstrate shared communicative spaces for co-learning and understanding. Further, both projects highlight the value of mobilizing local knowledge through recognizing that people are 'experts' in their own lives and thus can contribute meaningfully to the production of research for action, in a manner that changes an existing social situation in which they are actors. The positionality of researchers in the projects is documented and the reflexivity associated with this positionality is evident. Accounts of both projects also generate meta-knowledge in the manner described by Kemmis (2009) and both projects are situated within a theoretical framework – thus distinguishing

them from ‘mere interventions’ (Checkland, 1985). The political environments in which each project is situated is also made explicit and in both cases the impacts of politics at the micro- and macro-levels are rendered in the accounts of each project.

In the two projects reviewed above, the research participants were clearly co-researchers, and therefore had a very strong vested interest in the research outputs. The research in both cases arose out of the bubbling concerns of the people who would ultimately be most affected by the research.

It could be argued that this is not the case for the research documented in this thesis. Where the research undertaken differs to the PAR approaches described in this chapter, is that research participants were not involved at the commencement of the research, that is to say, prior to the research questions being formulated. While one could argue that the research participants involved in the research conducted in the thesis were clearly experts sharing their knowledge, they were doing so at the request of the researcher. As previously stated, this fits within the tenets of grounded theory, and sits easily within the constructionist perspective. From a PAR perspective, however, it could be argued that the research parameters, the questions formulated and the outputs produced are clearly products of the researcher’s worldview, however immersed she became in the data and the research process.

One could ask, ‘How might the research have developed differently, had the participants been involved at the commencement of the research undertaking? Would the same questions have arisen? While clearly, these are rhetorical questions (in the context of this thesis, as the produced work of the researcher seeking conferral of a doctorate) they are significant in thinking about further research for ‘development’ with remote Aboriginal peoples, if that group is to determine their own preferred ‘development’ futures.

Let us briefly revisit the debate (amongst anthropologists and other researchers) regarding the Northern Territory Emergency Response that was foregrounded in Chapter Two. Doing so provides an interesting opportunity to further consider the value of PAR as a motivator and framework from within which to consider ongoing research for Aboriginal 'development' and 'improvement' in remote Australia.

The 'polarization' of the debate around 'culture' and 'inequality' about which Austin-Broos (2011) writes, could provide an important starting point in seeking to engage differently in research which does not automatically assume any single perspective, and perhaps, unwittingly falls on one or the other side of the debate. Perhaps the role of PAR approaches is to turn discourses that are occurring amongst academics as a result of the NTER, from being discursive to being dialogic (Gustavsen, 2006), by enabling a broadening of the worldview that is formed during and from within the dialogue. Jones and Jenkins (2008) have suggested that dialogue should arise from relationships that facilitate learning about difference *from* the 'other', rather than from learning *about* the 'other'.

Again using this thesis as an example, one could argue that at this point in the thesis, the researcher has learned much *from* the research participants and that this has determined the direction and influenced the findings in the thesis. However, the account that has been produced is clearly the work of the researcher. Where a PAR approach would differ, is that if such an approach was taken, all research participants as co-researchers would be involved in establishing the research framework, undertaking the research and in producing the account of the research. If one applies this thinking to future research with remote Aboriginal peoples, one could conclude that it may be possible to reach a position where shared worldview becomes an enabler for thinking about, researching, planning and working towards a newly defined Aboriginal 'development.' Such approaches might begin to uncover the inherent assumptions of Western research (and science) and the cultural values attached to it (Du Bois, 1983) and the ways in which these wittingly or unwittingly serve to maintain oppression (Rigney,

1999, Stone, 2002; Tedmanson & Bannerjee, 2010). To illustrate this point, let us reconsider the idea of the two domains of 'subject' and 'object' raised in Chapters Five and Six, in relation to conceptions of bush food. Conceiving of bush foods as either or both 'subject' and 'object' clearly relates to the focus of the worldview from within which one might consider them. In order to be able to appreciate the true depth of what such considerations could mean, and the implications for further development of remote Aboriginal peoples' participation in the bush foods industry, the worldviews attached to both conceptions must be taken into account. In that context, PAR may provide the means to do so. Further, there is also a powerful argument to utilize PAR, (in consideration of Austin-Broos' position, for example) from the perspective of emancipatory Indigenous politics. PAR would seem to align with the call from indigenous researchers themselves for full participation and inclusiveness of indigenous voices as highlighted by Rigney (1999) and Smith, (1999).

7.8 Chapter Summary and Conclusions

The aim of this chapter has been to critically examine PAR as a potential research approach for ongoing research supporting 'development' for remote Aboriginal peoples, as a response to the fourth research question raised in Chapter Two of the thesis. The chapter has provided insight into the development of PAR approaches and the manner in which these have arisen and why. Further, the chapter finds that the potential of PAR has not been fully explored in the context of 'development' research with remote Aboriginal peoples and there may be value in doing so. There is a strong argument for PAR to provide a perspective that advocates that people have the capacity to direct their own lives in 'ways which are constructive for themselves and others in their social contexts' (Maslow, 1968 *in* Reason and Bradbury, 2009 p. 23). In the context of the manner in which bush foods have been considered throughout the thesis as a lens to examine 'development' for remote Aboriginal peoples the thesis further explores how we might consider working towards such approaches in the following chapter.

Chapter Eight:
Case Study Three Part II - Participatory Action Research: Seeing More Clearly

Chapter Note: Material from this chapter appears in a peer reviewed book chapter first published in 2012. Publication details: Cleary, J. 2012. 'It Would Be Good To Know Where Our Food Goes': Information equals power? In Drahos, P. and Frankel, S., (eds) Indigenous Peoples' Innovation, Intellectual property pathways to development, ANU EPress, pp. 53-71.

8.1 Introduction

The previous chapter outlined something of the historical development and the key characteristics associated with Participatory Action Research (PAR). However, as shown, while there are very many examples of PAR projects to be found in the literature in the fields of health, community health, social work and community development between Indigenous and non-Indigenous peoples, there is virtually nothing that reflects the use of this approach in the area of remote economic development with Aboriginal peoples. From the available literature, it is reasonable to conclude that the research focus in terms of the use of the PAR approaches with remote Aboriginal peoples has been firmly within the realm of health and wellbeing, not that of economic development. In an attempt to counter the lack of examples of PAR approaches in remote Aboriginal economic development, two research projects were briefly examined in the previous chapter to illustrate in action the critical components of PAR approaches reviewed in the PAR literature.

To further develop the idea that PAR may provide useful approaches to remote Aboriginal economic development, this chapter considers a research project undertaken with remote Aboriginal peoples active in the bush foods industry. The purpose of this chapter is to continue the discussion of PAR's utility in conducting inter-cultural research with remote Aboriginal peoples in order to

consider what an 'ideal' PAR approach might look like as a vehicle for furthering remote Aboriginal economic development. The chapter then describes three potential bush food development scenarios that have arisen during the research and considers where PAR might be used in these contexts.

8.2 'It Would be Good to Know Where our Food Goes'

This chapter examines a project previously undertaken by the researcher with remote Aboriginal harvesters of katyerr[12] (*Solanum centrale*, bush tomato or desert raisin). This project (on which the researcher was the chief investigator) was entitled 'Information = Power: Walking the Bush Tomato Value Chain' (hereafter I = P project) (Desert Knowledge CRC, 2008). It arose out of a statement made by one of the Aboriginal harvesters with whom the researcher had been working: '*It would be good to know where our food goes'* (BB, NT).

The researcher reflects on her own practices in order to critique the approach taken in the development of the research, paying particular attention to the principles of PAR outlined in the previous chapter. The reflection expresses the researcher's recognition of her own changed thinking with regard to 'doing' research with remote Aboriginal peoples, and the ways in which she would act differently in any future research, based upon this learning. In Chapter Six, two critical questions related to research ownership and dynamism were raised, in the context of ongoing research with remote Aboriginal peoples in the area of bush foods research and in research aimed at informing further 'development' with remote Aboriginal peoples. The review of the PAR literature conducted in

[12] A number of different Aboriginal names in the central Australian desert region are also used for *Solanum centrale,* the fruit known commercially as 'bush tomato'. These include akatyerr, katyerr, akatyerre, katyerre, kampurarrpa, kampurarpa and jungkunypa. 'Bush tomato' is also known in non-commercial contexts as 'desert raisin.' The term 'katyerr' will be used here, except where otherwise explained, as a mark of cultural respect and as acknowledgement that it was the term consistently used by the Aboriginal participants during the course of the project being reported on in this chapter.

Chapter Seven and the subsequent examination of two PAR projects forms the basis upon which the reflective analysis undertaken in this chapter occurs.

The researcher writes from her perspective as firstly, a researcher engaged in an institutional context and in many ways bound by the requirements of that institutional setting, and then secondly, from the perspective of beginning to understand alternative ways of being in and experiencing the world, a perspective that is richly informed by the knowledge of others who shared with her a very different worldview. The researcher also writes from a changing positionality, brought about by the enhanced worldview she has gained from firstly, the fieldwork described in the thesis and its subsuequent findings, and secondly, from deep considerations of alternative research approaches articulated in the previous chapter. From this perspective, the researcher does not write on behalf of other participants involved in the activity, except inasmuch as she interprets their actions and their impact on her own actions and reactions. The researcher has included her personal reflections here in order to illustrate the kind of transformative change that the consideration of PAR approaches might facilitate. It is those aspects of the project that relate to her own personal learning journey as part of the process of undertaking doctoral research that are the focus of this reflection. The reflections are recounted for the contribution they make in validating PAR as holding potential in further research with remote Aboriginal peoples. The reflective component of the chapter is written in the first person voice, as this better fits the narrative style and personal nature of the reflection. The researcher's reflections are presented in italics. This chapter also serves to further develop the grounded theory that is emerging from the thesis.

8.3 Context to the I = P Project

As outlined earlier in the thesis the research platform adopted by the Bush Products from Desert Australia (BPDA) project was to use a value chain framework to undertake ongoing bush foods research within the broader DKCRC project. As stated earlier in the thesis, the primary aim of research within the

BPDA project was to increase economic returns to remote Aboriginal peoples through their participation in the bush foods industry.

'Information = Power: Walking the Bush Tomato Value Chain' (I=P) arose out of a BPDA stakeholder consultation workshop held in Alice Springs in April 2007. A number of bush-foods industry participants, both Aboriginal and non-Aboriginal, attended, including harvesters, growers, wholesalers, processors and retailers. The stated aim of the workshop was to seek guidance from participants about the direction of proposed research to be undertaken in the BPDA project (Desert Knowledge CRC, 2008) and to obtain their endorsement of the use of the value chain framework as the major focus of the research.

At the workshop, stakeholders endorsed the adoption of a value-chain approach. However, there was a strongly expressed view that the research should be 'participatory,' and focus primarily on katyerr as a high-demand desert product in the bush-foods industry, but also upon its cultural value. Some workshop participants expressed the view that understanding the social context of the supply/value chain must precede any operational changes that might arise out of value chain driven research (Hassall and Associates, 2007).

I did not immediately recognise the significance of these views. From an agribusiness research perspective, I thought that understanding social context was a secondary research goal, one that would aid the more 'important' concern of seeking to improve Aboriginal positions with regard to economic returns in the value chain. As expressed firstly in Chapter Four, and subsequently in Chapter Five, this positioning of social considerations as secondary to economic considerations was a product of a western worldview. Thus, I saw the views being expressed primarily as a precursor to the main endeavour of the project. There was no immediate personal recognition that understanding social context of bush foods might constitute a research aim in itself.

Among the workshop participants was a group of remote Aboriginal women from a settlement approximately 270 kilometres north-east of Alice Springs, in the Northern Territory, who were invited to attend because of their involvement in the bush-foods industry as bush harvesters. These women made a number of comments related to better understanding the movement of the katyerr they picked on their land after the fruit left their community. One woman said, '*It would be good to know where our food goes.*' This statement was pivotal to both the rationale for the subsequent development of I = P, and in formulating the activities undertaken within the project.

From my external, western perspective, I interpreted the woman's comment to mean that if the harvesters knew what happened to the fruit they picked when it left their community (in relation to how others value-added to it), who profited and why, they would then come to see that there could be opportunities for them to play a greater role in the value-adding process, and thus 'improve' their position in the industry. Importantly, I also assumed that this was a shared interpretation. Given that assumption, it did not occur to me to ask or to even consider that there might be some other reasoning behind the question, for example, that the harvesters might be considering their bush foods from a 'subject' perspective. That is to say, that they may consider that they had a responsibility to understand where their food was going as part of caring for their country. From within a worldview informed by an agribusiness perspective, I simply understood that increasing the harvesters' capacity to develop more direct relationships with others in the supply chain could help them secure more and different buyers for their fruit, thus increasing competition and returns.

Research in agrifood industries supports this understanding, and has shown that better connecting component parts of supply chains can improve efficiencies and increase multi-directional information flow (see for example, Bryceson, 2008; Bryceson and Smith, 2008). It was from this premise of better connecting the component parts of the value chain that the I = P project was initially built. In the context of the I = P project, both my own interpretation and understanding of the comment 'It would be good to know where our food goes' and the broader goals of the BPDA Project were framed by thinking that was firmly grounded in a

western perspective of improving Aboriginal economic returns from the bush foods industry, and that saw their current participation as being in some way 'problematic'.

8.4 Pre-Project Planning and Preparation

In preparing for the project, I held a specific understanding of the 'participatory' nature of the project and what my role and the role of other participants in the project would be. In relation to my own role, I saw that this would be as a participant observer, and facilitator of knowledge transfer. My role as 'participant observer' would be undertaken in the manner outlined in Chapter Three of this thesis. There was an implicit understanding that some level of knowledge transfer would occur between the academic researchers and the harvesters and that as a result, the harvesters would become better equipped to participate in the value chain. A further result would be that the academic researchers would also better understand the value chain in which the harvesters were participating, and thus, this would aid the development of further research to 'improve' their positions. At that time, this position was informed wholly by the existing worldview from within which I saw myself as a researcher. From this position, as someone whose academic knowledge was privileged (DuBois 1983) over other forms of knowledge, there was no room for considering that the academic researchers were anything other than an essential part of the process. Project framing, funding and management were being led by the academic researchers. There was no consideration that all participants in the project could be conceived as co-participants and co-learners sharing power and privilege in a collective endeavour in the manner described in the PAR literature (see esp. Baum et al., 2006). From a PAR perspective, not all of the project participants could have been described as 'active participants' in the research process in that not all participants were engaged in conceptualising and shaping the research (McTaggart, 1997). Rather, at this point, participants could be said to be merely involved.

Along with the initial group of women from the stakeholder meeting, one other woman expressed her interest in being part of the I = P project. She was not involved in bush harvesting but, together with her partner, operated a small

commercial katyerr plantation where fruit was harvested by hand. The project participants also included two representatives from a reference group[13] established to guide bush-harvest research in the broader Bush Products Core Project. In all, there were twelve project participants, including the researcher and other academic researchers and supporting team members. A group discussion regarding activities to be undertaken as part of the research, determined that a physical journey following katyerr to various (commercial) destinations beyond central Australia would offer a useful way of understanding where the fruit went, how it was used and who used it.

The discussion focused entirely on the commercial aspects of the fruit and there was no consideration of any other context in which the food might exist. It is important to note that at this point, the questions being posed to the harvesters with a view to eliciting the harvesters' knowledge of katyerr were very much guided by a Western interpretation of the harvesters' original statement, that they (the harvesters) wanted to find out where their katyerr went and what happened to it.

This session incorporated both talking and drawing, enabling participants (some of whom have English as a second or third language) to express their knowledge both verbally and pictorially. Each of the women's drawings included clearly marked direction indicators, establishing their current location in relation to their home community. *When I asked one woman why she had done this, she responded that it was to show 'where home is, where we have come from, where our bush food has come from and where we are now.'*

[13]MerneAltyerr-ipenhe (Food from the Creation time) Reference Group was established to guide bush-harvest research activities. It comprised respected Aboriginal women recognised as cultural custodians of bush-harvest knowledge, some of whom were also bush-food industry participants.

At this point, the research team explained their roles as they saw them, i.e. as researchers and facilitators, and the group discussed what might occur after the project. Among other things, this discussion revolved around activities that might help to share the information and learning that occurred in the project with a wider audience. Activities discussed included writing about the project, and making a DVD and picture story boards so that other Aboriginal women engaged in harvesting activities might learn more about where their katyerr and other bush food goes. In accordance with the DKCRC media and communication protocols used to guide the release of all CRC research outputs, each project participant signed a media release form giving permission to film and take photographs of project activities. An undertaking was provided to all participants by the academic researchers that any materials produced would be available for review by all participants before being released more generally. The project engaged a professional videographer to record the journey that participants were to undertake.

None of the community project participants spoke up to express any concerns about the direction of the research activity, and on that basis, agreement was assumed. However, upon reflection, it could be argued that there was again, a definite privileging of western ways of knowing in the expression of the scope of the research activity, and in the language used to discuss the activity. Although interpreters were present, the primary language used to discuss the project was English, and thus the concepts and ideas discussed were formed within the structure of that language, and therefore influenced and limited by the language itself, in the manner described by Boroditsky and Gaby (2010) in relation to translating ideas and concepts from one language to a completely different language. Further, as Cameron and Gibson (2005b) have noted, confusion can also occur where those ostensibly speaking the same language use terminology with which they have become completely familiar, but that can exclude 'outsiders.' Bradley (2008) vividly highlights this point in his work with Yanyuwa families. One participant in that study for example, told him that the word 'landscape' held no meaning for her and that she didn't understand the term.

As researchers we did not consider the impact of using terminology with which others in the research activity might not be familiar, simply because this did not occur to us. Further, the research 'products' were clearly under the control of the researchers. While there was an undertaking to ensure these research outputs and products were acceptable to all participants, the power to make the decisions about how this was done and by whom, lay clearly with the research team.

8.5 Ethics

Ethical considerations were important in conducting this project. We were mindful of the need to ensure that activities were conducted both within Western regulatory frameworks for human research, and also to ensure the project met Aboriginal participants' needs and expectations in this regard. Additionally, the project was guided by a set of research protocols developed with Aboriginal peoples by the Desert Knowledge CRC (Desert Knowledge CRC, 2006). Ethics approval from the Central Australian Human Research Ethics Committee (CAHREC) was also obtained (CAHREC, 2008). CAHREC is a committee of the Northern Territory Department of Health, and considers both health and non-health research involving Aboriginal peoples in the Northern Territory. It does this through its Aboriginal Committee, whose primary aim is to protect Aboriginal peoples in the Northern Territory in the conduct of research, and to ensure Aboriginal peoples benefit from such research.[14] The committee, which aims to span all major language groups in the Northern Territory, includes at least one male elder and one female elder among its all-Aboriginal members, as well as at least one person with research experience in non-health-related research.

While I was confident that all ethical considerations had been addressed following the ethics processes described above, as the project developed a

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[14] Northern Territory Government, *Central Australian Human Research Ethics Committee, Policy and Procedures Manual* available at: http://www.health.nt.gov.au/library/scripts/objectifyMedia.aspx?file=pdf/12/26.pdf&siteID=1&str_title=CA HREC Policies and Procedures.pdf (Last accessed 24 November 2011)

number of incidents created a sense of concern. This sense of concern developed from the reflection that it is difficult to consider questions of ethics if one is unable to frame questions about ethical concerns that another might hold from within a worldview different to one's own. Incidents that occurred and that are reflected upon in the following pages vividly illustrate this point.

8.6 Undertaking the Project

Immediately following the workshop described above, the group travelled to the Sunshine Coast (via Brisbane) in Queensland. On arrival, the harvesters asked where they were in relation to their home communities, i.e. '*which way is home'*, and spent some time establishing the direction in which those communities lay, and talking about the distance they had travelled. This was the first major journey many of the harvesters had made by air, and it seemed important for them to establish exactly where they were in relation to where they had come from. The group was officially 'welcomed to Country', as is customary between Australian Aboriginal peoples visiting locations beyond those with which they have immediate cultural ties. The Aboriginal business operator who had welcomed the group and with whom we were meeting, specialised in the use of bush foods in her restaurant and catering business, and we experienced a commercially prepared bush-foods meal. The main course featured katyerr. For many of the harvesters, this was a new experience of bush food, prepared in quite a different way from the traditionally prepared bush food with which they were familiar. Following the meal, the harvesters shared with the group their stories of bush food, using a series of photographs and story boards which had been prepared by members of the project team during earlier research with the bush harvesters. The harvesters appeared particularly animated and excited during this part of the visit, and were very keen to talk about who they were, where they came from and how they harvested bush food.



Photograph 6: Experiencing a Commercially Prepared Bush Foods Meal Sunshine Coast, Qld (Photo Credit: Ange Vincent – Photo used with permission, DKCRC)



Photograph 7: On the Value-Chain Journey (Photo Credit: Ange Vincent – Photo used with permission, DKCRC)



Photograph 8: Sharing Knowledge, Sunshine Coast, Qld (Photo Credit: Ange Vincent, Photograph used with permission DKCRC)

In reviewing the subsequent video footage, a key theme about 'belonging' emerged. There were many references to the women's home community, and

where people belonged; where the food belonged; and how it could be harvested and by whom. The women also pointed out the children and grandchildren in the story boards, taking time to identify each person's children and grandchildren and talked about how important it was to 'keep the knowledge strong' with these young people and describing the manner in which this was done.

The harvesters also made a point of asking about the origin of the katyerr prepared in the meal they had eaten. The business operator explained that she bought it from her supplier, but that she wasn't sure from which part of central Australia it had started its journey. There was much discussion amongst the harvesters about where it might have come from, who might have picked it and how it came to be there.

Reflecting upon the video footage subsequent to undertaking the work described in Chapter Five, it is now very clear that 'belonging' from a perspective of identity was applied by the women as much to the foods they harvest as to themselves, again highlighting the subjective considerations of their bush food that were important to the women.

The following day, the group flew to Melbourne, Victoria. Again, on arrival the harvesters spent time establishing where they were in relation to their home communities and the direction in which it lay. We visited a number of commercial entities associated with bush food. These included a processing factory, a distribution business and a large supermarket.

At the processing factory, we were shown through the processes associated with preparing, cooking, bottling, labelling and packaging various bush foods for sale and distribution. The women seemed interested in learning about these various processes. However, in the review of the video footage, one incident in the factory appeared prominently. When the harvesters viewed large bags of raw product that had been received at the factory from various suppliers around Australia, they were highly animated and keen to know from where the bags had

originated, particularly those foods that they knew to be desert foods. Comments included, '*Maybe this [wattleseed, Acacia spp.] came from [community name] near us? Those ladies have been picking lots of this*.' There was also much interest in unfamiliar (non-desert) products, and the women wanted to know whose Country it had come from, who picked it, how it grew and how it got to the factory.

We met with a distribution company that managed the movement of finished products from the factory to retail outlets. The company presented information about the importance of continuity of supply as a requirement for maintaining shelf-space of finished products at supermarkets, and the constant pressure this placed on them to ensure they could get product from the processor. The processor also talked about the challenges of getting supplies of katyerr from wild harvest, and how this created difficulties if they couldn't guarantee their supplies. The information presented was quite abstract, with very few references to specific places or people.

At this point, I asked whether any of the participants wanted to make any comment or ask questions of the presenters. The videographer turned the camera to a small group of the Aboriginal women, who appeared uncomfortable and did not speak. There was an awkward moment. Afterward, when our group had left that place, I quietly asked one of the women what had happened, and whether I had done something to create the uncomfortable situation. I felt that I had, but I did not know what it was. She said 'We felt shame when you asked us to speak then.' I was quite upset and she explained, 'We did not know who those people were or where they are from, or what we should say, and we did not have time to think and talk about what we could say.' I apologised to the group, and another woman said 'That is ok, it is good that you asked and it is good that we can tell you, and that way you can understand.'

It was also at that point that the women revealed the nickname they had given me: 'noisy little one' 'because sometimes you talk more than you listen.' I found

this to be very revealing, and while quite confronting, I also saw that an increased level of trust was developing. This incident, and the growing trust, caused me to think about my actions and to reflect more deeply on my role in the activities we were undertaking, and to realise that, whilst I might be a researcher and the nominal 'leader' of this expedition, I was myself, learning. From this point, I regarded my role quite differently. While I could not have articulated it at the time, I was becoming a co-learner, at the same time as seeing the research activity itself in an entirely new light, through beginning to formulate a very different understanding of 'participation' to that which I had initially brought to the project. This new understanding of participation, was much more akin to the definition provided by McTaggart (1997) and detailed in the criteria he suggests (see Chapter Seven) as being essential to the PAR process. However, this incident also triggered a growing unease about whether the ethics processes undertaken prior to commencing the project had been adequate. Were all the participants in this project adequately protected by the ethics processes in place? Were those ethics processes conceived from within a shared worldview? I concluded that they had not been.

Finally, after visiting a large supermarket where we saw the finished products on the shelves, we attended an up-market restaurant in the heart of Melbourne that featured bush food as an integral part of its menu. This restaurant was operated by an Aboriginal woman who described herself as the traditional owner of land in the Melbourne region. She welcomed us to her Country and provided some history and context about her family and about her business, and served a multi-course meal that featured bush foods. We all enjoyed tasting the food that was presented and there was much laughter about some tastes. For all of us, some food was appealing, but some tastes were perhaps removed from our expectations of what it would (or should) taste like. Smoked, chilled kangaroo canapes for example, were not popular.

I was told by the woman sitting next to me 'We could cook this for you when you come to our Country again. It is nicer than this. Not cold.'

Before leaving Melbourne, the harvesters redrew their understandings of 'where their food goes', based on the journey we had made together.

Again I noted the clearly marked direction indicators on the drawings. The maps were not drawn in the usual abstract manner that I was most familiar with as a geographer — that is, with 'north' at the top of the page, 'south' at the bottom, and 'west' and 'east' to the left and right respectively. Instead, the maps were drawn in relation to the direction the drawer was oriented. For example, one woman was facing south, and so drew her map with 'south' at the top of the map and 'north' at the bottom. When I asked her about this, she said 'That is where it is.' I parted company with the harvesters and the rest of group at the airport in Melbourne, they to return to the Northern Territory and me to my home in South Australia. It was an emotional time, because we had shared much and developed new levels of understanding with and about each other.

8.7 Project Conclusion

In all, the physical journey occupied one week, and it provided many opportunities for learning. The harvesters were able to see 'where their food goes', and this was evidenced in discussions and, particularly, in pictorial representations completed at the conclusion of the project. There is also evidence that, as a result of undertaking the journey and forming new relationships with others in the supply chain, the harvesters have subsequently made some changes in the way in which they sell their fruit. In some cases, they are selling more directly into the chain, and are initiating these transactions themselves, rather than relying solely on traders making buying trips to their communities. It is likewise evident that they have increased their returns via these transactions, and are receiving higher payments than previously.

However, at the conclusion of the activity, the question I found myself asking was whether in fact this is what they were really seeking, when they expressed that it would be good to know where their food goes? I had the disquieting feeling that the physical journey we had undertaken in following the katyerr on its

commercial journey was but one interpretation of 'understanding where our food goes' that could be made. I also began to understand that perhaps it was an imposed interpretation created from within a singular worldview. It was at this point that I undertook to reflect on the experience, to review the video footage produced during our journey and to follow up with others in the group.

8.8 Seeing More Clearly

During our journey, there were many opportunities for conversations and sharing information and knowledge. There was also time for questions to be asked and answered and importantly, for differences to be noted and to begin to understand them. For example, on our arrival in Melbourne, everyone was very tired and when we arrived at our hotel, there was a long queue of people waiting in the foyer to be checked in. There were very few seats. Immediately, the Aboriginal women sat down on the floor. These were older women, and they were tired, so they did what they would normally do in the bush in those circumstances – they rested.

I was tired too, and while it is not something I would ordinarily have done (because it wouldn't have occurred to me to do it) I sat down on the floor also.

While we waited, we talked. It was just one of many small occurrences that helped to develop a fuller understanding of different ways of seeing the world. It was small incidents like this and others, e.g. laughing together about some of us getting on an escalator at the airport for the first time, and riding on the airline passenger carts from the gate to the escalators and waving '*like princesses*' (as one of the harvesters termed it) to other passengers. The journey itself helped to build strong, trusting and open relationships, which have been further built upon. It has been through such mundane interactions and building interpersonal relationships and the revelations that have occurred as a result of them, that knowledge exchange and co-learning were facilitated, in the manner described in the PAR literature. Importantly, such relationships have also created high levels of mutual understanding that could be taken into further research based on PAR approaches.

The importance of strong trust relationships has been highlighted throughout the PAR literature and referred to many times in the previous chapter. The value of such relationships was revealed in a most telling way during the I = P Project, and the following anecdote illustrates this very effectively: In another component of the BPDA Project, we had pursued horticultural development of 'bush tomatoes.'[15] As part of that work, a trial planting of bush tomatoes was developed in Alice Springs, with plants germinated from held seed stock. Bush harvest can be subject to limited or fluctuating supply, owing to inherent issues of climate variability. The aim of this research was to increase knowledge of the horticultural production requirements of bush tomatoes as a means of developing a supply mechanism that was more reliable than bush harvest. The project then aimed to produce information about horticultural production that could be used by remote Aboriginal communities in central Ausralia to develop horticultural bush food enterprises.

Very early in the development of this horticultural trial (and prior to the I = P project), we invited bush harvesters and other Aboriginal peoples from remote communities to visit the trial site. The rationale for this was to ensure that there was Aboriginal involvement and consultation around the project. The day went very well, with the bush harvesters and others politely attentive to the information that we presented. We were satisfied that we had responsibly fulfilled our consultation requirements in relation to the trial. The horticultural project continued. However, after developing the much deeper relationships with the harvesters during the I = P project and subsequently over the intervening time, I later learned that the harvesters were quite horrified by the horticultural trial. At the time of their visit (which was during the katyerr growing season), there had been very little katyerr growing in central Australia that season, and subsequently very little bush harvesting. From a western perspective, the lack of katyerr could be seen to be as a result of poor climatic conditions (in that there had been minimal rain). However, the harvesters' interpretation of why there was no

[15] The term 'bush tomatoes' is used here because in the context of the broader DKCRC project, this was the term consistently used, and is related to the commercial use of the fruit.

katyerr in the bush was quite different. When they visited the horticultural trial site and saw its numerous rows of healthy katyerr plants, they interpreted that this was where the wild katyerr was. This was later expressed to me in a question that was quietly asked one day: 'Why did you mob go out bush and dig up all the katyerr plants and put them in that place in Alice Springs? There was none left in the bush for us to pick.'

It had not occurred to me until that time that the harvesters' cosmology was so different to mine that we could interpret the lack of wild katyerr in such divergent ways. For the harvesters, what we were doing at the trial site explained why there was there was no bush katyerr to harvest from the wild.



Photograph 9: Preparing Horticulture Site, Alice Springs NT (Photo Credit: Ange Vincent – Photo used with permission DKCRC)

This story illustrates the importance of developing strong relationships as an enabler for bridging different worldviews if human beings are to share knowledge that is informed by very different cosmologies. The connotations of what the harvesters thought we had done in the horticultural project were quite terrible. From their perspective, having the katyerr at the trial site meant that we must have ventured onto Country to which we hadn't been invited and removed plants

and fruit to which we had no rights and without any permission having been granted by the custodians of that Country.

While conducting the interviews detailed in Chapter Five, the full extent of just how badly this would have been viewed by the harvesters was brought home to me repeatedly in the discussions with people about caring for country; belonging in country and especially in the manner that people described their relationships in country. In interpreting what the harvesters saw as our actions in relation to the katyerr, the women rationalised from within their cosmological understanding of the world that we were not custodians and we did not 'belong' and further, that we had put ourselves in danger. One of the harvesters told me that she had been worried for us: 'That Country can play tricks on you. You have to be careful. Have to pick bush food at the right time and in the right way. You must respect it.' I was able to explain exactly what we had done, i.e. that we had grown the katyerr from seed stock, and had not ventured on to anybody's Country, or dug up the katyerr and replanted it. However, one question remained, which I could not answer, and that was where the seeds had come from originally, 'because they still belonged on someone's Country and if they came from all different Countries, how come they were all mixed up together in that place?' Before understanding the worldview from within such a question such as this had been asked, I had no way of conceiving the subjective concepts that were expressed in the question. This begs a further reflection on the ethics process undertaken in the development of the horticultural project. The project had of course undergone a stringent ethics process. However, this ethics process considered issues that might arise from a Western perspective on such matters. In light of what was revealed in this exchange with the harvesters, one must ask whether the process undertaken (which did not remotely suggest that an issue such as this might arise) was adequate.

This important story also illustrates a further two points that are thematic in this thesis. Firstly, the thinking that underpins the assumptions we make is firmly rooted in the worldview within which the thinking occurs, and the thinking itself

is framed within the language in which the thoughts are formed. Secondly, it is only through the development of trust found in deeper relationships and engagement with others possessing different worldviews that one can approach new understandings that are informed by those different worldviews.

In the context of the I = P Project, and in light of newly developed understandings, perhaps there was a different interpretation that could be placed upon the statement 'It would be good to know where our food goes.'

I began to question the assumptions I had made at the beginning of the project. Did the statement 'It would be good to know where our food goes' mean something different from what I initially understood it to mean, and was the question itself framed from within a language that recognised different emphases and signifiers of what was important — perhaps reflectingdifferent cosmological understandings of spatial and temporal concepts?

In relation to the statement: "It would be good to know where our food goes" let us consider again the actions of the harvesters at various stages along the physical journey –

- the desire to 'place' themselves in relation to their home communities on arrival in different locations
- asking questions about where raw products had originated and who had harvested them
- the way in which directions were depicted on their pictorial representations of their journey
- their animation in talking about their own harvesting activities
- the emphasis the harvesters placed upon the importance of passing on knowledge to their children and grandchildren

One can see a pattern emerging. This pattern relates primarily to the importance the harvesters attached to 'place' and 'belonging' both for themselves and the

bush food they harvest. This importance is found in the context of interrelationships between land and people, as was also shown in Chapters Five and Six. So, the statement 'It would be good to know where our food goes' may well have been an expression of place-based cultural identity, and of customary systems of governance related to land, people and law – the sense of subjective 'belonging with' rather than the objective 'ownership of' the fruit they harvested, as Turner (2010) has written.

Identifying and recognising such alternative understandings based upon different cosmologies and different notions of place-based identify, has important implications for research.

As a researcher, comprehension of the 'two worlds' paradigm (and thus the capacity to begin to consider complex questions outside my own world view) would not have been possible without first developing the relationships that have formed in sharing the I = P project experience and other experiences that have built trust relationships over time. For that reason, it has been an enabling and perhaps emancipatory process (Carr and Kemmis, 1983) which has allowed the formation of a new perspective outside the personal and institutional constraints within which my original thinking was formed. The notion of experience, action and reflection (Reason and Bradbury, 2001) inherent in PAR has been applied to my own approaches to better understanding bush foods and the various lenses through which the considerations of and activities associated with them might be viewed.

As a participant in the I = P project, and through the subsequent building of deeper relationships with the Aboriginal harvesters and other remote Aboriginal women with whom I continue to work, I have come to develop very different perceptions and understandings of bush food beyond the context of participation in an industry. These perceptions and understandings are increasingly shaping my thinking and research and have formed an important part of developing this thesis.

Importantly, the experience of this level of ongoing engagement in these relationships has caused me to draw the conclusion that while there are many forms of research that may be labeled as 'participatory' there are varying degrees to which real participation occurs. Further, the full engagement of all participants in all aspects of the research in the manner identified by McTaggart (1997), depends upon the degree to which the worldviews (and thus the subsuequent multiple representations of reality) of participants are mutually engaged, considered and respected.

Upon reflection, and in light of new understandings I find that the I=P Project, while displaying some characteristics of 'participatory' approaches, would have been much more useful, had it been developed as a truly PAR project.

There are a number critical elements of PAR approaches that could have been addressed in the project. These can be summarised as:

- Not all participants were able to wield the same degrees of power in thinking about, shaping, framing, developing and doing the research;
- The research itself was heavily influenced by the institutional setting within which it was framed;
- Particular types of knowledge and knowledge gathering processes were privileged over others;
- Project resources were controlled by some participants and not others.
- One very positive aspect of the project is that while the project itself could not be described as 'participatory' it has played an important role in developing the kind of relationships that can facilitate more legitimate PAR approaches into the future.[16]

[16] At the time of writing the researcher is engaged in one such project in the Northern Territory

8.9 What next? Identifying Current Opportunities for PAR Approaches to Bush Foods Research with Aboriginal Peoples in Remote Australia

8.9.1 Scenario One – Protecting Traditional Knowledge Associated with Bush Foods

To conclude the work in this chapter, it is useful to consider how the PAR principles outlined in Chapter Seven and the lessons learned (in not applying them) highlighted in Chapter Eight could be applied to a specific and timely example of bush foods research in remote Australia.

There is a recognition that the development of systems to protect the traditional knowledge (TK) of Aboriginal poeoples that is associated with bush food and bush medicine is an urgent and high-priority area (UNDRIP, 2007). Aboriginal peoples' legal control over this knowledge must be clear and unambiguous, and producing an appropriate regulatory system would be an essential step in achieving that control (UNDRIP, 2007). It is further worth noting that, according to UNDRIP (2007), the rights of Indigenous peoples to control their traditional knowledge also include the right to benefit from such control of that knowledge, and this is something that must also be inbuilt to any regulatory system.

One mechanism that has been promoted as a means of achieving control over TK for bush foods and bush medicines, and for Aboriginal peoples to benefit from that control, is through development of plant breeders' rights (PBR) and other property rights tools. The Plant Breeder's Rights Act (1994)[17] provides the means for granting proprietory rights to breeders of certain new plant varieties and fungi in Australia. Currently, there is no existing legal requirement to recognise Aboriginal cultural ownership of plant materials, nor any consideration of TK in the development of varieties registered under the PBR Act.

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[17]Australian Government, Plant Breeder's Rights Act (1994) (amended 2011). Attorney General's Department, Canberra.

The intent in this section of the chapter is not to advocate or otherwise for the application of PBRs in relation to bush foods and bush medicine. However, given that work on developing PBRs for native species has already begun in Australia, it is relevant to consider this work on PBR development in relation to TK, at the point where this intersects with research and development. This section of the chapter considers the implications of *not* using PAR approaches in furthering the research on PBR and other property rights tools in the area of bush foods and bush medicines.

In the bush-foods context, the primary aim of PBRs is to develop and register new plant varieties which have desirable characteristics that decrease production costs and increase returns. Examples would include plants that have a higher fruit yield and that are adaptable to a range of growing and mechanical-harvesting conditions. Mechanical harvesting is less labour-intensive and thus less costly than manually picking fruit or collecting seeds. For those bush-foods species (such as bush tomatoes) that enter the market predominantly through harvest from the wild, PBRs are seen as a means of increasing and stabilising supply through horticultural production of 'improved' varieties that can be owned (in the sense of the property rights as a commodity) by entities under the control of Aboriginal peoples.

In remote Australia, the CRC for Remote Economic Participation (CRCREP) operated by Ninti One Ltd is developing a programme of research which aims to 'develop a model for improving native plant varieties to make horticultural production of bush foods more efficient and profitable' (CRCREP, 2012). According to project information, the focus of the research project is bush tomatoes, presumably because these continue to be a high demand species in the bush foods industry. While the project information does not specifically mention the term 'PBR' there are indicators that some form of PBR may be the intent of at least part of the project. For example, the stated range of outputs that the project seeks to generate include:

> *'Genetic collection of Bush Tomato [sic] selections established as intellectual property (IP) in trust for Aboriginal owners; new horticulturally suitable plant varieties that are more likely to be economically profitable under cropping; and [emphasis added] [P]rotection of plant varieties leading to licences for their usage'*
>
> *(CRCREP, 2012).*

The project information also states that:

> *'The Plant Business research will develop the horticultural, fruit quality and genetic understanding and engage Aboriginal and Torres Strait Islander groups in consultation about plant improvement with a view to gaining approval for the use of plant varieties developed from defined geographic locations. A significant parallel theme of the research is a detailed analysis of the variety of approaches available for safeguarding the needs and aspirations of Aboriginal and Torres Strait Islander people associated with Traditional Knowledge being commercially utilised'*
>
> (CRCREP, 2012)

However, given the subjective nature of bush foods as expressed by research participants throughout this thesis, one must conclude that governance systems which predate any Western legal framework must already exist. These ideas were clearly expressed in Chapters 5, 6 and 7. In light of the earlier work in this thesis, the CRCREP project raises a number of issues for consideration:

- Who has cultural ties to the plants being considered for 'improvement?'
- Who are the plant's custodians?
- Will the custodians be involved in the development of the research activities?

'Bush Tomato' is an extremely wide-ranging plant that grows across large areas of Western Australia, South Australia and the Northern Territory (Purdie et al., 1982). Very many Aboriginal peoples have and will continue to maintain cultural ties to the particular bush tomato plants that grow in their 'Country.' These cultural ties include the Dreaming stories and TK associated with those plants. From Aboriginal peoples' perspectives, what will be the cultural ramifications of creating 'improved' plants from hybridisations of plants, especially if this occurs across different 'Countries?' What will the stories be for these 'improved' plants

look like? Who will be able to speak them, paint them and pass them on to children and grandchildren? Where will these 'improved' plants fit in the place-based relationships between people, land and customary law? Who will they be, and where will they belong? Will the new plants have a Dreaming? Or will they be like the cattle mentioned in Chapters Five and Six that have no dreaming? Seton and Bradley (2004) noted the challenges of managing natural resources and the social consequences where introduced species (cane toads in this instance) were seen to have 'no dreaming' and therefore no natural place in the cosmological understandings of the remote Aboriginal peoples with whom they were working. Similarly, newly developed plants derived for the purposes of establishing PBR may well have no place under customary Law. This raises further questions:

- Where will the new and 'improved' varieties be grown? On whose country?
- If they are grown off-country, will they still have the same 'value' to the Aboriginal peoples from whose land they were orginally developed? And does this matter?

The project information is careful to specify that plant improvements will occur on plants from within geographically defined areas. Presumably this means with respect to Aboriginal Language Group Boundaries, but this is not clearly articulated.

To the extent that the word 'improved' implies that the plants themselves require something done to them to make them better, the question arises,

- Is the word 'improved' a culturally acceptable term?

In consideration of the work undertaken in developing the LARC Value framework, participants were very clear that 'country will provide' and that what grows there is what 'belongs there.' Will there be any concerns for example, that 'country will play tricks' on those seeking to 'improve' what is there?

- How will benefit-sharing arrangements and business models to commercialise such hybridisations be developed?

- Who will benefit financially?

- Who will determine the persons or groups to be consulted in the process of determining who should benefit?

- How will this sit with existing subsistence and customary economies currently operating in remote Australia?

In consideration of PBR, the PBR itself upon creation becomes a commodity which can then be traded. This raises the question,

- What protections will need to be considered to ensure the cultural rights to keystone species are not lost to Aboriginal peoples?

We can summarise all of the preceding questions regarding the CRCREP 'Plant Business' research project in one broader question that is posed in two different ways:

- How, where, and of whom, will these and other important questions be asked?

- From within whose understandings, worldview and language will the questions be framed, developed and discussed?

The project information certainly talks about consultation and the involvement of Aboriginal peoples as a key part of the project. One means of ensuring that 'improvements' such as those promoted through the development of PBRs and other property rights tools align with both existing indigenous cultural imperatives and the effective protection of property rights in Western legal systems, would be to engage Aboriginal and non-Aboriginal peoples as co-researchers in PAR partnerships. Through such partnerships, various knowledges, worldviews and languages could be considered and accorded respect.

Clearly, finding solutions to PBR and other property rights issues in relation to bush foods and bush medicines will require more than just clever property rule

design. Perhaps it is in recognising that there *is* more to understand than just clever property rule design that PAR can make a useful contribution to the process. Deep relationships based on trust, and through which shared understandings can be developed will be essential to the process. Such relationships are not about superficial consultation with select, disparate and loud voices. Instead, they require the meaningful, shared dialogues that occur over time, and that are based on respect for the value of different ways of knowing and doing. Crucially, these dialogues should be structured in a way which will enable quiet voices to be heard.

PAR approaches which can accommodate different forms of knowledge, ways of understanding, and knowledge systems (in this case, TK and customary law, alongside Western legal and monetary systems) equitably, will be essential in creating both a new regulatory administrative system and an environment in which it can flourish. The primary objectives of PAR as outlined in the previous chapter — to produce both knowledge and action that is directly useful, and consciousness raising (learning) that creates empowerment — would seem a useful place from which to begin the process in the context of the 'Plant Business' research project. Only in that way, could both the subjective and objective understandings of bush foods highlighted as important in this thesis, and the value attributable to both understandings be considered.

8.9.2 Scenario Two – Developing the Positive Attributes of Bush Harvested Supply of Bush Tomatoes

Let us reconsider a possible development scenario concerning bush tomato harvesting. One area where it may be reasonable to assume that further development could occur to increase economic returns for remote Aboriginal peoples from bush tomatoes lies in developing products that reflect the positive attributes of bush-harvested supply. These attributes could reflect that the produce is hand-picked from naturally occurring plants growing in the wild and is thus 'clean green and organic.' The products might also be regionally provenanced through the IK associated with the plants from which the fruit is harvested. Such product attributes are sought by discerning consumers in particular niche market

sectors (Hurst, 2007) and they could be priced accordingly. It would then be possible to differentiate these products from higher-volume products developed for more generic markets e.g. supermarkets. Such differentiation has not yet occurred in the bush foods market – primarily because most of the current market supply of bush tomatoes is drawn from wild harvest. In these circumstances, differentiation is unlikely to occur, as market prices for generic products have been established upon those products being made from wild harvest supply, rather than from a cultivated (and possibly cheaper) supply. In the current market, it would not be economically viable for processors to attempt product differentiation when consumers can already buy wild-harvested products at the supermarket. However, the bush tomato supply situation is changing. Based upon increasing demand for bush tomatoes in the market there is development occurring that is leading to cultivation of the plant as a means of creating a more consistent supply (Bryceson, 2008). From an industry perspective, the domestication and cultivation of the plant can be considered a logical development that is necessary to both meet demand and create confidence around supply in the marketplace. The likely implications of this action would be an increase in investor confidence in the industry, (thus driving further industry development). Were such actions to be taken, there would undoubtedly also be implications for the 300-500 remote Aboriginal harvesters currently operating in the Northern Territory, in that they could well be marginalised. This marginalisation would result if product differentiation from wild supply in the manner described above were not to occur simultaneously with cultivation. Cultivation may thus have both positive and negative implications for the remote harvesters.

A PAR process, used effectively to work with the harvesters in fully understanding their aspirations and apprehensions with regard to further development under this scenario, would make clear their preferred future/s in this regard. To date, there is no evidence that this has occurred. Based upon the concerns raised as a result of the review of the 'I = P' Project, it is clear that viewing cultivation simply as a means to increase economic returns to remote Aboriginal peoples does not consider the alternative forms of value that are

derived from bush harvesting, and, if harvesters are not deeply engaged in working through a process of coming to a shared understanding of what it really means to cultivate, then significant misunderstandings may be the result.

8.9.3 Scenario Three – In-Situ Development of Bush Foods as a Vehicle for Wealth Generation

A further development scenario concerning remote Aboriginal peoples' participation in the bush foods industry may lie in the pursuit of an 'in-situ' model of bush food enterprise, as was raised with research participants in Chapter Five. Under this model, bush foods may be used in commercial activities that take place in the traditional sites of its harvest, processing and consumption. Such commercial use might occur as part of a tourism product for example, where tourists could experience a bush food meal prepared in a traditional way. A comparison might be drawn to the ways in which consumers purchase wine. Wine might be purchased from a liquor retailer and consumed, with no interaction occurring between the wine-grower and the consumer. Wine might also be purchased by consumers as part of a 'cellar-door' experience. The wine is consumed in the context in which it was produced, that is to say, at the vineyard. The processes associated with its journey from grape to bottle might also be shared as part of that experience. Under this scenario, the wine becomes part of a much broader experiential process, perhaps as part of a tourism product. As was identified in Chapters Four, Five and Six, there is currently no contact between bush food harvesters and consumers. The bush food leaves it point of origin and goes elsewhere to be value-added bought and sold. In the current supply model, as illustrated by the Netchain analysis presented in Chapter Four, Aboriginal peoples have little control or influence on what happens to their bush foods once they are sold. Clearly, as shown in Chapters Five and Six, the relationships between Aboriginal peoples and their Country (and therefore all that County encompasses) are of paramount importance in their cosmological understandings of the world. Therefore subjective considerations of plants and animals and inanimate 'objects' that exist on Country mean that it clearly matters to Aboriginal peoples to be able to care for what a non-Aboriginal person might consider merely objects. An in-situ model of participation in the bush food

industry by Aboriginal peoples would perhaps provide a means for this to occur more fully than current models of industry participation. Such a model would create the opportunity for consumers to experience the food they consume in place, that is to say, at its place of origin. In this way, remote Aboriginal harvesters would be able to provide context for the food consumed in the manner that the earlier work in this Chapter suggests is important to them in 'knowing where their food goes.' In such a model of participation, remote Aboriginal peoples would also have more control over how much or how little of their TK might be shared, thus enabling the relationships between Aboriginal peoples and their Country to be respected. Were such a model of in-situ participation proposed as part of economic development for remote Aboriginal peoples, doing so within a PAR research process would again enable shared understandings of what constitutes 'success' and 'failure' from multiple perspectives which bring to bear different cosmological understandings of bush foods as both cultural icons and cash commodities. Clearly, any new development scenario would still need to be able to recognise both objective economic and subjective non-economic value and the connections and separations between them. So, while such an in-situ model might sit more easily with remote Aboriginal peoples' aspirations in regard to bush food industry participation (as was intimated in Chapters Five and Six), surmising this without full and proper regard for different worldview representations of bush foods that can occur within a PAR process may well repeat the same mistakes that lead to what has been viewed as 'failure' in remote Aboriginal development to date. Clearly, both economic and non-economic value (and the complex relationships between them) needs to be recognised. The requirement for such recognition suggests that the LARC Value framework used in conjunction with PAR approaches may be a useful tool in this scenario as it would assist in identifying factors that might potentially compromise alternative forms of value, enabling these to be considered and perhaps, protected. The value of a PAR approach lies in its capacity to consider and encompass differing cosmological understandings of the way people view their lifeworlds.

8.9.4 Where to from Here?

However, it is important to note that while some consideration of the scenarios above has occurred during the research activities undertaken in the production of this thesis, they are nonetheless, quite speculative. It must also be noted that they are still interpretations made by the researcher of what remote Aboriginal peoples themselves might want. While the research suggests that these development ideas may well be valued by remote Aboriginal peoples, it will be most important that Aboriginal peoples themselves are determining the manner in which development occurs. For this determination to be realised, finding ways of enabling the shared understandings around 'success,' 'failure' and 'development' will be critical, if there are to be further interventions in the lives of remote Aboriginal peoples. In consideration of policies such as 'Closing the Gap' (FAHCSIA, 2009) such interventions seem highly likely. Therefore, there is some urgency around enabling PAR approaches to be developed.

8.10 Chapter Summary and Conclusions

The aim of this chapter has been to critically examine some of the implications of pursuing PAR approaches to 'development' with remote Aboriginal peoples in Australia. While there is considerable criticism of PAR, particularly in relation to questions of validity and subjectivity as highlighted in Chapter Seven, there is also a powerful argument for its use from the perspective of emancipatory Indigenous politics and from Indigenous researchers themselves. This chapter has highlighted some of the challenges that may be experienced when undertaking research that purports to be participatory but that falls short of the ideals of PAR approaches. The chapter has identified some of the pitfalls encountered in such a project and the learning that can occur from engaging in reflexivity, however discomforting such a practice might be.

In that regard, Case-study Three goes some way to addressing the questions raised in Chapter Six about the importance of research ownership and dynamism, and in addressing the fourth and final research question raised in Chapter Two. If worldview differences (such as subjective and objective renderings of bush foods) are to be meaningfully considered then deep participatory approaches that

enable such considerations will be essential in research that supports remote Aboriginal 'development.' Further, remote Aboriginal peoples themselves must have a role in determining the nature, shape and conduct of research in this regard. PAR approaches in research with remote Aboriginal peoples that centralize the goals of full participation; action for building capacity to direct their own lives as Maslow (1968) suggests; and which occur within the constructs of their own understanding will be important, if we are to move beyond problematizing remote Aboriginal Australia and working towards a new concept of 'development.'

In the scenarios presented in the latter part of the Chapter, PAR processes would enable the development of trust relationships and supportive development environments where questions of 'success' and 'failure' and the nature of these (rendered from differing cosmological understandings) could be fully considered and thus better understood. It may well be that these scenarios might occur within the alternative development frameworks discussed in this thesis (Chapter Two). However, and most importantly, the set of circumstances which best represent the interests of those undertaking the development must first be determined. Those actors involved in the determination must include remote Aboriginal peoples themselves – whether or not they are acting for themselves or whether they are acting in conjunction with other, non-Aboriginal researchers, policy-makers and development agencies and practitioners. An interesting perspective on this idea is provided in the work of Matthews and Young (2005) in the Canadian context. Matthews and Young reported on the success of the Lax Kw'alaams First Nation Band in British Columbia in developing its forestry resources in a unique manner. The Lax Kw'alaams Band initially displayed many of the characteristics of remote Aboriginal communities in Australia, that is to say, high unemployment (80%) and significant welfare dependence. According to Matthews and Young (2005) this group has mobilised internally, drawing upon its own institutional infrastructure and traditions and marrying this to external expertise to turn around its economic situation. Matthews and Young report that this reversal of economic fortunes relied upon significant external capacity, more so than internal capacity. However, the initial will to change an

existing situation and the successful marriage of that internal will with external capacity in a manner that was obviously acceptable to the Band is an important point that can be taken from the study, in the context of applying appropriate approaches to development. These scholars also raised the important point that sustainability of the enterprise over time may depend upon the development of internal capacity, which highlights the need for continued involvement of the local people in future decision-making.

A parallel can also be drawn to the work of Skerratt (2011). While Skerratt writes specifically about rural development in the Scottish context, she presents a powerful argument for the need to shift thinking from short-term, project-based and externally driven 'development' goals, towards greater involvement and participation of community voices in the determination of those development goals. Her research highlights the importance of local, place-based development approaches where local culture and development aspirations are emphasised. While she does not specify cultural difference as a key component for consideration in such approaches, this can clearly be extrapolated from Skerratt's work, where she writes of the proliferation of 'Darwinian models of development' (Skerratt, 2011, p. 101) in which those communities more adept at evolving to mirror the language and culture of funding agencies are more successful in securing funding, albeit at the possible cost of compromising local development aspirations.

In specific consideration of the roles of non-indigenous researchers who continue to work with remote Aboriginal peoples, one can draw the conclusion from this research that there is an ongoing responsibility for these researchers to maintain a constant state of mindfulness and a sense of positionality in the acts of gathering and sharing of knowledge (Cochran et al., 2008). This will be especially important in our understandings of what constitutes 'valuable' knowledge and ways of knowing as non-Indigenous researchers working with remote Aboriginal co-researchers (hopefully) within PAR processes. A further challenge for non-Indigenous researchers who seek to engage with remote Aboriginal peoples in

development research will be in working together to find or create research methods that don't simply incorporate Indigenous ways of knowing, but in finding ways to co-create the research itself, so that it is formulated from within both Indigenous and non-Indigenous ways of knowing. The cyclic nature of PAR i.e. planning, acting, doing and reflecting, will be critical to such research and will need to be embarked upon fully, in all aspects of the research process. In that sense, coming to shared understandings that are then reflected in the praxis of 'development' will support development goals that are mutually shared, because they are being understood from within a co-created communicative space (Kemmis & McTaggart, 2007). Such positioning will entail a move beyond the participatory approaches that merely include the researched (including those utilized in part in the production of this thesis), to more radical positions where the researched become co-researchers and thus are fully equipped to undertake both the 'participant' *and* the 'action' components that are a critical part of PAR.

Chapter Nine:
Conclusion

9.1 Introduction

Structuring this thesis in order to be able to present the significance of both the research undertaken and the research journey has presented distinctive challenges. Those challenges arose partly out of walking a new research path, and moving from a place of familiarity to one that has required a shift in thinking about what it means to 'do' research. In the first instance, the investigation began from the place of the researcher's own knowledge and the ways in which she understood the world. This worldview embraced the value of academic knowledge (and still does). However, this worldview perhaps privileged academic knowledge above other forms of knowledge and the ways in which those other forms of knowledge are acquired, represented and shared. As the research progressed, the value of embracing different ways of knowing became clearer, and especially, the ways in which we can use different ways of knowing to undertake research. Learning about, and then embracing different ways of knowing became an integral part of the research itself. New understandings of knowledge and the ways in which it can be shared also presented the challenge of how to marry these two aspects of 'research' and 'research journey' in a doctoral thesis. The 'research journey' being referred to here is much more than simply describing the methodological approach one might take to undertaking research. Bringing both the research and the journey together has been achieved through presenting the research as a series of case studies, and in the use of critical reflection. Each of the case studies has contributed to both the understanding of what is presented as the research, and in illustrating the research journey. Presenting the work in this manner has enabled the 'back story' of the unfolding learning journey to be incorporated as an important part of the thesis itself. As with Chapter Eight, parts of this chapter are written in the first person. This occurs where the researcher reflects on her research praxis and upon the research journey that has been undertaken. The purpose of this chapter is to now draw together these two stories and show how and why they are important in the context of the research specifically presented in

the thesis, and, more broadly, to show why this is important to ongoing research with remote Aboriginal peoples.

9.2 Addressing the Research Questions

The first critical conclusion that can be drawn from the research and that responds to the first research question posed in Chapter Two, is that merely considering the 'success' or 'failure' of remote Aboriginal peoples' participation in the bush foods industry on the basis of the economic benefit derived, can be seen as a product of worldview. Further, the research questions the validity of the premise upon which the broader issues of 'success' or 'failure' of the industry to deliver benefits to remote Aboriginal peoples is made. This question also extends to the 'success' or 'failure' of the manner in which remote Aboriginal peoples participate in the industry. The research shows that such premises are currently based in large part upon a particular (Western) worldview and that indeed; it is this worldview that currently defines notions of success and failure.

The research also illustrates that this singular worldview is not formed from within understandings of the world that allow for pluralistic, dynamic representations of bush foods as both cash commodities *and* cultural icons, and therefore nor can it accurately reflect the multiple forms of value that may be derived from within both representations. The first case study, presented in Chapter Four, highlights this singular perspective, where using the conventional metrics of value chain success to analyse the value chain in which remote Aboriginal harvesters are situated, was found inadequate to fully uncover all the forms of value that exist in the chain. The research showed alternative value that is derived from non-economic considerations of bush foods by remote Aboriginal peoples needed to be better understood in order to fully appreciate the rationale for participation of the harvesters in both commercial and non-commercial activities associated with harvesting bush foods. In Chapter Four, the conventional analysis applied to the value chain showed that there were several areas in which changes could be made in the chain to improve its effectiveness and efficiency in terms of economic value creation. However, under this analysis,

such changes were considered solely from within a worldview that valued those changes as 'improvements.' Such singular understandings of improvement would lead one to conclude that the changes were needed due to a 'failure' of the actors within the value chain to behave in ways that increased economic returns. This perspective *problematises* the participation of remote Aboriginal peoples in the bush foods industry, rather than recognizing that definitions of 'success' and 'failure' may simply be a product of worldview.

To illustrate this point, let us briefly consider again, the actions of the harvesters and the traders first introduced in Chapter Four. These actors have been continuously trading together for over thirty years (Morse, 2005; Ryder et al., 2009). One could conclude that the trade between the harvesters and the traders has continued to the satisfaction of all parties given that it has been sustained over this lengthy period of time. An interesting observation is that the trade has developed and continued without any external 'support' mechanisms; that is to say, without government funding or research and development programmes. From that perspective, it could be considered one of the few (Whitehead et al., 2006) bush food 'success' stories in terms of ongoing participation of remote Aboriginal peoples in the commercial use of bush foods. Clearly, if considered from the perspective of the actors engaged in the activities described, there is no failure evident to these actors. Perhaps the manner in which the trade is occurring, and the alternative value that is being derived from it accounts for its longevity. The point to be made here is that initially this alternative value was not recognized. Rather, the value chain within which both the harvesters and traders are operating was seen to require improvement, hence a full programme of research (the BPDA project) was developed to work towards this aim. In not being recognized, the alternative value could not be considered as a 'success' metric. The lack of consideration of this point has had significant implications, in that research and development aimed at improving the position of remote Aboriginal peoples in the bush foods industry could well be attempting to 'fix' something that is not broken. Perhaps remote Aboriginal peoples are participating in the industry in the manner which fits best with their aspirations – aspirations which are drawn from a worldview that constitutes value (and by implication

'success') differently to how others might understand it. And this point vividly illustrates that participation in the industry has not been adequately explored from the perspectives of remote Aboriginal peoples themselves. Rather, what can be seen instead, is that the 'need for improvement' research theme continues to be articulated in ongoing bush foods research, as highlighted in Chapter Eight. Here, the research theme has been promulgated through research aimed at improving bush tomato plants to create efficiencies for horticultural development and the development of property rights tools. While the aim of such research in providing a means of increasing economic returns to remote Aboriginal peoples has undoubtedly arisen from a position of wanting to improve the lives of this group, it does not allow that such 'improvement' may be seen as firstly, unwarranted, and secondly unwanted. Rather, it presupposes (taking Austin-Broos' position) that inequality exists and must therefore be addressed. The research, formulated as it has been from a Western understanding of what 'improvement' means, is unable to consider the deeper, subjective attachments to bush foods that remote Aboriginal peoples in this study have articulated. It highlights most starkly, the point that Austin-Broos (2011) has made – that both inequality *and* cultural difference must be considered together in attempts at interventions aimed at improving the lives of remote Aboriginal peoples.

The research undertaken and presented in this thesis brings into question whether such a simplistic view of 'problem to be fixed' and notions of 'improvement' based upon one way of knowing the world is an appropriate platform upon which to base both further research, and equally importantly, further development, with remote Aboriginal peoples and their participation in the bush foods industry. What was not evident in either the BPDA project or the proposed research raised in Chapter Eight for example, is any understanding or recognition that Aboriginal peoples derive alternative forms of value from bush foods, as part of their cosmological understandings of the world. It follows that such non-recognition precludes the asking of what must now be, in light of the research in this thesis, considered a critical question of precedence in further bush foods research and development: *'How do remote Aboriginal peoples constitute and articulate notions of 'success' and 'failure' from within their own worldviews, in their*

participation in the bush foods industry, and what does this mean in considerations of 'improvement' in that participation?'

In asking such a question, the second case-study presented in Chapters Five and Six are pivotal in the thesis, as the research articulated in these chapters developed the recognition that a new way of representing alternative forms of value was needed for notions of 'success' and 'failure' to be more fully considered and appreciated. A new way of representing value enables a better understanding of the different forms of value inherent in bush foods value chains where remote Aboriginal peoples are participants. Importantly, such representations enable potential 'improvements' to value chains to be based on that fuller understanding. Recognising that the value derived from bush foods by remote Aboriginal peoples encompasses forms much broader than economic value alone, allows one to shift focus from a position of 'problematising' Aboriginal peoples' participation in the bush foods industry to a position that recognizes a more pluralistic worldview of 'success' and 'failure.' Such considerations also sit comfortably with Weber's 'rationality for participation' raised in Chapter Four, in that such considerations can encompass the tensions of both 'formal' and 'substantive' reasons for the participation of the actors in the value chain examined in that chapter.

Understanding firstly, that these alternative forms of value exist, and secondly identifying the attributes of which they are constituted and where these can be found is thus critically important in ongoing research in the bush foods industry. This understanding will be especially important where such research is premised upon notions of 'improving' remote Aboriginal peoples' participation and positions in the industry. The LARC Value framework, used in conjunction with other tools for value chain analysis, will enable a more thorough examination and understanding of 'value' beyond the ways in which 'value' might be understood in a conventional value chain using conventional forms of analysis. Research that is then premised upon these understandings will have a greater chance of formulating 'improvements' that are based upon a shared understanding of

success metrics. Such research will also be able to consider factors which might impinge upon or damage existing forms of value. However, the processes associated with such research are also critical, if it is to meet the needs and aspirations of remote Aboriginal peoples.

In the specific context of bush foods research, the researcher argues that PAR approaches to research process can provide such opportunities. Undertaking research that is underpinned by the principles of PAR could enable the building of an open space for research and development that can be informed, co-created and co-owned by remote Aboriginal peoples engaged in bush food harvesting and/or trade – a space in which such a new picture about 'development' in the bush foods industry might come to be painted. Such a space might also create a development landscape within which various models, tools and frameworks can be applied, including the alternative development models considered in this thesis, and also the LARC Value Framework.

In the case of the LARC Value Framework, such a space might facilitate the application of the framework in bridging the different 'value' domains the framework seeks to reflect. From this position, building and developing sustainable enterprises might occur which meet the aspirations of remote Aboriginal peoples, and that fit concepts of 'success' (and associated metrics) that are derived in a different way to Western understandings of such concepts. In turn, perhaps these enterprises can recognize different forms of 'value' as described within the LARC Value Framework, and bring this to bear in existing value chain models or in the creation of new models. In that way, models of participation that accurately reflect what it is that remote Aboriginal peoples regard as important and ideal may come to be developed.

9.3 Contributions to Theory

The primary grounded theoretical position that can be constructed from the research undertaken in this thesis is that remote Aboriginal peoples view their lifeworlds in ways that may be fundamentally different from Western ways of

knowing the world and that this matters significantly to considerations of 'success', 'failure' and 'development.' This concept is illustrated most profoundly in considerations of bush foods in that they clearly hold value that is both subjective and objective. The research found that these renderings are directly related to worldview. Understanding this premise has significant ramifications for both research and development with remote Aboriginal peoples. The thesis also contributes to a number of existing theoretical constructs and these are now considered.

9.3.1 Understanding Value Chains

The LARC Value framework makes a significant contribution to value chain scholarship in that it presents a completely new way of examining concepts of 'value' that encompass both economic and non-economic domains. The research has shown that such considerations of alternative 'value' will be critical in determining strategies to improve the effectiveness of bush foods value chains in which remote Aboriginal peoples participate. The research demonstrates that improvement strategies need to consider the impacts that implementing them might have on both economic and non-economic forms of value that are important to remote Aboriginal peoples. Figure 14 provides a visual representation of where value chains in which remote Aboriginal peoples are participating sit in consideration of both subjective and objective understandings of bush foods as both cash commodities and cultural icons.

Most importantly, the 'shared' space between the two value domains shown in Figure 14 will require careful consideration in how future 'development' in this space might be undertaken and PAR approaches to such considerations are recommended.

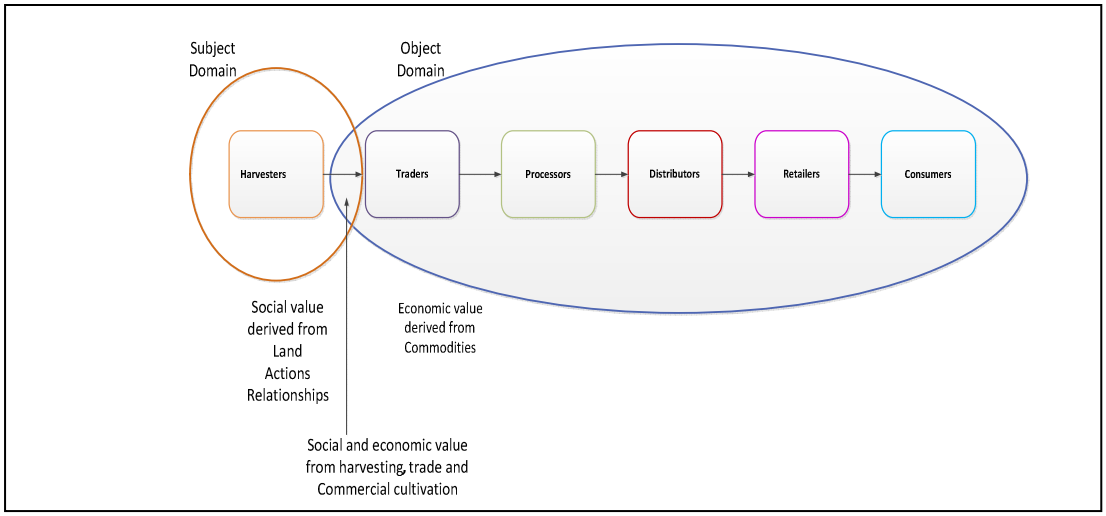


Figure 14: Bush Food Value Chain within Subject/Object Construct

9.3.2 Development Scholarship

In Chapter Two, two alternative economic development models were considered for their effectiveness as vehicles to carry forward economic development with remote Aboriginal peoples. This chapter now reconsiders what conclusions might be drawn about the effectiveness of these models in light of the findings of this research.

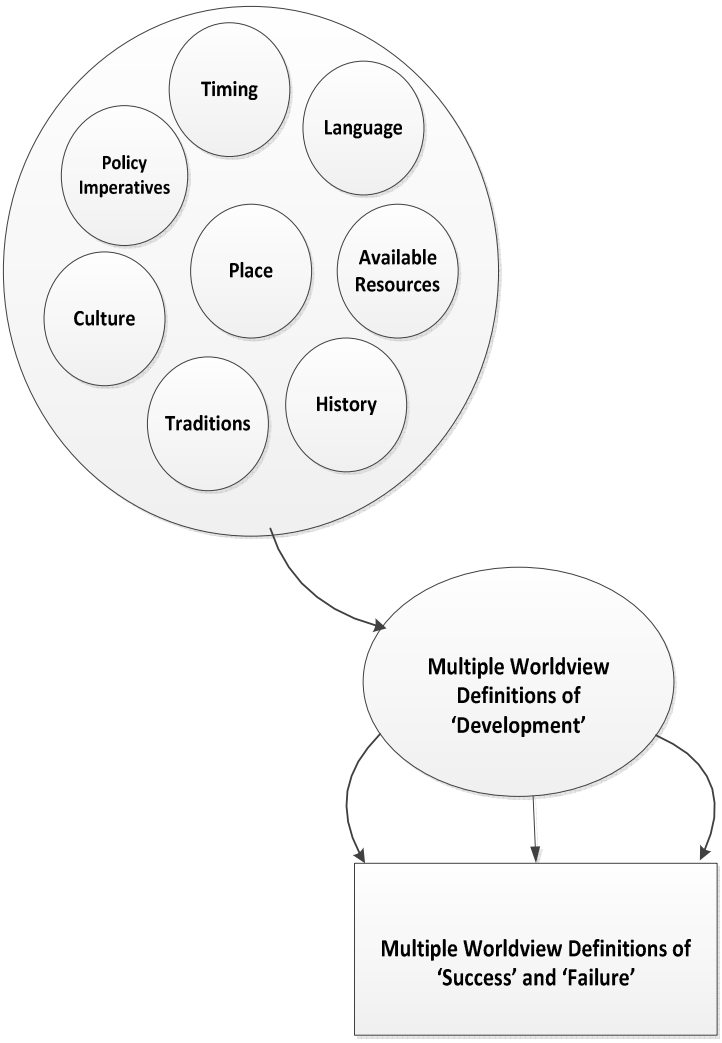
Firstly, the research has established a case that structures such as value chains, developed from within dominant economic development models, are not able to recognize alternative (subjective) forms of value derived from bush foods by remote Aboriginal peoples. What must now be considered, is whether the research findings in this regard might extend to the alternative economic development models reviewed in Chapter Two, namely the Hybrid Economy Model (HEM) (Altman 2001) and the Sustainable Livelihoods Framework (SLF). Such consideration is important, as both models have been proposed as vehicles for further economic development with remote Aboriginal peoples. Within the HEM, Altman asserts that the customary economic sector sits separately to, but interacts with, the public and private economic sectors. The customary sector is thus recognised in the HEM as not being a part of the public and private economic sectors that are the usual representations in conventional economic

models of the marketplace. Rather, the HEM recognises that economic activity is occurring outside these public and private sectors and may be non-monetary. The SLF also recognises the customary, non-monetary (economic) sector, and that benefit is derived from activities considered from within it in multiple ways. However, it can be argued that both of these alternative economic development models would consider the land upon which development might occur as part of development activities undertaken by remote Aboriginal peoples as a *resource* to be utilised, whether this is for monetary or non-monetary purposes. The premise upon which such a determination would be made is inherently that 'economic' activity is occurring. Based upon this premise, these alternative economic development models do not recognise the cosmologically different understandings of 'country' that constitute the life-worlds of remote Aboriginal peoples. Neither model recognises for example, that the land itself could alternatively (and/or simultaneously) be considered 'kin,' in the manner described by Bradley (2008) and expressed so eloquently by 'Uncle A' (Chapter Five) when he was speaking about his country: '*Stories tell us about that food. And Ancestors. Maybe some things were people first. Now they might be animals, or plants or rocks. We know about these things. This is our Knowledge. It is important to us. So we know it. We know the Law."*

The conclusion that can be drawn here is that, as was found with conventional economic development models, the two models promoted as alternative paradigms for economic development with remote Aboriginal peoples may also not adequately recognise different cosmological understandings of what constitutes 'value' and, by extension, what constitutes 'success' or 'failure.' Both models are premised upon objectification of the land and what exists within it, as a resource. Both models, then, would sit firmly within the 'Object' domain presented in Figure 12, *Subject/Object Value Constructs in Relation to Bush Foods* presented in Case Study Two.

Insofar as it has identified alternative forms of value inherent in bush foods for remote Aboriginal peoples, the LARC Value framework may therefore make a contribution to both the HEM and the Livelihoods Framework in development activities where bush food enterprises are the vehicle for such activities.

Figure 15 provides a visual representation of what is currently occurring in relation to 'development' and development research (for example, in the bush foods industry).



Under this schema, the dominant purview of what constitutes 'development' and therefore 'success' and 'failure' takes precedence in the narrative about remote Aboriginal peoples and determines how and what research and development actions are undertaken.

Figure 15: Current Representations of 'development,' 'success' and 'failure' in Remote Aboriginal Development

Development approaches are also premised upon particular ways of knowing the world. Currently, development approaches in remote Aboriginal Australia are formulated on models derived from fundamentally Western concepts of 'success' and 'failure.' While both the Hybrid Economy Model and the Sustainable Livelihoods Framework reviewed in Chapter Two feature participation and inclusiveness as critical success factors in sustainable development processes, they are nonetheless focused primarily on economic gain, whether or not this is monetary or non-monetary. The research in this thesis contributes to development theory in two areas. Firstly, the research makes explicit the expression of how participation and inclusiveness might be enacted in these models. To that end, Case Study Three argues that PAR approaches provide mechanisms through which perceptions of difference can be usefully considered, explored and debated. PAR approaches may thus address the current ambiguity in the operationalization of these models. PAR provides a humanistic perspective that advocates that people have the capacity to direct their own lives in 'ways which are constructive for themselves and others in their social contexts' (Maslow, 1968 *in* Reason and Bradbury, 2009 p. 23). The thesis argues that PAR approaches in research with remote Aboriginal peoples that centralize these goals are critical, if we are to move beyond problematizing remote Aboriginal Australia and working towards a new concept of 'development.' The research articulated in Case Study Three strongly supports Austin-Broos' (2011) assertion that inequality and cultural difference must be considered together, in any interventions aimed at 'improvement' in the lives of remote Aboriginal peoples.

The research also strongly supports the theoretical positions of PAR scholars including Fals Borda, McTaggart, Kemmis, Reason, Bradbury and others, in arguing that value neutrality in social research is not always an ideal stance, and that this is especially so where divergent worldviews form part of the research environment. Such a position is especially meaningful and relevant in the bush foods context. As was demonstrated in Case Study Three in the review of the 'I=P' project, deep involvement as participant rather than 'aloof academic observer' (Freire, 1970) or external interventionist can help to build a rich picture of social situations that might otherwise be unattainable from more positivistic

approaches. Thus, the thesis proposes that the trade-off between objectivity and collaborative learning in this inter-cultural space is extremely worthwhile. Indeed, the researcher takes the position that colonial understandings and manifestations of power and influence (L. Smith, 1999) which currently privilege Western ways of knowing and doing can only be broken down through engaging in the kind of deep relationships inherent in truly participatory research approaches.

Figure 16 shows how such processes might come to be reconfigured to enable shared understandings of 'success' and 'failure', and Figure 17 provides a representation of the operationalization of the two alternative development models incorporating a PAR approach to development.

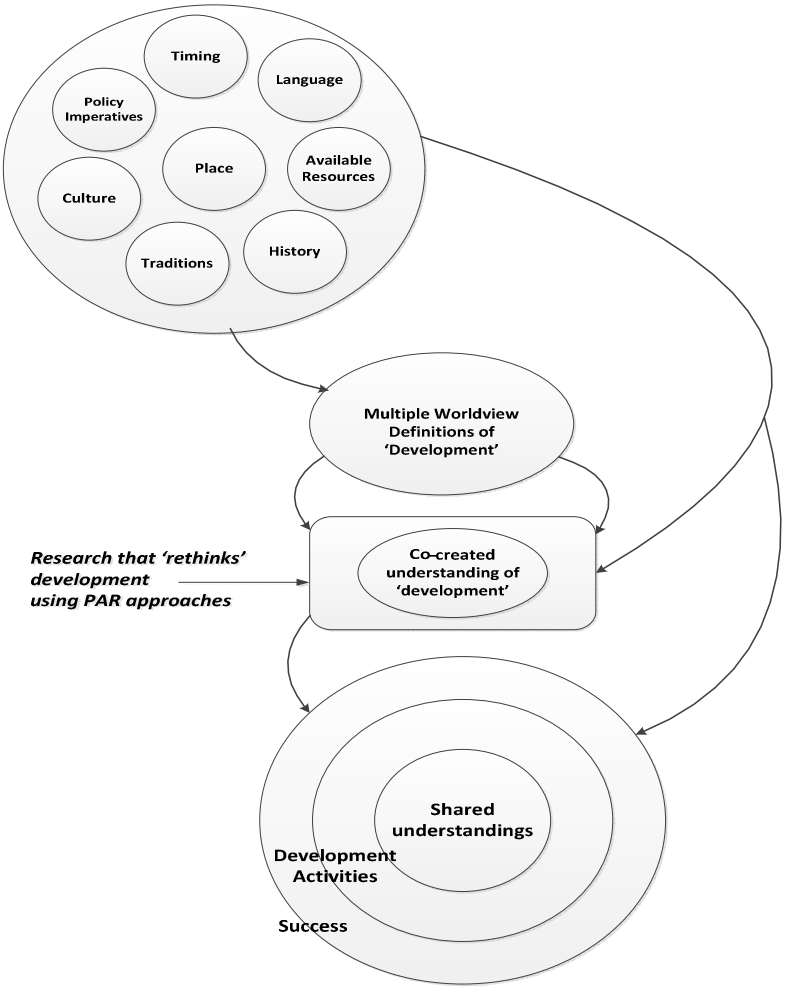


Figure 16: Reconfiguring Development Research and Development Activities

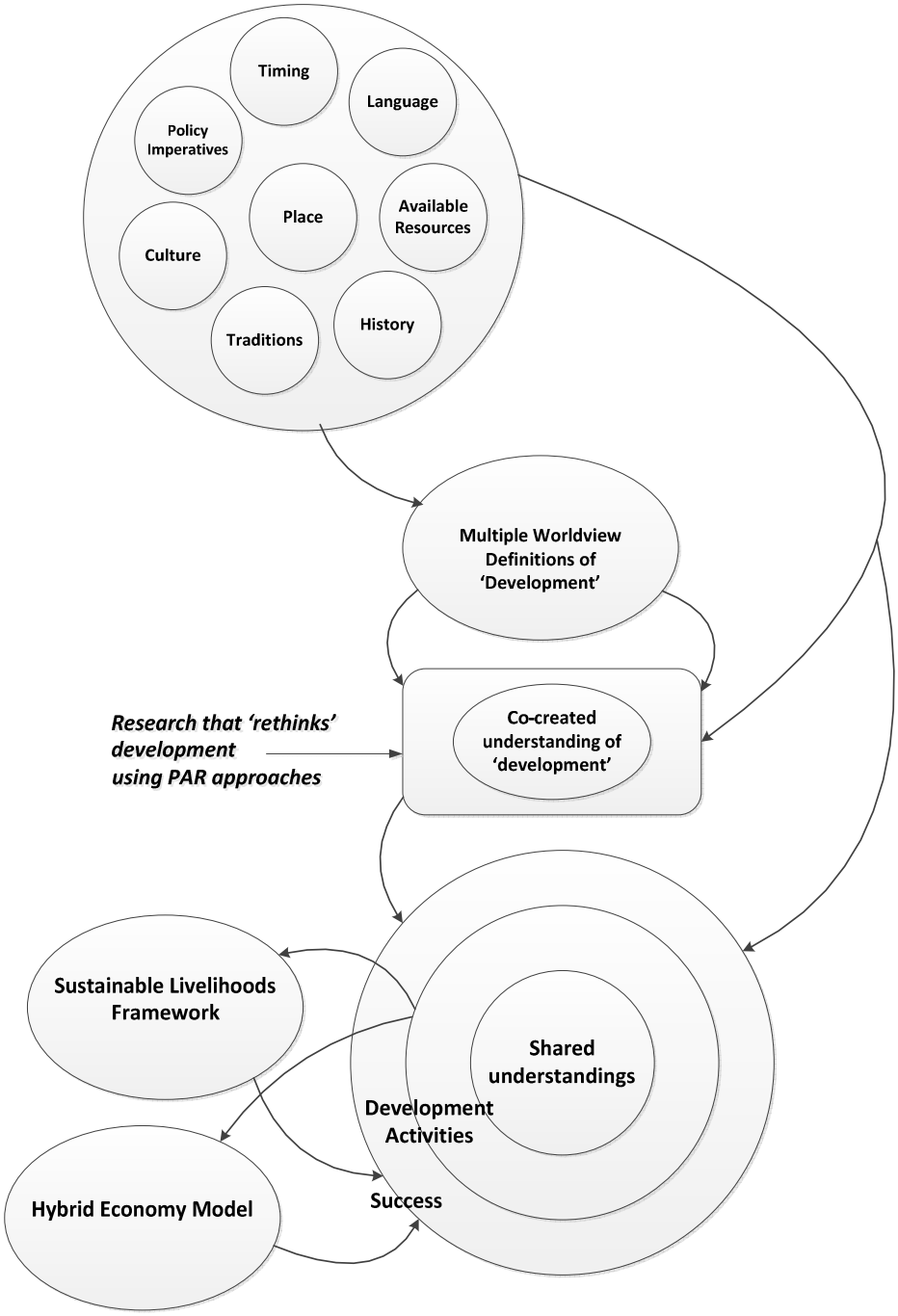


Figure 17: Operationalising Development Models Using PAR Approaches

9.4 Policy Implications

This research suggests that state support and input for the development of enterprises involving remote Aboriginal peoples does not consider significant cosmological differences that can be attributed to worldview. The most stark impact of this is that a catalogue of development 'failures' is evident in remote Australia, based upon singular understandings of what constitutes failure. Policy and its operationalization are produced from a unilateral position that accepts that 'success' and 'failure' are universally understood concepts. This thesis argues that 'success' and 'failure' are not universally understood concepts and that presuming so may in some part account for the catalogue of development 'failures' that litter the narrative in policy debates. From this position, development goals and policy mechanisms do not currently recognise that in some circumstances state input may not be appropriate nor desired (as exemplified in the sustained trade between the harvesters and traders featured in Chapter Four, despite *no* state input). Development policy imperatives need to be rethought in that they need to be able to account for worldview differences in order to be reshaped to fit the needs and aspirations of remote Aboriginal peoples. This can only occur if remote Aboriginal peoples themselves are co-creators of development policy. Such policy should of course be evidence-based. However, perhaps a rethinking of what constitutes evidence and how it is acquired is also necessary.

9.5 Implications for Further Research

In the production of this thesis, a number of tentative findings have emerged. It is pertinent to raise them here, as they may well be of importance in considerations of further research within the area of economic development with remote Aboriginal peoples.

The first of these tentative findings suggests that there may be a temporal aspect to considerations of value and that such considerations are dynamic. There is a sense of timelessness in the manner in which Aboriginal peoples might consider the 'Dreaming' or *Tjukurrpa.* That is to say, such concepts are described as being

unchanging and eternal (Bradley, 2008). However, the researcher suggests that in some aspects of the ways in which remote Aboriginal peoples consider their interactions with bush foods, there is a level of dynamism evident. This dynamism was expressed in the different responses given by people in relation to the question of selling, or not selling bush foods. For some people, selling was an everyday experience. For others, it was complete anathema. While this could perhaps be explained from the perspective that not all remote Aboriginal peoples necessarily share the same worldview, one might also suggest that such differences relate to the manner in which people engage with those 'objects' that they value, and to the changing needs and imperatives that peoples have that must be met. For example, some participants interviewed in Case Study Two, talked about 'having bills to pay' and 'needing cash' while expressing that in the past this wasn't so. Selling bush foods for these participants was one way in which they might meet those needs. As discussed in Case Study Two, this could be considered simply as a different perspective on the manner in which 'Country will provide.' From a theoretical perspective, e.g. from within the Community Capitals Framework (CCF) considered in Chapter Two, one could argue that this is simply the conversion of one form of capital to another. While this finding is speculative, it does suggest a note of caution in considerations of development with remote Aboriginal peoples. What may be currently seen as necessary in terms of reconciling a continuum of views regarding activities such as selling bush foods, may not be so in the future. If such dynamism is related to changing cultural norms then the efficacy of development models and frameworks such as the LARC Value framework might well be limited, from the perspective of what is understood to be acceptable and 'normal.' Further to this point of dynamic cultural norms, recent research (Taylor, 2011; 2012; Taylor and Carson, 2009) suggests that a changing demography is contributing significantly to change in remote Australia. Demographic trends show an increasing exodus from remote Australia by young people – and particularly young women - as they seek to develop different lives in urban centres where they can reap the benefits of enhanced education and health supports. Against this backdrop one must consider whether the 'shelf life' of new frameworks such as the LARC Value framework and the alternative economic development models currently promoted

as holding promise for remote Aboriginal peoples is limited. Such tools may have benefits for remote Aboriginal peoples currently engaged in the industry, but may become obsolete for future generations, should the trend toward net outmigration continue, for example.

While the LARC Value framework has arisen specifically out of work undertaken in relation to bush foods and the bush foods industry, it may have broader application beyond this industry. It may be useful, for example, in the art and tourism industries, where remote Aboriginal peoples are also participating in value chains related to those industries. Research which examines the similarities and differences in what constitutes 'value' and whether these concepts are consistent across all three industries would be useful. Such research would contribute significantly to improving the robustness of studies aimed at supporting economic development of remote Aboriginal peoples. However, as emphasised frequently in this thesis, such studies will need to occur from a shared worldview perspective.

More broadly than the Australian context, the LARC Value framework may find further use internationally with other Indigenous peoples. Further research to examine whether the principles of identifying different forms of 'value' based upon worldview would contribute significantly to further validating (or not) the concepts presented in this thesis.

While the thesis does not in any way purport to have provided a sole answer to how inter-cultural understanding in a commercial industry can be developed, the intent has been to provide a different lens through which bush foods might be seen as both cash commodities but also cultural icons. Such a perspective aims to provide deeper understandings of whether, and if so, how, the complexities of bush foods and ways of conceptualizing these might be brought together in a manner that is acceptable to the 'custodians' of both commercial and cultural knowledge and value domains.

9.6 Reflections on Research Praxis

My own understandings of 'success' and 'failure' – themes about which I have written at length in this research - were shaped by the institutional research perspectives within which I was situated. This understanding shaped my research practice and the nature of the research I would undertake and the manner in which it might be conducted. This position is clearly illustrated by beginning the research on assumptions that bush foods and the manner in which remote Aboriginal peoples engaged with them could be captured simply by analysing a bush food value chain. Understanding that there was more to be known than could be known from this limited perception was challenging.

Undertaking the work presented in Case Study Two was a turning point of sorts in my personal learning journey. This work furnished me with a greater self-awareness of myself as a researcher and an understanding that 'success' and 'failure' might have very different interpretations to those upon which I might have formed my own perceptions. Such self-awareness came about as a result of beginning to understand worldviews different to my own. Understanding that there could be value that is beyond economic value and understanding what this value means to remote Aboriginal peoples caused me to reflect deeply on the value of different forms of knowledge and the manner in which we might acquire it. This deeper understanding created a further desire to develop a new awareness of the impacts of my actions as a researcher. Growing self-awareness thus raised the idea that there could be different ways of knowing. Finding out more about these different ways of knowing has helped to develop different ways of thinking about 'doing research' and what impact that could have on how I might position myself in research activities in the future. In turn, this lead to thinking about and engaging with the scholarship on PAR approaches to research, and to developing this understanding as a major part of my thesis. I now understand that there are many ways of knowing and of gathering information that subsequently becomes knowledge – knowledge that can in turn imbue agency. I also understand that the manner in which I might gather that information within discipline-specific culture and tradition may not always be valued by others in the manner in which I might value it. This understanding has

required that I undertake some 'back-tracking' on the research journey presented in the thesis, to re-examine aspects of the (metaphorical) research places I had already visited (in the work highlighted in Chapter Eight, for example). That required understanding different research methods from those which I might originally have supposed would furnish the means to understand what it was the research was trying to understand. The manner in which the thesis has been structured clearly shows the changes in thinking and practice that have occurred, and in particular, the movement from a commitment to one research paradigm to another (as expressed in Case Study Three). I have come to understand more fully what I have observed and what has been shared. I have made many mistakes, offended people, misunderstood completely at times and been completely misunderstood at other times. I have been challenged by worldviews very different to my own. This has helped me to appreciate difference and the importance of knowing how to communicate differently. My own worldview has been reshaped and recoloured so that it has become enriched by subtle shades of difference, where once only primary colours existed. The learning has been life-changing. Illustrating this life-changing personal learning journey became an important part of writing the thesis, and integral at times to providing meaning to the research itself. The research, and the process of completing it, has had a profound impact on the manner in which I will engage in future research.

Finally, I conclude with a story. This seems fitting, since so much of what has been shared with me has been shared in this way...

> *'If you dig here, see here where these three cracks in the ground cross over? If you dig down there, you'll find a bush potato. Probably have to dig down a long way. Dry here for a long time, but that one will be there, just deep.'*

And so I dug, standing up, and clumsily wielding a digging 'stick' made from a flattened steel crowbar. Around me, women and children laughed as I struggled with the unfamiliar movements.

> *'No, no! You should sit down and dig. You'll get tired standing up there - sore back and sore sides. Here, like this.'*

The speaker demonstrated, sitting on the ground, one leg beneath the outstretched other, fluidly wielding the crowbar to dig in the manner that women have done in this region for many thousands of years. Eventually the prize was uncovered: a yam-like tuber approximately 30 centimetres in length and reminiscent of a very large kumara. The smell was subtle – earthy and fresh, with a hint of ginger.

*The bush potatoes (*Ipomoea costata*) harvested that day were later cooked in the fire and eaten with kangaroo, the fur of which had been singed off in a fast burning grass fire and then the meat buried and cooked in hot coals.*

Around the campfire, we talked about the bush food we had harvested together, and I learned. All around, the spinifex moved ceaselessly at the slightest breeze, its grey green forming a living carpet on the red desert sand. It was a long way from the processing factory that we had recently visited, both geographically and metaphorically. In this desert environment, with its sensory dichotomies of harsh terrain against subtle colours, it was hard to bring to mind and compare the mechanical rhythms of the factory with the natural ebb and flow of the desert. I reflected that it was here that bush food begins its journey from 'here' to 'there', where 'here' and 'there' are both physical places and places of meaning. I finally understood that I too, have made that same journey.

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