THE SPATIAL DIMENSION OF ABORIGINAL LAND TENURE

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ABSTRACT
The unique relationship Aboriginal peoples have with the land has been highlighted in recent years with the passing of the *Native Title Act* 1993. The vastly different characteristics of Aboriginal land tenure to the Australian Torrens systems makes it difficult for the integration of the two tenure systems into one land registration system. A better understanding of Aboriginal land tenure and associated boundary definition is a vital first step towards mapping and documenting boundaries for the purposes of resolving native title disputes and developing institutional infrastructures that can better address the duality of tenure systems.

Aboriginal land tenure boundaries have been mapped in the past by various anthropologists and historians. Mapping and definition of Aboriginal land boundaries by ‘surveyors’ are likely to provide alternative ways in which native title boundaries are determined, offering a different perspective on the spatial extent of Aboriginal land tenure. There is a need to accurately and unambiguously define the spatial extent of native title within the Australian cadastral system to support land based infrastructure and the future of native title.

The paper highlights:
- The characteristics and similarities/differences between the two tenure systems in a spatial context;
- The current methods employed in defining and mapping Aboriginal land tenure boundaries and the appropriateness for the purpose of native title determination;
- Possible ways in which Aboriginal land tenure could be defined and mapped in the future; and
- Possible incorporation of Aboriginal land tenure into the current land administration and land registration systems of Australia.

KEYWORDS
Aboriginal land tenure, Australian cadastral system, Native Title, determination and delineation of native title claim areas.

INTRODUCTION
It has been acknowledged that two land tenure systems exist within Australia, customary Aboriginal land tenure and the Australian cadastral system. Both land tenure systems are diverse by nature and are not overly compatible. The passing and implementation of the *Native Title Act* 1993 has endeavored to recognise traditional Aboriginal interests in land, previously recognised by the common law of Australia. An integral element of the native title process is the requirement that a map and a worded description of the claim area be supplied as part of the initial application. Previous mapping efforts of traditional Aboriginal land have been performed for anthropological or ethnographical purposes. There is now a need for mapping of traditional Aboriginal lands and the delineation of claim areas for the process of native title.

The Institution of Surveyors Australia (ISA) has acknowledged the growing involvement by the surveying community in the native title process, particularly the determination and delineation of the spatial extent of native title. A national policy on native title has been issued by the ISA, encouraging the education and awareness
of spatial requirements for native title for surveyors and other parties involved with
native title.

There is a global trend to recognise indigenous people interests in land and
incorporate them into the mainstream land administration domain. With the advanced
gromatic technologies now available, the capture, management and application of
diverse land based information can now be a reality.

**SPATIAL CHARACTERISTICS OF ABORIGINAL LAND TENURE AND
THE AUSTRALIAN CADASTRAL SYSTEM**

An element of cohesion is required between Aboriginal and Non-Aboriginal
concepts of land for the native title process to be successful. Understanding the
spatial characteristics of both tenure systems will aid the implementation of native
title, and the incorporation of Aboriginal interests in land, into the mainstream land
administration of Australia.

**Spatial Characteristics of Aboriginal Land Tenure**

The importance of land within Aboriginal culture transcends generations and
involves a spiritual and material connection to land, where land is not measurable in
mathematical terms, nor delineated through the mapping or textual mediums of a
western society. Traditional interests in land are measured and quantified through the
traditions and customs as held by the Aboriginal peoples of Australia. These
traditions and customs are demonstrated through paintings, song, dance, symbolic
totems and oral traditions, and used to reinforce the rights, restrictions and
responsibilities for managing and protecting land. The land tenure system as held by
Aboriginal peoples, defines cultural identity and is held in a communal manner.

A defining relationship with the land as held by Aboriginal people is one of spiritual
affiliation. “The spiritual relationship is centred on the belief that ancestral beings
created the form of the land and the people. The spatial coincidence of these
activities established the identity of clans and the limits of their territories” (Davis &
Prescott, 1992, p1). The legal recognition of this spiritual relationship to land was
highlighted in *Millirrpum v Nabalco* (1971) by Justice Blackburn. This spiritual
relationship is a fundamental concept defining the nature of Aboriginal land tenure.
Such a connection to land is often difficult to quantify for the purposes of native title.

Aboriginal people have forged a material or resource relationship with land that has
evolved over time, with the utilisation of the natural environment for food and
resources. This intimate relationship with land provides Aboriginal peoples with the
knowledge of local foods and material resources at the appropriate seasonal times
and locations. This relationship to land offers a quantifiable connection to land,
where the location of resources provides a spatial context for defining this
connection to the land (Davis & Prescott, 1992).

**What Constitutes Aboriginal Boundaries?**

Topographic features play an important role in the demarcation of territories and
boundaries. The mapping efforts by Tindale (1920 - 1940s) and Clark (late 1980s),
defined and delineated language areas, where it was found that a “close
correspondence exists between many tribal boundaries and physiographic,
geographic and ecological boundaries” (Clark, 1990, p2). Further, territories and
boundaries may follow seasonal or vegetation patterns. There are no standards of accuracy that can be applied to describe these boundaries, the units of measurement are not mathematical but cultural, ecological and geographical. The boundaries of Aboriginal lands are accurate in that the location is known by all members of the community and neighboring communities. There is little demarcation other than topographic features to define Aboriginal land boundaries, where it is said “the boundaries between Aboriginal territories are not delineated in treaties or demarcated on the ground as are international and internal boundaries of most countries” (Davis & Prescott, 1992, p134).

**Spatial Characteristics of the Australian Cadastral System**

The Australian cadastral system has developed over the past 200 years, ensuring security of title and promoting sustainable development. The cadastral system “derives many of its principles and concepts from English Common Law. It has married the system of land transfer under English Common Law with the needs of a vast developing country” (Williamson, 1994, p1). The development of the Australian cadastral system has seen the inception of the Torrens System of title registration and the development of digital cadastral databases.

The Torrens system of title registration was created in South Australia in 1856 and soon became the accepted method for registering interests in land throughout Australia. The Torrens system of land registration was designed to alleviate the problems encountered with the deeds system, in that an error in the chain of deeds could void the title. At the time of development the Torrens system was a marked improvement, it was seen as fast, cost effective, secure and suited the needs of society at the time of development (Williamson, 1994).

The Australian cadastral system primarily involves:
- Individual grants from the Crown;
- Parcel boundaries derived from individual cadastral surveys, these are coordinated together in the cadastre;
- Many forms of tenure including leasehold, freehold and Crown land;
- Associated State and local regulations as to land use and development; and
- Torrens System of land registration. 

(Williamson, 1994)

**What Constitutes Torrens Boundaries?**

Title boundaries in the Torrens system are commonly portrayed as “imaginary lines, which extend between marks placed by the surveyor or between those marks that already exist on the ground” (Surveyors Board, 1994, p 99). Physical boundaries dominate the methods employed for the demarcation of boundaries, the use of fences to isolate ownership of land has been used predominately by western cultures.

The creation, demarcation and delineation of title boundaries have associated standards and requirements to be upheld by the surveying profession. These standards have been adopted by Victoria are well documented within the *Property Law Act 1958*, *Transfer of Land Act 1958* and the *Subdivision Act 1988*. The registration of interests in land through the Torrens system in Victoria offers security of tenure and a State guaranteed title, it does not guarantee the boundaries of the land parcel. The Australian cadastral system operates with rigid definitions of boundaries...
where differences in boundary locations are a matter of law (Surveyors Board, 1994). The Parish maps, historically provided the cadastral framework for the state. As technology advanced the framework of cadastral information in a digital format was realised with the creation of digital cadastral databases (DCDBs) and digital topographic databases (DTDBs).

**Similarities and Differences between Aboriginal land tenure and the Australian Cadastral System**

The fundamental difference between Aboriginal land tenure systems and the Australian cadastral system is the concept of ownership and the role of land within society. Figure 1 displays these fundamental differences in Aboriginal land tenure systems and the Australian cadastral system. Aboriginal people consider land to be of integral importance for determining cultural identity, where land is present in all aspects of life. The western view of land is one that it can be owned exclusive of others, viewed as a commodity which may be bought, sold, leased, inherited or use for the storage and safe keeping of wealth for economic gains.

<table>
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<tr>
<th>Aboriginal Land Tenure</th>
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<td>Torrens system of registration of interests in land, Cadastre displays the spatial context of interests in land</td>
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*Figure 1: Differences between Aboriginal land tenure systems and the Australian cadastral system.*

Globally, it has been recognised that traditional indigenous land tenure systems and the Western or European land tenure systems are conceptually and spatially very different. The problem of differing land tenure systems, highlighted in Australia by the *Native Title Act* 1993, has been an influencing factor for many land reform projects in neighboring countries. Rakai & Williamson (1995) and Iatau & Williamson (1997) detailed the land administration in Fiji and Papua New Guinea respectively. Both countries have large indigenous populations and the need to recognise customary land tenure within the mainstream tenure systems is a necessity for the creation of complete and effective land information systems.
The High Court’s decision concerning *Mabo vs State of Queensland (no 2)* 1992 instigated the development and implementation of the *Native Title Act* 1993. The objectives of this Act are clearly stated to protect and recognise native title, to facilitate future dealings, to establish a mechanism for the process of recognising native title and to provide for the validation of past acts (section 3 of the *Native Title Act* 1993). Native title is dependent on the statutory recognition of the traditional interests in land held by Aboriginal people, previously recognised by common law, at which only limited traditional Aboriginal rights and laws in land is recognisable. The nature and extent of native title can be elusive from a Western perspective, where native title rights and interests in land are difficult to define, for reasons including:

- Diversity of rights and laws pertaining to land within and between Aboriginal communities;
- Traditional Aboriginal rights and interests in land are not frozen in time, when pursuant by the *Native Title Act* 1993;
- The presence of overlapping rights and interests in neighboring land; and
- Fundamental social and cultural differences between Aboriginal and Western perspectives of land.

*(Lane, 1999)*

**National Native Title Tribunal Procedures and Guidelines**

The National Native Title Tribunal (NNTT) is the responsible body for facilitating the process of native title. They have issued guidelines and procedures for the documentation and delineation of claim areas. A map and worded description are required as part of the native title application, primarily assisting with the determination and delineation of claim areas and the spatial extent of native title.

There are no standards provided for the determination and delineation of claim boundaries, only broad guidelines. These guidelines provide representing bodies with details concerning the custodians of land based information, the appropriate land based information details that should be supplied, the appropriate scales of maps and the tenure details required for the native title application. The advantage for these broad guidelines is that they acknowledge the diversity within and between Aboriginal communities where there are no pre-existing claims to provide precedent. The disadvantage of these broad guidelines are that boundaries and claim areas are being prepared from various source maps with differing scales and features.

**MAPPING OF NATIVE TITLE CLAIMS**

Efforts to determine and delineate traditional Aboriginal land boundaries “was conducted by officers of the Port Phillip Protectorate which operated from 1839” *(Clark, 1990, p6)*. Previous mapping efforts undertaken in Victoria had been performed for anthropological or ethnographical, historical and administrative purposes.

Current methods to determine native title claim areas can involve a tedious operation of searching and sorting of Parish maps and overlaying the external boundaries of traditional lands as identified by the Aboriginal claimants. The advent of digital mapping has encouraged the use of ANZLIC datasets and the States digital cadastral
and topographic databases for mapping of native title claim areas. The Central Land Council has pioneered the use of digital land based data, particularly the Northern Territory’s DCDB, for the management of Aboriginal lands through geographic information systems (GIS).

As the States strive for complete and accurate DCDBs, these databases for determining, delineating and managing native title lands are a reality. The use of the State digital topographic database allows traditional Aboriginal lands to be determined and delineated if the boundaries of such lands correspond with topographic features. Figure 2 displays how the DCDB and the Digital Topographic Data Base (DTDB) may by used to include native title as a main spatial database through a layering of land information.

![Diagram of the use of cadastral and topographic data for determining and delineating native title in a layering affect.](image)

The development of a digital database of native title claims for the specific use by Government agencies and Aboriginal communities will strongly rely upon the digital cadastral and topographic databases. The addition of other land based information will only support and promote further development of land information systems. The ISA policy on native title supports the development of “working models for measuring, recording and retrieval of native title spatial information” (ISA, 1998, p5). The native title policy recognises that as managers and providers of spatial information, surveyors are in a unique position to provide appropriate resources for native title claim determination, delineation and management. The Yorta Yorta case recently handed down by the Federal Court highlighted the necessity for clear and accurate delineation of claim areas and the potential of applying state digital data in the determination and delineation of native claim areas.

**The members of the Yorta Yorta Aboriginal Community v The State of Victoria & Others**

The Yorta Yorta case was lodged with the NNTT in 1994, the first for the State of Victoria. The location of the claim was in the north of Victoria and the Southern regions of New South Wales, encompassing the Ovens, Goulburn and Murray Rivers and crossing state borders (Yorta Yorta case, 1998).
The Application

The native title application details the claimants, the claim area and the traditional rights and interests held under traditional laws and customs. The claim area was identified utilising a reference map and worded description. This reference map was created through the use of the Public and Aboriginal Lands digital spatial database (Yorta Yorta case, 1998).

The Determination

The determination handed down by Justice Olney of the Federal Court was that native title does not exist in relation to the land and waters identified as part of the application. The decision was primarily based on the Yorta Yorta community having lost connection with the land where traditional interests and rights in the land had not continued to the present day (Yorta Yorta case, 1998).

Issues

The external boundary of the claim area “was something in the order of a kilometer or more wide according to the scale of the map on which it was drawn” (French, 1998, p7). The large boundary dimension and the representation of the claim area encompassed many regional towns such as Echuca, Benella, and Wangaratta, generating public confusion as to the exact areas being claimed as part of the native title application (Bowen, 1997). It was established that the traditional boundaries, as identified in the application by the Yorta Yorta community, did “not appear to follow any particular geographic or other feature…. that there was no evidence “to indicate the precise basis upon which the boundary of the claim was established” (Yorta Yorta case, 1998: section 9 per Olney J). The mapping requirements established by the Native Title Act 1993 assumes knowledge of cartographic concepts and techniques and that access to current land based information is readily available to representing bodies and Aboriginal communities. The Yorta Yorta case has highlighted the need for accurate and unambiguous boundary delineation and determination of traditional Aboriginal lands and of the spatial extent of native title interests.

FUTURE DIRECTION OF THE TORRENS SYSTEM AND OF NATIVE TITLE IN VICTORIA

The FIG (International Federation of Surveyors) have established a framework for cadastral systems for the future. The document entitled ‘Cadastre 2014’ encapsulates the ideal that future cadastral systems will be “a complete documentation of public and private rights and restrictions for land owners and land users. It will be embedded in a broader land information system, fully coordinated and automated” (Kaufmann & Steudler, 1998, p 10). The inclusion of all land based information into one complete inventory signals the incorporation of Aboriginal interests in land with mainstream land administration forming a truly multipurpose cadastre. The development of digital cadastral and topographic databases forms the jurisdiction’s key spatial data infrastructure, from which the delivery of land based services online provides for the development, management and distribution of spatial data to the public and private sectors.

The establishment of the Australian Spatial Data Infrastructure (ASDI) and the Australian Spatial Data Directory (ASDD) by ANZLIC includes Aboriginal and
native title administrative data. The possible creation of a national framework for spatial data has economic and social ramifications as the ASDI promotes efficient and effective management and transfer of land based information over the Internet. The inclusion of native title or Aboriginal land tenure information into the ASDI and as part of the core land based datasets will improve the data quality and will provide national uniform standards required for the native title process.

Native title is still evolving in Australia, currently there is a shift towards the implementation of registration tests for applications and a mediation process that promotes the formulation of Indigenous Land Use Agreements (Neate, 1999). Mapping applications within the native title process are also evolving with a greater use of digital data to assist with claim area delineation.

**CONCLUSION**

“The seriousness of the problem of accurate delineation of claims should not be underestimated” (French, 1998).

The legal recognition of Aboriginal interests in land through the inception and implementation of the *Native Title Act* 1993 has endeavored to unite two contrasting land tenure systems. The need for accurate and unambiguous delineation of native title claim areas has been highlighted by recent native title decisions. The methods employed to delineate native title claim areas has been a process of continual evolution with a greater use of digital land based data being encouraged. Better understanding of cartographic techniques and easier access to digital spatial data will also improve the process of delineation of claim areas for native title. The establishment of an ASDI will provide much needed consistency in data quality and standards across Australia. The possible incorporation of native title interests and the mainstream land administration of Australia has been encouraged as governments strive for an all encompassing multipurpose cadastral system for the future. The national policy on native title formulated by the ISA serves to educate surveyors and other interested parties on the spatial requirements for native title. As native title interests are clearly defined and integrated with the DCDB and DTDB then security of tenure over lands affected by native title is supported.

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The term ‘Aboriginal people’ includes the Torres Strait Islander people. The authors views do no represent the views or perspectives of Aboriginal communities, nor do the authors claim to speak on behalf of Aboriginal peoples.

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