

Alternative Knowledge Systems

Simon Fisher and Lisa Watts

This paper is dedicated to the late Jack Japanangka Butcher. He was with us all the way and sadly passed away just as we were completing the research

It is appropriate, arguably imperative, in this millennium that Australian history after 1788 not only be written by its Indigenous people but also be based on research by Indigenous people. In the past, history has been written by non-indigenous people both about Indigenous societies and cultures and about the colonisation of Australian continent by the British, but at least until recently without the collaboration or authorisation of Indigenous people. An approach without genuine collaboration or authorisation may fail to employ ethical methods in collecting data. Moreover, the interpretation of the material may easily be distorted if it is presented solely from a non-indigenous perspective.

The perspectives of indigenous people can only be authoritatively represented if indigenous people collect and interpret the data. Meeting those criteria requires a set of features unique to an indigenous society: socialisation in its culture and native fluency in its language, as well as lived experience and knowledge. It also requires a set of skills that originated in the non-indigenous culture: written forms of communication, organisation of data and presentation of data according to discipline specific requirements, and project management. Contemporary research principles incorporate these critical features of the two traditions, and interdependently acknowledge the skills of the researchers through capitalising on their diverse backgrounds.

OUTLINE OF THE ALTERNATIVE SYSTEMS OF KNOWLEDGE MODEL

This paper provides an explication of an innovative model of research, ‘the alternative systems of knowledge model’, initiated by the Warlpiri people of Central Australia in collaboration with the then Northern Territory University. First, the model aims to develop synergies between traditional, cultural and scientific based knowledge in order to create ‘new’ knowledge. Second, it is argued that paradigms of research embrace indigenous systems of knowledge, not only to bring greater recognition to indigenous skills and contributions, but if there is to be ongoing human and environmental sustainability, it is vital that indigenous knowledge is integrated.



An important result of using the alternative systems of knowledge model is that its research findings elucidate both indigenous perspectives and knowledge. In the process of developing the synergies between the indigenous knowledge system and the western knowledge system, the two systems validate each other's findings. When indigenous research findings are substantiated by western research findings, in any discipline, the evidence is confirmed and the argument is considerably strengthened.

On a more practical level, a multi-disciplinary, integrated and collaborative approach to research which stems from two traditions, produces research of higher quality. Most significantly, the research findings make an invaluable contribution to the development of appropriate policy and management on natural resources shared by both indigenous and non-indigenous people.

The specific features of the alternative systems of knowledge model focus on both the systematic processes of research, the skills that the researchers bring to the research project and the collaboration of the two traditions. There is a great deal of capacity to exchange knowledge between the two systems. Indigenous knowledge of historical events can be exchanged with Western knowledge of historical events, subject to appropriate research methodology in the collection of data, including its examination and interpretation. Indigenous mythologies synergise with western geology and hydrology and Indigenous spatial ability synergise with western cartography and so forth.

As incongruous as the two systems may seem, there is an underlying unbounded potential for synchronisation of research paradigms whether based on essences, disciplines, ethics, protocols, methodologies and more importantly, the collection and interpretation of data. As the researchers apply for ethics approval under the western system, the researchers apply for ethics approval in accordance with the protocols under the indigenous system. Both of these applications can coincide at the same time. The collection of data from both the western and indigenous system must coincide at the same rate to ensure that both forms of data are available on the same topic, event or focus point in preparation for interpretation.

A WARLPIRI INITIATIVE

The alternative systems of knowledge model was informally developed in 1996. The Warlpiri people of Central Australia could no longer tolerate being excluded from the intellectual debates that arose from public policy processes under Australian Administrative law, which revolved around the contested site, 'Pikilyi', the most significant water source for Warlpiri people. The Pikilyi Pound comprises a large catchment area, a deep natural basin which holds an immense water supply of exceptional quality. It is located on Mt Doreen Pastoral Lease, approximately 350km north west of Yuendumu and is at latitude 22 degrees south and longitude 131 degrees east on the far eastern side of the Great Sandy Desert.¹ Pikilyi is site of greatest cultural significance to the Warlpiri and 'beneath the surface of the Pikilyi region lays a permanent water supply in a natural reservoir'.²

The Warlpiri uphold that the general exclusion of indigenous traditions in public policy processes under Australian Administrative law is largely an underhand practice of colonization that aims to obliterate indigenous knowledge. It is clear that this exclusion is a form of denying indigenous people of their right to practice their traditions. The consequences of this prohibition are inevitable: the indigenous knowledge system is weakened considerably, and most significantly, a great deal of knowledge imperative to sustaining the indigenous economic base is lost:

The policies and practices of colonizaton, which led to the dispossession of Pikilyi, had a devastating impact on its Warlpiri owners and guardians. Their water sources were destroyed or contaminated by the introduction of mining and pastoral activities and they were denied access to Pikilyi. The most fundamental incompatibility was the arrival of cattle which trampled their ground and contaminated their holy waters.³

A series of formalized debates on Pikilyi begins with the official occupation of Warlpiri lands in 1926, and includes criminal proceedings in the Northern Territory in 1944, a federal inquiry known as the Simpson Inquiry in 1946, and fifty years later in 1996, a tribunal hearing of a country living area application. It is apparent from examination of the archival sources that those conducting the hearings deemed Warlpiri evidence as inadmissible. The Warlpiri saw that people with discretionary powers were making decisions on issues of the greatest importance to them: decisions about their land, water and natural resources, without considering Warlpiri evidence, knowledge or perspectives. Moreover, it has become apparent that over the past two hundred years, the development of both Commonwealth and State policies and administrative laws relating to natural resource management issues were void of indigenous input and considerations.

In a span of ninety years, all determinations relating to the Pikilyi site were detrimental to the lives of the Warlpiri. The machinations of public policy processes had completely undermined the value of indigenous knowledge, thus dishonouring a unique tradition with one of the earliest track record of proven human sustainability. Warlpiri hold that their profound relationship with the unique eco-systems of an otherwise arid environment could be the basis for developing synergies between their own cultural, spiritual and religious knowledge systems and those of the western scientific based knowledge system: hydrology, geology and hydrography. It became a case of transforming the systemic attitudes of Europeans against the inclusion of Indigenous tradition.

In July 1996, the Warlpiri reached a low point as a result of a tribunal hearing of a community living area application, known to the Warlpiri as Ngalyapunpa, located within the vicinity of Pikilyi. This application was lodged in September 1990, under S.102A of the Crown Lands Act by three Warlpiri applicants (two now deceased). Six years later a tribunal hearing took place on the site. On the day prior to the hearing, under the pastoralist's instruction, the lawyers sent an intimidating message to the Warlpiri community prohibiting Warlpiri individuals other than the applicants from

1. Watts and Fisher, 2000, Pikilyi: Water Rights—Human Rights, Joint-Masters thesis, Northern Territory University, p.4

2. *ibid*, p.4

3. *ibid*, p.vi

entering the pastoral lease boundary. The Central Land Council advised their Warlpiri clients of their rights of access to traditional lands under the Northern Territory Land Rights Act, but many fled to their surrounding communities, fearing reprisals if they entered the lease area.⁴

Those who did attend were shocked to see that the pastoralists concerned had bulldozed the area, demolishing all remnants of living quarters in order to destroy any trace of Warlpiri historical association to the site under investigation. Unbeknownst to the traditional owners, including the applicants, the pastoralist erected a new sign, displaying the words 'Conservation Area'. The applicants were most dissatisfied with the hearing; upon their arrival at the site for the hearing, the pastoralist swiftly escorted the tribunal, the applicants and the lawyers off the Mt Doreen Pastoral Lease, leading them to view an outstation called Yinjirimardi, located outside the lease in order to persuade the Tribunal that the Warlpiri already had a home.⁵

Although the Warlpiri had legal representation throughout the entire tribunal process, the Warlpiri experienced the dominance of the western system at all levels and experienced exclusion of the indigenous system at all levels. Part 8, Community Living Areas of *The Pastoral Act 1992* (NT) requires the applicants to demonstrate historical residential association. This requirement was emphasised despite the fact that Warlpiri people were officially dispossessed from their land in 1926. Altogether, 91 recommendations were handed down by the tribunal in April 2003, and its final recommendation determined, 'by majority that no excision be made'.⁶ A critical analysis of the 91 recommendations reveals that the information is inaccurate, a disgrace to public policy processes and furthermore, entries in the applicants' submission relating to their cultural affiliations to the site were highly criticised by members of the Tribunal.

This incident was pivotal in the creation of the alternative systems of knowledge model. The elders had endured seventy years (1926–1996) of being denied both their rights to access Pikilyi and their rights to engage in public policy processes on matters relevant to their land and natural resources. In a vigorous response, the elders appointed Fisher and Watts, to establish paradigms of research that would bring greater recognition to indigenous skills and knowledge. At this point it seemed quite clear to the Warlpiri that thorough investigation of natural resource management issues, drawing parallels between historical, scientific and cultural perspectives were only possible through the integration of both the western system and the indigenous system. It also became very clear to the candidates that neither could undertake the tasks assigned to them without the other.

4. *ibid*, p.243

5. *ibid*, p.243

6. Report on Community Living Areas Tribunal Recommendation, Mt Doreen Station. Application by Marshall and Butcher, Central Land Council, Alice Springs NT, p.31

THE APPOINTMENT OF RESEARCHERS

Fisher, a Warlpiri man, earned his appointment from actively listening to his family accounts of their history for decades, building up a wealth of traditional knowledge and clear understandings of indigenous perspectives. Fisher had acquired fundamental and invaluable indigenous skills in the realms of language, knowledge and culture. Watts, a non-indigenous person, earned her appointment as a result of her long-standing relationships with family members, her ability to interpret Warlpiri perspectives and demonstrated project managerial skills in order to successfully conduct the project. The skills of the applicants, while in themselves distinctive, worked consistently side by side and the collaborative component included the dynamic contributions made by each of the candidates, and the systematic processes involved the collection, examination and interpretation of archival and oral material.

Subsequently roles were clarified: Watts would act in the capacity of all elements related to western traditions and Simon Fisher would act in relation to all elements concerning indigenous traditions. (See diagram below). The success of the project hinged on the close collaboration of the two traditions and the complementary skills of the researchers.

ACADEMIC APPROVAL FOR THE ALTERNATIVE SYSTEMS OF KNOWLEDGE MODEL

The research model includes the academic arena not only to improve educational outcomes for indigenous people but primarily to ensure that stakeholders of significant natural resources actively participate in intellectual debates on issues relevant to both management and ownership. There is validity to the research model receiving academic recognition in order to authenticate its research principles, methodology and to maintain quality control of the research material.

In 1997, Fisher and Watts proposed to the Centre for Indigenous Natural and Cultural Resource Management (CINCRM), the then Northern Territory University (NTU), undertaking a research project that integrated two traditions. Over a period of three years, the NTU academic board initiated a series of debates concerning the conditions of granting special dispensation to produce a joint Masters thesis. A formal proposal to approve Joint Masters Candidacy was lodged with the research Degrees and Scholarship Committee on 14 August 1997. The joint Masters research project was conducted from 1998 to 2000.

On 12 October 2001, at the fourth NTU graduation ceremony, Watts and Fisher were admitted to the degree of Master of Aboriginal and Torres Strait Islander Studies. The joint-project was recognized as precedent-setting both for Indigenous people and academia in what resulted as, 'the first Joint Masters in an Australian University and possibly the world'.⁷

The core arguments, which convinced the Academic Board to offer joint candidature focussed on the two candidates bringing unique and complementary skills from two traditions:

*Mr Fisher has the necessary language skills, and as an aboriginal elder in his own right, the relevant qualifications in terms of traditional knowledge. Ms Watts has the more “traditional” skills in written documentation and archival work.*⁸

The Academic Board had shown ‘considerable support for the development of innovative paradigms of research that acknowledge in a higher education context, the value and legitimacy of an alternative systems of knowledge’.⁹ The proposal gave the University the opportunity to acknowledge the value and legitimacy of alternative systems of knowledge in a higher education research context that were in line with the mission and aims of CINCRM.

However, the Academic Board was determined to maintain both academic rigour in the research process and independent assessment of the two candidates and thus had in their minds that separate theses would be submitted for examination. In the original Offer of Candidature, the academic board stipulated that at all times independent assessment of the two candidates must be possible. Associate David Parry, Director Postgraduate Research Studies reported that, ‘at this stage it was not envisaged’ that the candidates would submit a joint thesis.¹⁰

The academic debate on submitting a co-authored thesis continued for two years while the candidates conducted their research project. The candidates argued that it was not possible to submit separate theses, having amassed an enormous collection of both oral and archival data and believing that the key to collaboration was not only in the collection and examination of data. Moreover, Simon’s role in interpreting the data was pivotal to providing indigenous perspectives. On 27 August 1999, the supervisors of the candidates, Professor Marcia Langton and Professor Nancy Williams formally proposed to the Academic Board that the candidates submit a joint thesis for examination:

*The project has been collaborative, and thus it is now difficult to draw separate research theses from the substantial collection of oral history recording carried out by the candidates jointly and in collaboration with traditional owners.*¹¹

7. Paul Toohey. 1 –14 October 2001, The Australian, ‘Mystery shrouds top-end thesis’, p.3.

8. Associate Professor David Parry, 6 November 1999, Draft, Examination procedure for Joint Masters by Research thesis—Ms Lisa Watts and Mr Simon Fisher, Northern Territory University, Darwin, NT.

9. Executive Officer, Research Committee, 22 September 1999, Memorandum to Professor Marcia Langton, Nancy Williams, David Carment, David Parr and Dr Bill Perrett: Re: Action arising from meeting 5/99 of Research Committee

10. *ibid*

11. Associate Professor David Parry, 6 November 1999, Draft, Examination procedure for Joint Masters by Research thesis—Ms Lisa Watts and Mr Simon Fisher, Northern Territory University, Darwin, NT.

On 8 September 1999, the Academic Board discussed the proposal of a joint-thesis at length, reaching two fundamental conclusions. First, that the candidates must be able to provide evidence of their training in research and that could include submission of materials, other than theses. Second, arguments focussed on the need to develop rigorous academic confines in order to assess each of the candidates on their own merits:

An essential component of any such paradigm is that the research effort and outcomes of each individual be clearly identifiable and able to be distinguished from the research effort and outcomes of others that may include submission of material other than theses as evidence that the candidates have been properly trained as researchers.

The committee considered the difficulties that the examiners might face in determining, ‘from simply reading the thesis that each of the candidates had achieved the level of a masters by research degree’.¹² The research committee members provided instruction to develop appropriate methods of examination for proposal to committee. Additional Rules for Examination of Theses were stipulated by the board: one joint (co-authored thesis) with a preface detailing the need for a joint thesis, an oral examination, an unequivocal statement of each candidate’s separate contributions and joint contributions. The oral examination enabled each of the examiners to clarify issues or seek further information about either individual or joint contributions. It is evident that Watts and Fisher met more rigorous criteria than most research degree students.

RESEARCH PRINCIPLES

Research principles of this model ensure that the traditions are treated in the same way in order to create equilibrium between the two systems. In accordance with university rules, academic supervisors were appointed to supervise the candidates and in accordance with indigenous cultural protocols, cultural supervisors were appointed to control the conduct of the research. These principles applied to all facets of the research project, including the selection of one non-indigenous and one indigenous examiner, joint applications for funding, and joint granting of stipends.

A 70,000-word volume titled, ‘Pikilyi: Water Rights—Human Rights’, and a 35-minute documentary video were submitted for examination. One indigenous examiner, Dr Pat Dodson and one non-indigenous examiner, Dr Peter Read, both of international standing were selected to examine the thesis, both agreeing, ‘that the research for the thesis could not have been completed without the two contributions’.¹³ Read described the thesis ‘as among the best theses he had read’. Read comments:

For years, Aboriginal people and some non-Aboriginal people have criticised universities for accepting only one kind of knowledge: western positivism. Here we have traditional Aboriginal explanation, including mythology sitting side by side with geology. Two systems of knowledge not only together but complementing each other’¹⁴

12. *ibid*

13. Kathy Rea, undated, Masters graduands page 1.doc, ‘Joint thesis based in two know edges’, NTU, Darwin, NT.

Possibly without knowing it, the committee's responses reinforced the principles of the alternative systems of knowledge model as the model can represent both *distinctive* capacity and *collaborative* capacity. Distinctive capacity entails all components of individual candidate's traditional knowledge of their respective inherent system and collaborative capacity entails the ability of the candidates to jointly combine their traditional knowledge to effect the purpose of the research.

RESEARCH METHODOLOGIES

The candidates were methodical in their approach to ensure that the analysis of the data and the main argument of the thesis were presented from a Warlpiri perspective. In the first six months of the project, the candidates discussed Warlpiri history extensively. They identified major historical events significant to the Warlpiri in relation to the dispossession of their land and analysed them from a Warlpiri perspective. As a result of these discussions the candidates developed a list of topics that in effect summarised the existing Warlpiri knowledge of their history. This process took place prior to the candidates beginning the arduous task of collecting, examining and interpreting the oral and written evidence required to substantiate the Warlpiri argument.

The organization of data is a significant part of the collaborative processes, integrating both knowledge systems. As the candidates were obligated to adhere to research ethics associated with Warlpiri law, it was necessary to establish three systems. The systems were devised to manage an enormous collection of data but primarily to ensure that a Warlpiri argument developed from a Warlpiri perspective. Three systems were developed in order to manage substantial amounts of data: system one provided a detailed time-line of significant events, including an abstract for each series of archival documents. System two comprised a list of topics relevant to the argument and system three recorded indigenous evidence usually in the form of oral or pictorial data, including Warlpiri translations and interpretations. Oral data were collected by recording interviews (Warlpiri people) on digital camera. The candidates listened to the oral evidence many times and Fisher provided the interpretation. Relevant data were cross-referred to Systems 1,2 & 3.

In the establishment of the research methodologies, the candidates were excited when they realised that archival evidence substantiated the oral evidence. Combining both oral and archival evidence has proved an invaluable means of strengthening the Warlpiri argument. The research processes are also outlined in both the individual and joint statement of contributions compiled by Fisher and Watts.

Indigenous research ensured that 'Warlpiri truths' were accurate and that all interpretations were made from a Warlpiri perspective. The networking among indigenous people was extensive and work was conducted on a collaborative basis. In

14.Kathy Rea, undated, Masters graduands page 1.doc, 'Joint thesis based in two know edges', NTU, Darwin, NT.

conducting the research project, approximately 150 Warlpiri people were consulted or involved in some capacity. Because of the unique nature of the project, the candidates established research ethics in line with the principles of Warlpiri law.

The alternative system of knowledge model is innovative in that it allows indigenous people, for the first time, to have control over their own knowledge. Research principles relating to intellectual property and copyright of indigenous knowledge are placed within the indigenous domain to enable indigenous people to make decisions on the finer purposes the knowledge is intended for. Both research methodologies and research principles are developed primarily to strengthen the indigenous system of knowledge in order to ensure the maintenance of indigenous economic sustainability.

Research principles and research methodologies apply to both indigenous and western systems. In a traditional context, a set framework exists for the indigenous system of knowledge that embraces the significant components of the tradition: laws, lore, custodial law, jukurrpa, subsections, kinship system and traditional practices. Indigenous research respects and upholds the fundamental elements of the indigenous knowledge systems.

THE INDIGENOUS KNOWLEDGE SYSTEM

Below is a diagram that demonstrates the traditions of the indigenous system and its contributions to indigenous research:

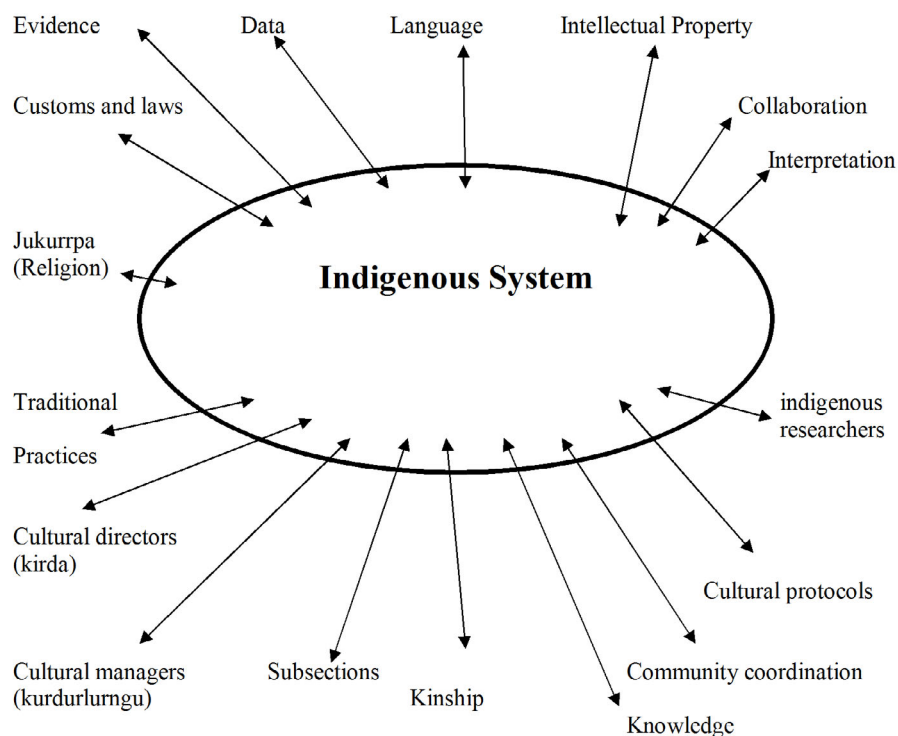


Diagram 1. Traditions of the indigenous system

THE WESTERN KNOWLEDGE SYSTEM

In a traditional context, a set framework exists for the western system of knowledge that embraces the significant components of the tradition: academia, lore, disciplines, law, philosophies and administration. Western research respects and upholds the fundamental elements of the western knowledge system.

Below is a diagram that demonstrates the traditions of the western systems and the contributions to western research:

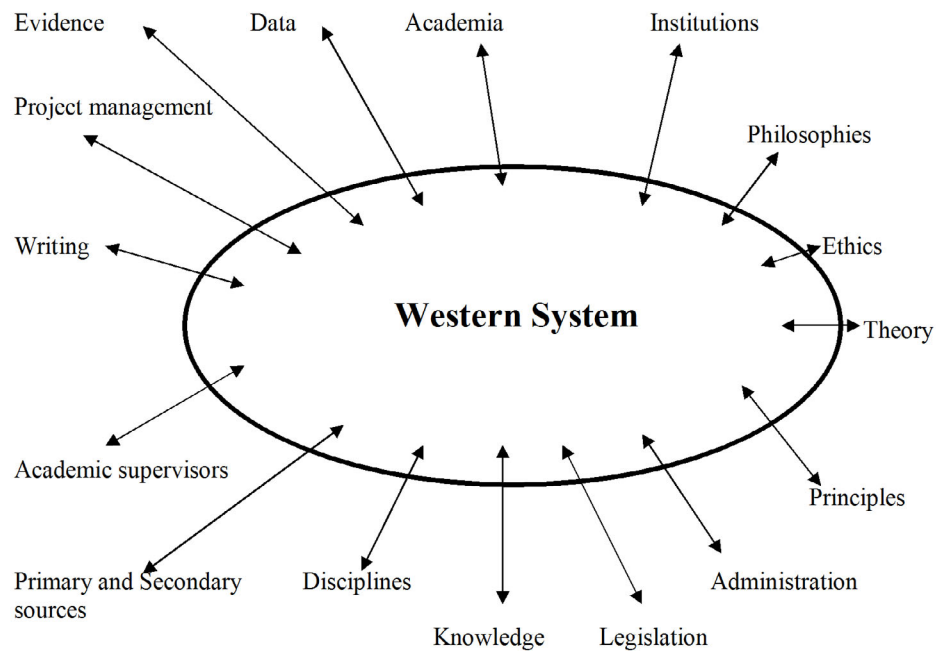


Diagram 2. Traditions of the western system

COLLABORATION

As mentioned-above the success of the model hinged on the collaboration of the two candidates operating in a cross cultural setting, adopting a multi-disciplinary approach to research in a context that recognizes on equal terms the elements of both the indigenous and western system. There are of course critical variables that must be taken into account when establishing this model. In this case, the candidates had known each other for a very long time and continue to remain dedicated to working together on implementing the principles and methodologies of this model in order to achieve research project objectives.

Prior to commencing the research, the candidates had already gained substantial experience in cross- cultural settings both on an informal basis and official capacity. It is also recognized that both candidates are two very different people, each with a unique set of skills required to correlate indigenous knowledge with western evidence. The research methodologies assist the candidates in the process of examining western

evidence to substantiate indigenous perspectives. The candidates share a common object: to record and document indigenous knowledge first to ensure that this valuable commodity is not lost and second, as a priority to use the knowledge in order to at the least, sustain the indigenous economic base.

It is unforgivable to think that indigenous knowledge is lost purely because of the systemic attitudes of a colonised society, and if the case, a radical transformation is certainly needed at the senior policymaking and management level. Integrating both the western and indigenous traditions ensures the ongoing sustainability for both indigenous and western economic bases and that it also provides a broader range of acquired skills and knowledge to draw on for the on-ground application of managing natural resources. The preservation of a knowledge system that as mentioned-above has a proven track record of human sustainability is the responsibility of all concerned and its major contribution to human sustainability must be unduly recognized.

Diagram three outlined below illustrates the collaborative process of the two traditions. This structure outlines the academic rules of the Charles Darwin University and the laws and the cultural protocols of the Warlpiri people, during the 1998 –2000 Joint-Masters in Aboriginal and Torres Strait Islander Studies by Research project. The arrows demonstrate the ability of the candidates to cross over systems in order to exchange the knowledge required to correlate western evidence with indigenous knowledge.

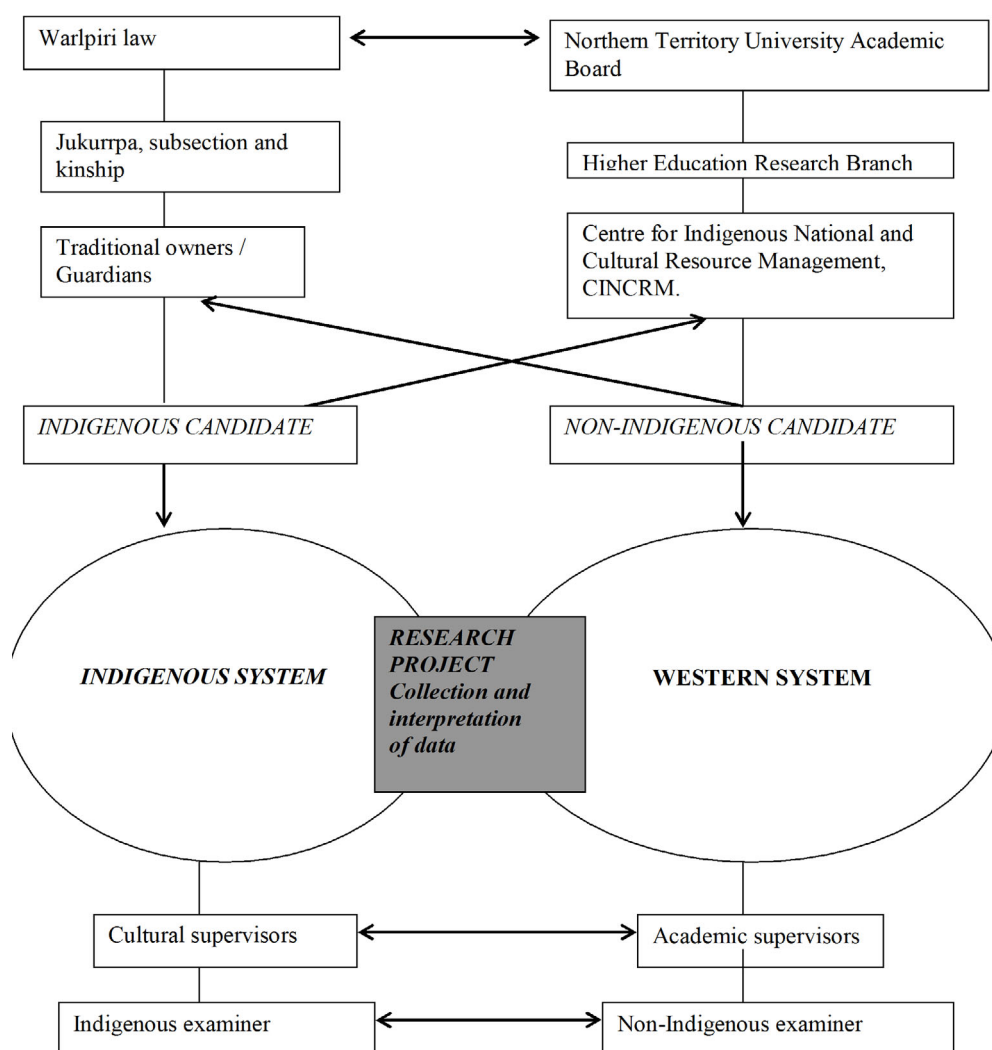


Diagram 3.

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