

Incorporating indigenous boundaries into Australian Law

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ABSTRACT

Indigenous-derived boundaries have been existent since time immemorial in Australia. The landmark *Mabo* decision recognised the continued existence of Indigenous customary title under the common law and the Commonwealth *Native Title Act 1993 (NTA)* codified the processes for recognition and extinguishment. After thirty years of ongoing recognition, Australia is moving into the implementation and leveraging phases of legislative Native Title. This paper considers how the boundaries of these interests can be unambiguously identified on the ground if required. To do this we first discuss Indigenous customary title itself, how boundaries were understood in pre-European Australia and the nature of evidence relied on by the Federal Court to make Native Title determinations. By examining all litigated Native Title determinations made under the *NTA* we analyse the decisions in light of the well-established common law boundary determination principles. Similarities are drawn between the hierarchy of evidence used to reinstate typical cadastral and Native Title boundaries. From this, an elementary framework was constructed to allow a surveyor to better understand the Court's decision-making. We conclude that it is too early to be definitive as to how the courts will resolve Native Title boundary disputes, if they ever eventuate, but there is sufficient evidence to make preliminary evaluations of the relative merit of Native Title boundary evidence.

1. Introduction

Native title is *sui generis*, that is, particular to itself. The meaning and source of Indigenous customary title is not derived from the concepts that underpin western legal canon. Notwithstanding this, a determination that Indigenous customary title has survived is made through Australian legislation, which recognises that land interest within the Australian legal framework. In this way, Native Title acts as an aid to the development of the common law in a manner which accommodates cultural differences and unique Indigenous legal rights (Borrows and Rotman, 1997, p. 9) and codifies those rights within a traditional European structure.¹ As will be discussed later, The Federal Court makes the determination on an area defined by the claimant group. After first establishing that Indigenous customary title still exists in at least some part of the claim area, the Court considers the effect of post-occupation acts to divide the claim area into exclusive, nonexclusive and non-existent Native Title areas. As Native Title evolves from the recognition through to the leveraging phase it is timely to ask if a process for the unambiguous identification of the various Native Title interests on the ground can be incorporated into Australia's existing boundary

framework. The Native Title holders understand the extent of the land upon which they laid claim to. What appears as a mere technical task to some, is not without political and cultural complexities. The thought of employing a surveyor to come out to Indigenous Australians' traditional lands and essentially "peg out" the extent of their determination may perhaps come across as offensive. While we see it as necessary to protect Native Title interests the action is still potentially fraught.

It is understood, in the conventional boundary (i.e. non Native Title boundary) framework, that only the courts have power to make definitive declarations as to a boundary's position however, in the interests of pragmatism, cadastral surveyors have the role of marking existing boundaries and creating and recording new ones at the landowner's behest. It is not unreasonable to assume that as Native Title interest evolves there may well be a role for surveyors to be given their role as the court's proxy. The aim of this paper is to examine the nature of Native Title boundaries and compare and contrast them with those that cadastral surveyors ordinarily deal with.

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¹ To aid comprehension we will refer to the customary title recognised by the common law as 'native title' and these rights codified by legislation as 'Native Title'

1.1. Native Title is a real property interest

In Australia, the interests in property that existed under customary law, survived the acquisition of sovereignty by the Crown. Their continued existence was recognised in seminal native title case of *Mabo v. Queensland* (No. 2) (1992) 175 CLR 1 ('Mabo') and defined at 57 per Brennan as "the interests and rights of indigenous inhabitants in land, whether communal, group or individual, possessed under the traditional laws acknowledged by and the traditional customs observed by the indigenous inhabitants." This definition provided the basis for the definition of Native Title which is found in s 223(1) of the *Native Title Act 1993* (Cth) (NTA). The 'contents of Native Title, its nature and incidents, will vary from one case to another' (*Wik v. Queensland* (1996) 187 CLR 1 ('Wik') at 169). In the over thirty years since then, there has been a proliferation of Native Title determinations across the Australian continent, particularly in Western Australia (WA) (See Fig. 1. Analogous to other land interests, in determining Native Title the Court is obliged to decide three things:

1. who has the Native Title rights (title),
2. what those Native Title rights are (tenure) and,
3. what is the spatial extent of those rights (boundaries).

However, despite numerous determinations being established across the country, there has been little investigation into how Indigenous-derived boundaries accepted by the Court will be used in a practical sense.

1.2. Boundaries are essential to the exercise of real property rights

The ability to identify the boundaries of any real property right is crucial to any exercise of that right. Without a mechanism that allows a boundary to be unambiguously definable, those rights stand the risk of being lost. Currently, unlike most other land interests, there is no requirement to accurately identify a Native Title boundary on the ground using monumentation² (NTA). Instead, most Indigenous customary boundaries, for claim proceedings, are documented virtually using written metes and bounds descriptions or a mapping database using Geographic Information Systems (GIS). The key problem with this status quo lies in the interpretation of the Court's decisions. Historically, extrinsic ambiguities have been a more significant problem in boundary interpretation than intrinsic ones. That is, the inadequacies and errors in descriptions are only apparent when confronted with the facts on the ground.

It follows that the inability to accurately identify and protect places which are of importance to Indigenous culture may lead to irreparable damage to that culture, people, and place. Protection rather than compensation is the goal as no amount of money or punishment is going to restore significant Indigenous places once they have been destroyed. Therefore, the accuracy at which boundaries are defined should be represented at a level which respects the significance of the features which they are protecting.

However, in no way will this paper suggest that Native Title boundaries be compulsorily marked on the ground. As in typical practice, boundary identification is only required where the risks demand a sufficient level of accuracy. In the same way, a reinstatement³ process is

² Monumentation is a physical identifier of an owner's boundary, usually in the form of a boundary peg. It will usually be placed at the intersection of boundary lines and will serve as a permanent identifier of the original owner's intentions for the boundary at the time of the conveyance (Strack, 2017, pp. 6).

³ A reinstatement in a surveying sense refers to the re-identification of a previously determined boundary. The previous boundary marks will usually be kept, while any boundary marks no longer physically present will have their positions remarked and referenced appropriately (Campbell, 2011, pp. 2).

clearly required to identify Indigenous features in circumstances requiring such a reinstatement.

1.3. The common law holds the expressed intention of the parties as the controlling element

For European-created boundaries in Australia there is body of law that has been developed to resolve boundary disputes. It is accepted that in determining the position of a boundary from a common law perspective, the greatest weight should be given to the expressed intention of the parties to the transaction that created the land interest (Hallmann, 1973, p. 175; Brown, 1980, p. 150). The practical application of this principle has been aided by authors developing hierarchies of cadastral evidence, based on the judicial decisions, to assist cadastral surveyors in their task (Hallmann, 1973; Brown, 1980; Campbell, 2013). Given that Native Title land interests are created in a significantly different way to conventional land interests, we suggest that these established hierarchies may not necessarily be appropriate to establish Native Title boundaries so they can be understood on the ground. In this paper, we intend to describe an elementary framework that will allow surveyors to assess the relative merit of conflicting evidence if they are ever called upon to mark the boundary of a Native Title interest. To arrive at this framework, the first section will provide essential background to the Native Title determination process and the next section will present the current legal framework. After that we will use an examination of the published decisions of litigated determinations to demonstrate the types of evidence called upon in a determination and lastly, we will present our framework and discuss the risks and uncertainties created by the determination process.

2. Native Title

2.1. The Australian constitutional context

The Commonwealth of Australia was formed from six existing British colonies in 1901 as a result of *Commonwealth of Australia Constitution Act*. This established a Federal Parliament (s1), a Federal Supreme Court (The High Court) (s70), and the ability to create other courts with federal jurisdiction (The Federal Court). The established High Court has jurisdiction to determine appeals from any Federal or State Court (s73). Section 51 sets out the matters for which the Federal Parliament may make laws including for 'the people of any race for whom it is deemed necessary to make special laws' (s51 (xxvi)). In addition to the NTA (Cth), Australian States have created their own Native Title legislation although *Western Australia v Commonwealth* [1995] HCA 47 confirmed that State Native Title legislation was subservient to the NTA (Cth) through exercise of s109 of the Constitution Act. This section states that if a State's law is 'inconsistent with a law of the Commonwealth', the Commonwealth law will prevail.

2.2. The evolution of Native Title in Australia

The concept of native title (indigenous customary title) was recognised in Australia on 3 June 1992 after the High Court *Mabo* decision. Native Title may now be recognised via the Federal or High Court (Commonwealth of Australia, 2017). As previously mentioned, the first task is to establish, who has the Native Title rights, what those Native Title rights are and what is the spatial extent of those rights. Since *Mabo*, most activity in the Native Title sphere has concentrated on this recognition phase (Fig. 2). This phase must inevitably be followed by an implementation phase to provide for the ongoing management of the title. As more determinations have been made Prescribed Body Corporates (PBCs), which manage Native Title rights and interests on behalf of Native Title landholders, are becoming more functional. In doing so, Native Title landholders are looking towards what they can do with their land (Kennett et al., 2015, p. 5). Upon reaching the implementation

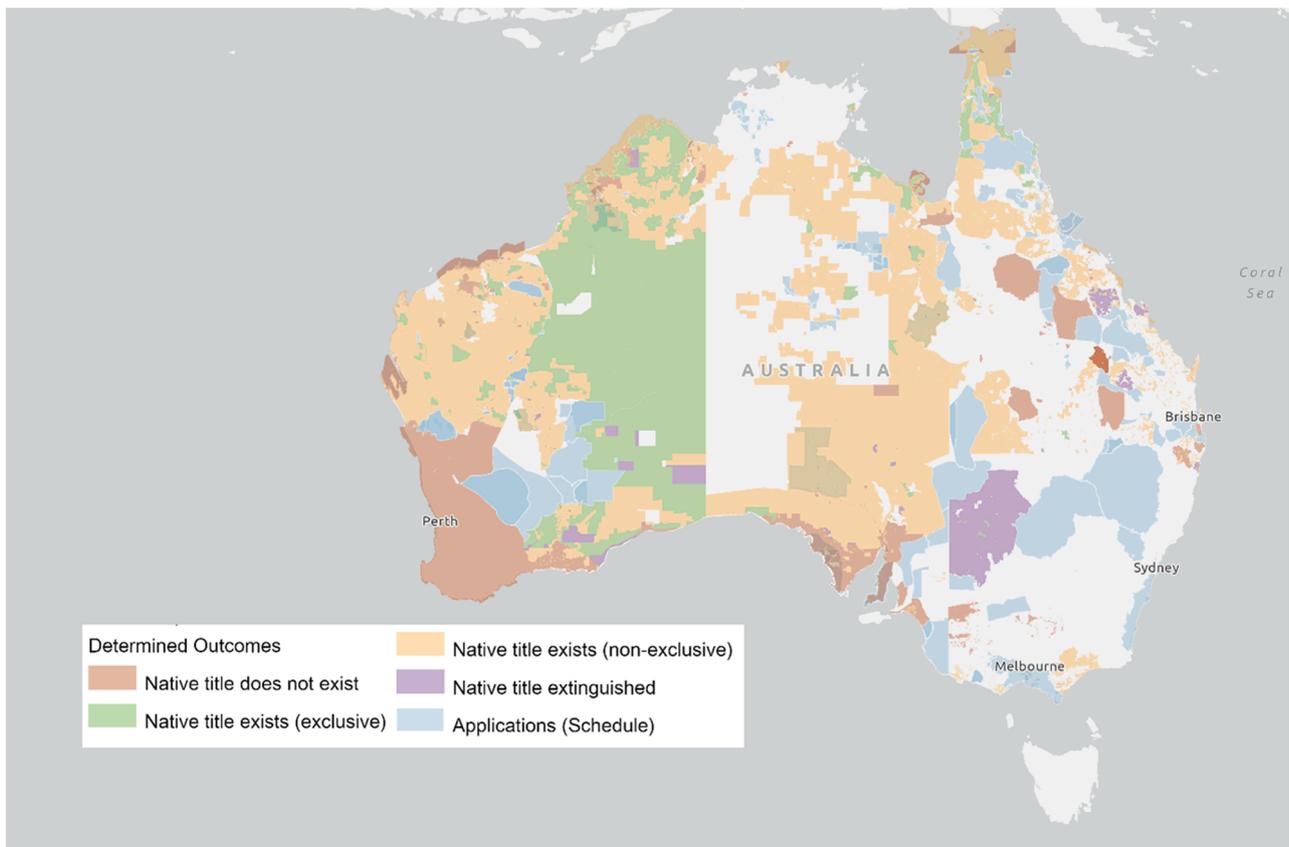


Fig. 1. Native Title Determinations as of 2023 (National Native Title Tribunal, 2023).

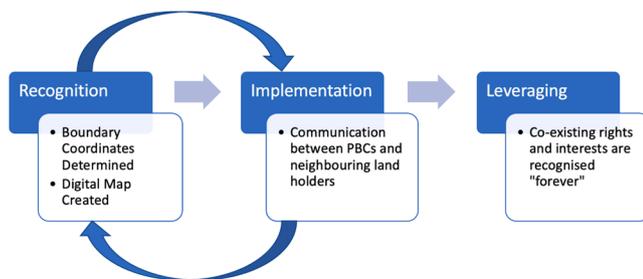


Fig. 2. The Evolution of Native Title Rights & Interests.

phase PBCs begin communicating with landholders on establishing lasting interests in their lands, which ultimately leads to Native Title rights and interests being recognised with the same longevity as freehold title. Consequently, all interested parties require greater certainty regarding boundaries relevant to a Native Title interest. If there is no settlement between the parties, Native Title recognition invariably ends in dispute (Verran, 1998, p. 251). This has been an issue since the inception of the Native Title Act (NTA) in 1993 and it necessitates practical solutions to encourage holders of land interests to communicate about their boundaries. Once implemented, Native Title will eventually enter a leveraging phase where Native Title holders can utilise their interests to further their own agenda.

2.2.1. The recognition phase

If the Indigenous claimants can clearly establish a continual connection to the land, the Court will recognise a series of property rights (i.e., Indigenous customary title) that existed pre-Crown acquisition, which have not been extinguished by legitimate actions of the Crown, and will make a determination accordingly. Mediation is used to

find common ground between the parties (s86). If all matters can be agreed through this process, then a consent determination (s87 NTA) can be made, otherwise, the outstanding issues will need to be litigated. As they pre-date European occupation, the spatial limits of these rights are not necessarily co-incident with other existing monumented land interests. It follows that when Native Title is recognised, there is no change in European land interests. Instead, Native Title rights and interests are layered on top of land which cannot extinguish it (Lochead, 2006, pp. 7–8).

In the case of extinguishment post-determination, the future act regime provides Native Title landholders with consultation and compensation before extinguishment can be made possible.⁴ This is analogous to compulsory acquisition of freehold title, in that there is no right to negotiate over whether the proposed acquisition goes ahead, only an objection can be made to the valuation (Wensing and Sheehan, 1997, p. 15). Once extinguished, Native Title cannot be revived (Terrill and Boutilier, 2019, p. 39).

Native Title is separated into exclusive⁵ or non-exclusive⁶ forms of title. Non-exclusive Native Title primarily exists on pastoral leases. Exclusive possession Native Title is principally recognised on vacant (or unallocated) Crown land (National Native Title Tribunal, 2017). In large Native Title parcels, mainly consisting of land of low economic value, many Indigenous-derived boundaries may fall within such a parcel. In

⁴ Future acts are changes to legislation or other actions that validly affect native title in relation to the land or waters to any extent that occur after commencement of the NTA. See s24AA of the NTA for more detail if required.

⁵ refers to the right to own, occupy, and use an area of land to the exclusion of others, allowing Native Title holders to limit land access (Queensland Government 2020).

⁶ coexists with other property rights, which means Native Title holders don't have authority over access to lands (Queensland Government 2020).

populated places, the claimable Native Title land may be dispersed in small parcels, left from the creation of freehold parcels, with boundaries that bear no relation to Indigenous boundaries (Turk, 2007, p. 240). Consequently, the internal boundaries of a Native Title parcel do not follow Indigenous-derived boundaries. This has created a ‘Swiss Cheese’ of traditional external boundaries and Eurocentric ‘internal’ boundaries. However, it should be noted that not all external boundaries are explicitly Indigenous-derived, meaning these boundaries may still follow the European-derived title.

Native Title property rights, while unique, are not registered under a form of title. In this regard, native “title” is a misnomer. For instance, Native Title can be exclusively recognised over unallocated state land (USL), but that doesn’t mean a certificate of Native Title is issued. Rather its existence is noted by the formal register of Native Title in Australia, the National Native Title Tribunal (NNTT). This body records Native Title determinations made by the Federal Court, the High Court or by recognised state or territory bodies (Stephenson and Tehan, 2015, p. 242)

If there is no notation by the NNTT, normal due diligence requires potential claimants conduct searches of all public registers to determine encumbrances. The NNTT does not record or track grants to individual community members since most claims are usually pursued collectively by claim groups (Stephenson and Tehan, 2015, p. 246). Nor is there a requirement for PBCs to be actively engaged in the mapping and recording of any subsequent dealings with Native Title lands pursuant to Indigenous Land Use Agreements (ILUAs) (Stephenson and Tehan, 2015, p. 246). An ILUA is a voluntary, confidential agreement regarding issues relevant to Native Title. It is negotiated between one or more Native Title parties and the people or groups having an interest in the land, such as farmers, mining companies, tour operators, or governmental agencies (Queensland Government, 2019). They are particularly relevant to the implementation phase once Native Title has been established.

2.2.2. The implementation phase

After the Federal or High Court has come to a determination on the extent of a Native Title claim, the Indigenous claimants may form their own PBC to manage their determined rights and interests. By this point in the process, boundary coordinates and digital maps for Native Title determinations have been created. It now remains the task of the PBCs and the holders of the neighbouring/underlying title to communicate about what was decided upon in the recognition phase (Kennett et al., 2015, p. 5). In this way, the recognition and implementation phases are linked. The parties must implement that which was recognised for any recognition to be successful.

One of the primary communication issues, that this paper is attempting to resolve, lies in the difference between perceived ownership and ownership determined by the Court. The Court will often form a boundary that departs from the traditional owners’ understanding of the clan extents (Dodson and McCarthy, 2010, p. 91). It is intended, among other things, that clearly delineating what the Court has decided upon will resolve ambiguities and hence reduce conflict between neighbouring PBCs and other landholders.

2.2.3. The leveraging phase

Once legal recognition is secured, the next challenge for many Native Title holders is leveraging their property rights. The aim of this phase is to achieve sustainable economic outcomes⁷ for Indigenous Australians without losing their unique traditional, spiritual, and distinctive relationship with the land upon which their culture is based. As Native Title

is embedded in genealogy and established connections to the land, it is not ‘free’ to be traded (Wensing and Sheehan, 1997, p. 6). The only way Indigenous landholders can sell their interests is by surrendering their Native Title rights to the Crown and converting their interests into Crown-issued title (thereby removing Indigenous-derived boundaries and associated relationships with the land). This is often seen as a last resort, as there is little evidence to conclude that forcing the subdivision of communally owned lands into personalized land titles will enhance Indigenous Australian’s day-to-day existence (Dodson and McCarthy, 2010, pp. 85–9). This is the risk of making Native Title fungible. Indigenous Australians run the risk of losing their lands through foreclosure if Native Title land is turned into a collateral asset for economic development. Evidently, a system which allows Indigenous Australians to establish everlasting interests in land while receiving benefits from it is far from established.

2.3. Recognising Native Title

The process for recognising Indigenous-derived boundaries can be broken into three main stages:

1. The Indigenous claimants submit a claim concerning the extent of their rights and interests.
2. The information submitted by the claimants and the expert witnesses is then accepted by the parties through mediation or, if litigated, cross-examined in court.
3. The Judge assesses this information in reference to legislation before coming to a final determination.
 - a. The spatial extents of the determination area are determined by the Court.
 - b. The written description and map are transferred into GIS format.

2.3.1. Making a claim

Section 13(1)(a) of the NTA allows for an application for a determination and s62 sets out the content required for a claimant application. Claimants are required to describe the rights and interests being claimed (s62(d)) as well as the factual basis (‘the claim book’) for asserting their existence (s62(d)). Of particular note to this work, there is an obligation to provide sufficient information, by physical description or otherwise, to enable the boundaries of the claim to be identified (s62(2)(a)) as well as a map showing the boundaries (s62(2)(b)). In addition, they are required to swear an affidavit that none of the area claimed is covered by a previously approved determination (s62(1 A)(b)) and disclose any overlap with existing applications that have been made (s62(2)(g)). Having made the claim, it can be amended to reduce the area of land and waters covered (s64(1 A)) but the claim cannot be added to (s64(1)), except in the case of two claims being combined (s64(2)). In *Wandarang, Alawa, Marra and Ngalkan Peoples v Northern Territory of Australia [2000] FCA 923* (‘Wandarang’) Onley J was confronted with an inconsistency between the written description and the application map. The Judge resolved it using a similar logic to conventional boundary conflicts by “reading the application as a whole” (para 40) to divine the applicants’ intention. “The notation on the application map indicating that the boundary follows the southern border of Urapunga Station is a decisive indication of the applicants’ intention.”

Because of the culturally sensitive nature of the information in the claim book, it is kept confidential and largely cannot be accessed by the public. The cross-examination is accessible via a transcript, but there is a significant cost component in accessing a suitable transcript.

2.3.1.1. Affidavits. Affidavits are typically submitted from the Elders of an Aboriginal Clan. These documents provide insight into how connection is proved from the claimants’ perspective. Because of the highly confidential nature of this information, these documents

⁷ The preamble to the NTA declares that its intention is to secure “the adequate advancement and protection of Aboriginal peoples and Torres Strait Islanders”. Furthermore, “Governments should, where appropriate, facilitate negotiation on a regional basis between the parties concerned in relation to ... (b) proposals for the use of such land for economic purposes.”

generally cannot be printed, cited, circulated, or saved by a party uninvolved in a Native Title hearing. Some exceptions exist, but these cases are uncommon (M Barker 2022, pers.comm.).

2.3.1.2. Anthropologist report. An anthropologist researches a wide array of evidence including historical records (such as pastoral maps), early ethnography and scholarly works. Most importantly, the evidence of the lay witnesses⁸ will be supplemented by field trips. The anthropologist will conduct these on-ground studies to physically assess the boundary and the site evidence.

A GIS representation of the external boundary may be created by an anthropologist to supplement evidence that will be considered by the Court. Anthropologists are usually GIS experienced as it supports their work in understanding the ethnographic evidence and communicating with clients (J Gehr, pers.comm.). Therefore, anthropologists or mappers assisting such persons will usually create the first virtual representations of Indigenous interests.

2.3.1.3. Claim boundaries. Section 190B(2) of the NTA requires the extent of Native Title lands be supplied as spatial information to within “reasonable certainty”. This means that the digital boundary must as close as possible follow the general/written description of the external boundary. External boundaries which follow the European-derived title can be readily created on GIS since the boundaries of European-derived interests already exist in electronic format. The situation becomes more complex when the GIS analyst must consider Indigenous-derived boundaries. The external boundary of a Native Title parcel has been extant since before European occupation in Australia. Therefore, unlike internal boundaries created through extinguishment, these boundaries will not explicitly follow the underlying title. The external boundary is dependent upon a claimants’ understanding of the extent of their lands. Generally, the description will follow topographic features (Brazenor, 2000, pp. 71–2). There may be instances where the external boundary crosses through a monumented property, leaving only one side of the Native Title parcel unmarked. For example, the underlying title of Pt 5282 (See Fig. 3) might be fully monumented, but there is uncertainty in identifying the position of the external boundary (the dotted line).

The method employed to virtually represent an Indigenous-derived boundary will vary depending upon the nature of the evidence and the GIS analyst. Usually, topographical maps will be utilised when identifying natural features such as watersheds. Often specific geographical co-ordinate points will be referenced where there is a change in the direction of a line. Centrelines will often be followed when referencing unmarked waterways or ridgelines. The centrelines are preferred because placing the boundary on one bank or another can potentially limit access to neighbouring groups (National Native Title Tribunal, 2021).

In most circumstances, a desktop survey will be conducted when creating an Indigenous-derived boundary. Because of the nature of Indigenous boundaries, an overlap or gap may at first exist where there is abutting Native Title claims. Through back-and-forth negotiations with neighbouring claimants, a satisfactory boundary may be reached. In the first instance, a boundary may be drawn on a topographical map by the claimants. It may then be described in written form and mapped in conjunction through GIS, with the GIS officer providing the geographic co-ordinates for the written description (J Gehr, pers.comm.). Keep in mind that there is no articulated standard across the GIS industry for representing Indigenous-derived boundaries. To their own discretion and abilities, a GIS analyst must simply represent the Indigenous claimants’ interests to within ‘reasonable certainty’ (190(B)2 NTA).

⁸ A witness without any personal qualification. Like every other witness, a lay witness must confine their evidence to topics about which they have firsthand experience.

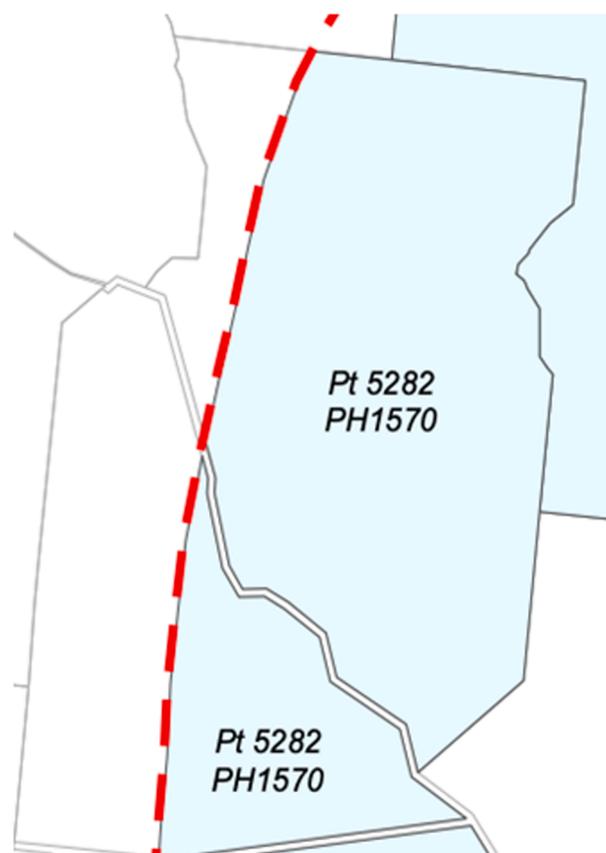


Fig. 3. Close-up of extent of Native Title determination. The blue shaded area shows the extent of the Native Title determination, and the red dashed line shows an Indigenous-derived boundary not co-incident with an existing European-derived land parcel (NIAA 2012).

GIS datasets are helpful with the spatial understanding of Indigenous boundaries, and in some circumstances, a graphical depiction may convince the Judge that the location of the boundary is acceptable. For example, during the taking of primary evidence at Kununurra in *Ward & Ors v Western Australia & Ors (1998) FCA 1478* (‘Ward’) GIS mappers were actively involved in representing Indigenous interests at the time (M Barker 2022, pers.comm.). However, for GIS datasets to satisfy the Court, there must be close involvement between a GIS analyst and an Indigenous claimant prior to a decision. Otherwise, the Court cannot readily rely upon this information.

Clearly there are risks in relying upon GIS representations to reflect the traditional boundary understanding. The claimants may work with the GIS analyst and assume everything they have said is captured in the final representation; however, they are rarely in a position to verify this information. It is worth asking how well do the claimants understand the representation?

2.3.2. Court hearings

The cross-examination process will depend upon the Judge overseeing the matter since the Judge retains overall authority over the cross-examination procedure. For example, the Judge may prefer to listen to concurrent evidence⁹ rather than employing an adversarial process of evidence giving and questioning (note this is only employed for expert witnesses) (Hughston and Jowett, 2014, pp. 1–2). It is unnecessary to examine every aspect of the evidence in the claim book. For example, Onley J in *‘Wandarang’* was satisfied that because of the

⁹ the procedure of concurrently hearing evidence from every expert witness engaged in a case (Hughston and Jowett, 2014, pp. 3).

overwhelming weight of the evidence heard, and particularly the assertions made in the claim book by the senior members of the land claiming groups, then other matters could be accepted.

Anthropologists, archaeologists, geologists, or anyone in a relevant field of expertise may be called to give expert evidence (Singleton, 2018, p. 29). Somewhat ironically, Indigenous Australians are broadly recognised as lay witnesses, as Blackburn J identified in *Milirrump v Nabalco Pty Ltd* (1971) 17 FLR 141 at 153, there are essentially “two kinds of witnesses, namely aboriginals ... and expert witnesses.”

During cross-examination of witnesses, counsel will usually cross examine an Indigenous elder on the information they submitted in an affidavit. It is also common for counsel to raise issues in cross-examination for the benefit of spatial certainty. For example, in ‘*Ward*’, a witness described the significance of a location where the court was being held. Following this explanation, counsel for the respondent’s presented the location’s cartographical coordinates: latitude so many degrees South, longitude so many degrees East (Reilly, 1998). It will vary depending upon the nature of the cross-examination, but the Indigenous witnesses can reveal enough information to determine culturally significant places/features to a certain accuracy. However, there are many problems associated with this approach (an issue which will be raised later in Section 4.2.3).

Evidence of history, moral obligation, legends and myths, religion, a person’s claim of descent, cultural artefacts, family ownership and boundaries relevant to family lands are some examples of what may be included in oral evidence (Singleton, 2018, p. 28).

2.4. Determination by the Court

The *Native Title Act*’s definition of Native Title at s 223 serves as the foundation for what must be determined to be successful in a Native Title determination (Fitzgerald, 1995). Cross-examinations of boundary evidence conducted on-country will generally be held at the trial stage when connection is being established. The High Court will usually not consider evidence of this nature unless the case has not been heard in a subsidiary court (Federal Court of Australia 2016).

2.4.1. The documentation of established claims boundaries

At present, the Court’s primary concern is with the parties involved in a Native Title case. It is expected that a Native Title claimant and the defendant are aware of the boundaries determined by the Court during the recognition phase (McGrath et al., 2015). However, upon reaching the implementation phase, the Court’s documented view with regards to the boundaries is limited to the judgement, the boundary description, and the GIS representation. Adjoining Native Title interests are becoming more prevalent across Australia with the growing number of successful Native Title claims. These interests are not able to overlap at law due to the nature of Native Title registration. However, keep in mind that two or more groups may be recognised in one Native Title determination (Everard, 2009). The Native Title Act does permit the updating of boundary details if required (NTA s13(1)(b)). Therefore, the Native Title property cadastre may, at least theoretically, if not practically, be modified properly if a better manner of defining Indigenous boundaries is discovered (Turk, 2007, p. 240). A question is then raised: will successive Native Title landholders (uninvolved with the recognition phase) be able to readily understand the Indigenous boundaries accepted by the Court based upon these forms of identification alone?

The current practise for representing Native Title interests virtually is by including them in a digital property cadastre using GIS. These interests are represented by a closed set of “vector” lines, running between locations with specific coordinates. This method has been pursued because of its administrative convenience and will generally be sufficient where a greater degree of accuracy is not required. However, with the increasing number of adjoining Native Title determinations, there is a growing demand to properly reflect the genuine nature of Indigenous boundaries (Turk, 2007, p. 240).

3. The present legal framework

Core to this work is understanding the land tenure systems of Indigenous Australians. From this, it is possible to establish the technical and cultural considerations for identifying their traditional boundary understanding. Almost all Indigenous boundaries between clans were established before European arrival with a few succeeded to through their society’s traditional laws and customs. This means seeking the intentions and actions of long deceased people with only the aid of an oral tradition rather than a written one. Additionally, the nature of “secret business” surrounding sacred Indigenous places remains an impediment to publicly documenting where these sites are located. Therefore, a Native Title determination will be referenced by published coordinates, but culturally significant sites will not necessarily be recorded. Established cultural heritage boundaries open to the public will only reference enclosed sites that will not specifically reveal the location of sacred Indigenous places (Queensland Government 2021).

3.1. A traditional Indigenous Australian view on boundaries and ownership

The Indigenous Australian ownership diverts radically from the forms of tenure established in Australia post occupation. Expert witnesses have pressed onto the Court that “Aboriginal cultural groupings are not akin to European “nation states” – that is to say, they are not, and were never, political entities, and so there was never any need for them to be geographically demarcated with the precision one expects of nation states” (Croft on behalf of the *Barnjarla Native Title Claim Group v State of South Australia* [2015] FCA 9 (‘Croft’) at para 778) and “distinct boundary lines do not always present themselves in any discussion between different Aboriginal groups over who holds rights and interests in relation to apparently adjoining or proximate areas of country.” (*Banjima People v State of Western Australia* (No 2) [2013] FCA 868 (‘Banjima’) at para 182). The rights to exclude people from the edge of country is likely to be shared (‘*Ward*’ at p96). As an Aboriginal lay witness put more directly; “We don’t have boundaries, that’s bullshit. Country is country; you go from one waterhole to the next. Like when people used to go before any stations was there, people would go from water to waterhole, where there is permanent water like a spring.” (*Narrier v State of Western Australia* [2016] FCA 1519 (‘Narrier’) at para 75). Since there is an explicit cultural aspect to land, it is not possible to establish the features which were of importance to Indigenous Australians without first investigating their way of life before European occupation.

Rather than being established through the idea of European sovereignty and laws, Indigenous tenure is anchored in Indigenous Australians’ own continual connection to the land both spiritually and physically. In this way, Indigenous Australians view land, or more properly ‘country’, as though it were a person: they sing to it, visit it, worry about it, feel sad for it, and long for it. Therefore, country is not a place, it is a living being with a past, present, and future, as well as a consciousness and a desire to live (Rose, 1996, p. 7). The land itself is a kind of ‘church’ a form of theophany in which the land embodies the essence of the Ancestors and is attributed to the Ancestors’ labour. Therefore, Australian land has been designated as a holy sanctuary for Indigenous Australians, with certain areas gaining special hallowed status (Palmer, 2018, p. 110).

Indigenous boundaries may be influenced by clan ownership, ritual and religious associations, ceremonial sites, the location of camp and burial sites, water sources, vegetation, and topography (Davis and Prescott, 1992, p. 59). These boundaries are not enforced through technical and legal means. In most instances, boundaries are not considered as mechanisms for excluding others, allowing people to cross boundaries without being rejected or kept out (Neate, 1999, pp. 22–3). In some cases, the need for outsiders to seek permission before accessing country is so they can be warned about places where they should not go lest they may get hurt or sick (*Rubibi Community* (No 5) *v State of Western Australia*

[2005] FCA 1025 ('Rubibi Community') at para 160). Traditional indigenous boundaries, therefore, must be viewed in terms of their cultural context, rather than being seen as an identification of personal ownership.

Anthropologists have identified sacred sites as being important places for a spirit ancestor that dwells in and has existed upon in the past (Neate, 1999, p. 31). Sacred sites are not found at random, and many (but not all) are places where rituals can be performed (Rose, 1996, p. 53). These sites do not exist in isolation. They are interconnected through dreaming tracks (more popularly known as "songlines"). These sacred sites are not only interconnected in myth but also by long sequences of song memorised by Indigenous Australians, which are passed onto the next generation. In this way, Indigenous elders can memorise the important features of the landscape and pass on this knowledge at religious rituals (Sutton, 1998, p. 361).

One of the central beliefs of Indigenous Australian culture is that ancestral entities shaped the earth and its inhabitants. Songlines, or Dreaming tracks, are the paths that ancestral and mythical entities traversed during this period, commonly known as the "Dreamtime" (Sutton, 1998, p. 361). This shaping led to the defining of territorial boundaries and the identification of clan lands (Davis and Prescott, 1992, p. 20). As the Yawuru people put to the court "boundaries of a country are set at 'changeover places', which is where Dreamtime beings start to speak different languages as they carry the myths and stories across the land" ('Rubibi Community' at para 276). Dreaming tracks were used to connect countries to form trade routes, movements of animals, marriage networks and more. For example, the Arrernte people in Central Australia followed the tracks of Dreamings and met up at major sacred sites for regional ceremony, trade, marriages, initiations, and dispute resolution (Rose, 1996, p. 52). Among groups with country displaying high relief landform, such as the Arrernte people, one may expect a clear definition of a boundary along dreaming tracks (Davis and Prescott, 1992, p. 225). In other parts of Australia, the travels of Dreaming creatures play a lesser role in the structuring of land ownership and demarcation (Sutton, 1998, p. 361).

Rockholes, soaks, wells, rivers, claypans, springs, and other natural features may form part of a Dreaming track and will invariably entail some spiritual significance (McConnel, 1930). For example, as the flow of water leads to the shaping of the land, boundaries are more often defined by a watershed (Davis and Prescott, 1992, p. 112). In landscapes with a rich variety of features and readily available water sources, boundaries are generally well established and clearly delineated, as among the *Tiwi* and *Yolngu* groups of Arnhem Land in the Northern Territory (Davis, 1984). Conversely, in arid areas where there is a sparseness of outstanding geographic features, Indigenous country does not display the same precision of boundary delineation (Davis and Prescott, 1992, p. 229). In such arid territories, dreaming tracks and sacred sites usually connect surface and subsurface water supplies. Therefore, in this case, the boundary lines will vary depending upon seasonal conditions (Rose, 1996, p. 52). Likewise, areas that provide very little economic activity for hunting and gathering are unlikely to be in contention between groups. Since the areas are subject to little use it was not necessary to define specific proprietorship ('*Banjima*' at para 184).

Boundary marking systems relating to Indigenous Australians vary between Torres Strait Islanders and Aboriginal peoples. Indigenous Australians in the Torres Strait Islands are amongst the few native peoples who are known to still hold records of their artificial boundary monuments (Wensing, 2016). Because of the agrarian culture of Torres Strait Islanders, they used monuments such as piles of rocks (extending into fish traps). Native Title claims in the Torres Strait have involved the particularisation of these boundaries via coordinates because of the legal system's requirement for certainty on Native Title determinations (National Native Title Tribunal, 2021). Contrarily, there is little indication that Aboriginals used artificial means to define the extent of their boundaries (Davis and Prescott, 1992).

Over much of the Australian mainland, surveying and indefinitely fixing precise linear boundaries between clan estates is not consistent with Aboriginal Law or practice (Neate, 1999, pp. 22–3). Clans often claimed membership in a larger collection of clans through common ceremonies, in addition to their identity within their own country. Affiliations formed by such rituals will produce "many cross-cutting sets", which will connect clans from diverse ritual groupings (Keen, 2000). This has led to some sections of Indigenous land where two clans have complementary interests.

Furthermore, in modern circumstances, non-Aboriginal factors may have influenced the location of some Indigenous boundaries. For example, where there used to be a set of customary conventional tracks, or Murri roads, for travelling from clan estate to clan estate along the intersections of such estates, more recent public roads may have created de facto boundaries that are not always consistent with the classical division of clan estates (Neate, 1999, pp. 22–3). Restrictions on where Aboriginal people could live and work have led to parts of the landscape being conceptualised by reference to station names in a post-occupation environment (*Drill on behalf of the Purnululu Native Title Claim Group v State of Western Australia [2020] FCA 1510 ('Drill')* at para 22). In the view Mortimer J in '*Narrier*' Aboriginal witnesses were somewhat more nuanced and talked about "near" a town or "around" a station and are perhaps driven more by the need to describe an area in the way a European would understand it (para 369).

3.2. The applicability of common law reinstatement principles to Indigenous-derived boundaries

The common law has worked to preserve both government-sanctioned property rights and Indigenous Australians' rights on par (Bartlett, 1993, p. 182). In this tradition, the Mabo decision replied to the Queensland Government's assertion of sovereignty by crafting a framework that recognised the pre-existing Aboriginal and Torres Strait Islander People's land interests. So too with the question of resolving Indigenous derived boundaries on the ground, we should look to the common law tradition and assume, if ever it is considered by a court, the principles of reinstatement will guide their decision.

With European-derived boundaries there are many types of evidence of intention to be considered. In general terms there is the physical evidence of boundaries on the ground and the documentary evidence that serves as a virtual representation of the boundary. When all this evidence is in harmony the task of identifying the limits of land interests is a relatively simple technical one. When the evidence is in conflict, either within or between the two classes, then surveyors (and sometimes the courts) need to resort to principles of reinstatement. It is long-established that the physical evidence of boundaries should be considered as superior to the documentary evidence (Campbell, 2011, p. 17). This preference comes from thinking of all land interests as being the result of a conveyance, either from another private individual or, in the case of an original grant, the Crown, and the physical manifestation of that land interest being most easily understood by the giver and the receiver. This is not necessarily the case for Native Title. The difference has been expounded upon, albeit in the context of the *Aboriginal Land Rights (Northern Territory) Act 1976*. This act was an attempt to recognise traditional Indigenous land ownership in a European context. Like the *NTA*, although the final product differs, this act requires the traditional owner to make a claim for the land that is recognised, wholly, in part, or not, by a court. In *Attorney-General for the N.T. of Australia v. The Honourable Maurice, M. [1987] FCA 349* both Lockhart J (p5) and Sheppard J (p8) distinguish a claim for land from a "will, Crown grant or conveyance". We would suggest that Native Title, likewise, differs as it is not a conveyance. It is not granted by the Crown, rather its continued existence is recognised and codified by the courts and the Legislature. Notwithstanding that, before European occupation these boundaries were understood and observed in the absence of documentary evidence. For that reason, a similar reinstatement approach for

Indigenous-derived boundaries would be practical because it would consider features significant to Indigenous Australians over virtual representations of their interests. Furthermore, this approach identifies and appreciates the Indigenous Australians' physical connection to the land. We would contend that, like a survey plan, metes and bounds descriptions and the GIS data derived from them, is a virtual representation of reality that is defined by features on the ground. Any conflict that can be found on the ground between the survey plan and the expressed intentions of the parties involved warrants a form of reinstatement. Hence, any inconsistency between the GIS data and the landmarks that established the bounds of the Native Title determination would need to be resolved in a similar manner.

The primacy of the expressed intentions of the parties to the deed is well understood as the lodestone in conventional boundary reinstatement. What then will take its place in the case of Native Title boundaries? The evidence presented to the Federal Court to make their determination appears to be the only pragmatic source of illumination for this question. Even in the case of consent determinations, where the Court relies on State and Territory procedures, it does so because they have "access to anthropological, and where appropriate, archaeological, historical and linguistic expertise. It has a legal team to manage and supervise the testing as to the existence of Native Title in the claimant group." (*King on behalf of the Eringa Native Title Claim Group v State of South Australia* [2011] FCA 1386 at para 19). We presume that if confronted with a Native Title boundary dispute, the Court will approach it in the same way as conventional boundaries, that the evidence approved by the Court will be preferred over the GIS representation. This paper uses litigated Native Title determinations to investigate the types of evidence the Court is presented and to establish an analogous hierarchy for Native Title boundaries which are Indigenous-derived.

4. Boundary determinations in litigated determinations

As of [January, \(2023\)](#) the vast majority (92.5%) of finalised, successful Native Title determinations have been achieved through consent determinations. The nature of these processes means that the basis for deciding the spatial extent of the determination is obscured from public view. For the purposes of this paper we have, instead, had to rely on reported judicial reasons of litigated Native Title claims. Even within this group, the matters of contention between the applicants and respondents are related to extinguishment, group membership and the continued connection to country so they rarely pass comment on the proposed boundaries.

This section starts with an analysis of the boundaries as understood, or at least articulated, by the indigenous claimants insofar as the significance that Indigenous Australians imbue in specific features can be drawn from the Judge's determination. After that we will highlight the Court's views on these boundaries and lastly, we will consider the implications for surveyors who may be asked to represent these boundaries on the ground.

4.1. Indigenous boundaries

4.1.1. Types of Indigenous boundaries

The types of Indigenous-derived boundaries have been classified under four main categories. Natural corporeal boundaries, Artificial corporeal boundaries, Metaphysical boundaries, and Incorporeal boundaries.

4.1.1.1. Natural corporeal boundaries. Natural corporeal boundaries include unambiguously definable physical features in the landscape such as ridgelines; "country north of the Hamersley Range escarpment the Fortescue River Valley" (*Banjima* para 179) or watercourses; "... where Kurtjar country was. He said that the Norman River, the Carron River and Rocky Creek form the boundary" (*Rainbow on behalf of the*

Kurtjar People v State of Queensland (No 2) [2021] FCA 1251 (*'Rainbow'* para 108); "There was general agreement that the Yule River was definitely Kariyarra country. Most applicants considered the Peawah River to be the boundary, and many considered the land between the Peawah and Balla Balla Rivers to be a Ngarluma Kariyarra 'mix'." (*Daniel v State of Western Australia* [2003] FCA 666 (*'Daniel'*) para 119). The features in this category are all linear features, easily understood by Indigenous and European people alike and are independent of measurements.

4.1.1.2. Artificial corporeal boundaries. Artificial corporeal boundaries include Indigenous-derived boundaries which are supported by European-derived features that are marked or somehow discernible on the ground; "The northern, eastern and southern boundaries are by reference to pastoral lease boundaries." (*Narrier* para 73); "Nauo people held core rights in country just to the south and ... across to the west of Port Lincoln" (*Croft* para 806); "... there was a stock camp called Eight Mile Hole, which was east of H Lagoon (south of Walker's Creek), all of which were Kurtjar places" (*'Rainbow'* para 108). These features can be either linear where they represent the boundary itself or points where they represent a minimum bound on the claimed area. While these European features will not explicitly follow the Indigenous interest's pre-European occupation, Indigenous witnesses may be satisfied by the proximity of these interests to their pre-existing ones. Some care must be taken because, while many European interests are readily discernible on the ground not all are. States, such as Queensland, have variable marking standards depending on the tenure of the grant. In many cases pastoral leases are granted without field survey and the interpretation of granted boundary is ambiguous (See *Re Boundary of Jarwood Holding* (1938) 17 QCLR 63).

4.1.1.3. Metaphysical boundaries. Metaphysical boundaries include boundaries which are a mixture of corporeal and incorporeal elements; "'Mrs Puertollano told a story about two Bluebones or parrot fish story, which became important in debate about the southern boundary of Bardi country. One of the fish was from Bardi country and the other from 'Pender Bay side, Nyulnyul'. They had a fight. They fought around Pender Bay. The Pender Bay Bluebone got the best of the Bardi Bluebone and knocked its front teeth out. The Bardi Bluebone came back sick with its front teeth knocked out. As a result, all the Bardi people took to following the Bluebone that had its teeth knocked out in the fight. They broke their teeth and got them knocked out just to show they cared. She has seen Bardi people with their front teeth knocked out" (*Sampi v State of Western Australia* [2005] FCA 777 (*'Sampi'*) para 310); "'I know where the Ngarranggarni [dreamtime creator figure] been running'. He then started giving a detailed description of where the boundary lay, expressed as a movement from west to east across the landscape, anchored in his description by reference to features we could find on the map" (*Neowarra v State of Western Australia* [2003] FCA 1402 (*'Neowarra'*) para 140). Dreaming tracks are the most accurate representations of these features. They embody a physical presence while at the same time the incorporeal presence may extend upon that which is perceived on the ground. Broadly speaking, it is possible to represent these features to within reasonable certainty, but the virtual representations will never fully embody the incorporeal elements of the boundary, because the incorporeal elements impact upon human life (like tooth removal), rather than being explicitly embodied on the ground.

4.1.1.4. Incorporeal boundaries. Incorporeal boundaries are based upon human interaction with the land; "She said that they were in forested areas on Miranda Downs and that '[s]oon as you go in that country, you can just feel it... It's no good place'. She had been told not to go in there and believed that she had to respect that prohibition." (*'Rainbow'* para 98); "Brian Tucker stressed that command of country was legitimated by command of esoteric ritual knowledge. In that regard he told Dr Palmer that when they sang the Wardirba songs progressively identifying areas

of country, the one that was associated with Weeli Wolli Creek marked the transition in the responsibility for the singing from Banjima to Nyiyabarli" (*Banjima* para 336). These boundaries are the hardest types of Indigenous boundaries to depict. Therefore, any virtual representation of these boundaries will rely upon a person's physical and emotional connection to the land. It is expected that the boundary accuracy of such features will improve with a greater number of interrelationships between witnesses testifying to a spiritual connection to the land. In this way, communal interaction improves the level of physical and emotional awareness about an incorporeal space, allowing such a space to be better understood by the Indigenous community.

Similar to Indigenous boundaries, Indigenous places/features have differing properties. A sacred site/meeting place is a place where Indigenous clans have routinely gathered at. For example, multiple clans often gathered at sacred sites to participate in rituals, marriages and other events which were likely to engrave in the memories of the witnesses who attended such an event. Most sacred sites exist as a corporeal feature, such as a basin or valley, but there will be many incorporeal elements associated with such a site. More investigation can be conducted into classifying the types of sacred sites and their importance to Indigenous Australians, but that is out of the scope of this journal article. As such, this article assumes that all sacred sites/meeting places have a similar significance between Indigenous Australians.

Natural landmarks are also referred to and include any natural corporeal features which are not linear in nature and cannot explicitly form a boundary line as such. Examples of such features include sinkholes, rocks or hilltops, like point type artificial features, support a claim to country by showing a minimum extent or connection.

4.2. Judicial consideration of boundaries and contextual evidence

This sub-section describes observations extracted from published decisions that demonstrate the Court's attitudes to evidence it uses to determine the final Native Title boundary.

4.2.1. The mechanics of the Act

The Court is clear that a determination does not create Native Title, rather it is a process to recognise and bring under the modern Australian legal framework "what has always existed" (*Willis on behalf of the Pilki People v State of Western Australia (No 2)* [2014] FCA 1293 para 8). The nature of those pre-existing societies and their relationship to land and "ownership" (see Section 3.1) does not always fit smoothly with European law but the NTA is the mechanism to allow this recognition. In *Mabo Brennan J* wrote "Difficulties of proof of boundaries ... afford no reason for denying the existence of a proprietary community title capable of recognition by the common law" (at 51). While the applicants are obliged to prove their claim on the balance of probabilities the Court appears open-minded as to what that proof may be. The applicant need only persuade the Court "that the thesis for which they contend is more likely than not." (*Narrier* para 403).

The Court's flexibility is necessary as the NTA compels applicants to draw boundaries that do not accord with traditional understandings of country (*Narrier* para 74). The same limitation seems to result in conservatism from applicants in putting forward their claim boundaries. While the claim boundaries are entirely a matter for the applicants (*Neowarra* para 158) it is quite common that the claim is for land well within the traditional country (*Alyawarr, Kaytetye, Warumungu, Wakay Native Title Claim Group v Northern Territory of Australia* [2004] FCA 472 para 69).

The absence of countervailing evidence that an area "was not and could never have been within that over which the Banjima exercised traditional rights and interests at sovereignty" (*Banjima* para 295) was sufficient for the claim boundary to be accepted. Likewise, the absence of competing claims "strengthens the conclusion" (*Neowarra* para 380) that the claim is not trespassing onto the country of other Indigenous Australians. However, no other adjoining claims is not a *carte blanche* to

claimants. The social cost of European occupation has been the complete extinction of some traditional societies. In *Croft* the neighbouring society no longer existed. The Judge decided that they did not have to make a finding of whose country was to the south of Port Lincoln, but they were satisfied that it was not the applicants. Clearly, previous determinations will create inflexible boundaries to claims through the operation of s62(1 A)(b) of the NTA.

4.2.2. The consequences of colonisation

Where European occupation has resulted in the tragic destruction of whole societies, or a loss of their connection to the country, the Court has shown that this has no effect on the claims of those who may have shared interest (*Ward* at p 102). However, occupation has had consequences on traditional boundaries beyond the extinction of peoples. The Judge in *Dempsey* on behalf of the Bularnu, Waluwarra and Wangkayjuru People v State of Queensland (No 2) [2014] FCA 528 (*Dempsey*) makes the point that government restrictions on traditional language and law in Queensland sent culture 'underground' (para 75) and led to activities and ceremony for country being forced to be performed off country (para 55). This leads to uncertainty in location evidence in an oral culture. Restricted access to one station, 'Mulga Downs', in 'Rainbow' led to ambiguity in witnesses' evidence as to the eastern boundary of the claim (para 137 & 188) that the Court was nonetheless willing to accept. In addition, it was put that inaccurate anthropological historical mapping of country had played a role in the ambiguity in the traditional oral tradition (para 166).

4.2.3. Lay witness evidence

There are well established anxieties around evidence obtained from Indigenous witnesses. The NTA shows that the Parliament has explicitly made accommodation for them. While ostensibly being bound by the rules of evidence, the Court has some discretion (s82(1)) and are directed explicitly to consider cultural and customary concerns to minimise prejudice to litigants (s82(2)). This is aside from the conduct of the proceedings, where the Court makes adjustments when evaluating the reliability of Indigenous evidence (for example, taking evidence and holding hearings on country or dealing with gendered knowledge). Judges have been acutely aware of how the status of witness can affect their willingness to expound their true thoughts (*Ward* at p69), that silence on a point can not necessarily be seen as assent (*Manado (on behalf of the Bindunbur Native Title Claim Group) v State of Western Australia* [2017] FCA 1367 (*Manado*) para 367) or as in *Narrier* (para 142) "She sometimes appeared to know much more than she was willing to say."

In an oral culture evidence of traditional laws and customs can only be hearsay (*Wandarang* para 9) and it is accepted that oral traditions have a shallowness over three or more generations (*Rainbow* para 650). This risk is mitigated somewhat by the community. As Weinberg J quotes from an expert witness report, "Performance and transmission is regulated by a jural public, ensuring continuity of content. Ritual instruction is characterised as vigorous, and attention is paid to ensuring that an initiate learns fully and correctly. 'Getting it wrong' is subject to sanction and is not tolerated. In my view, such a process of oral tradition works toward the maintenance of continuity of accounts and limits the possibility for revisionism or innovation." (*Griffiths v Northern Territory of Australia* [(2006)] FCA 903 para 455). As a balance, the Court clearly has a preference for evidence that comes from closer to first contact and thus requires fewer transmissions (*Dempsey* para 153) and that which is consistent within itself (*Sampi* para 1085) and between witnesses (*Dempsey* para 49 & 753). In *Neowarra* the judge was impressed that two groups had consistently described the common boundary between their claims through independent processes with no common participants (para 141). Simultaneously, the Court understands that inconsistency, of itself, does not necessarily make evidence unreliable. They are aware that in "any neighbourhood, community or society there may be a range of opinion about such things as the extent of land or country"

(‘Banjima’ para 267) and “particular members of a group will have detailed knowledge of (and sometimes authority to speak for) country in one location, while others can do so for various different locations within a larger area associated with a land owning group or society” (‘Rainbow’ para 176).

Words of caution have been written about the reliability of court transcripts in relation to people with English as a second language (‘Ward’ at p 22) as the written word cannot convey the nuance of the response or their apparent understanding of the proceedings. For example, in ‘Neowarra’ (para 149) the demeanour of the witness when contradicting their written evidence with their oral evidence led the Judge to conclude that they were unlikely to comprehend the significance of contradiction. The privileged position of the primary Judge to observe the totality of evidence laid before them means that even the Full Court on appeal is loath to intervene unless the conclusions are glaringly improbable (Banjima People v State of Western Australia [2015] FCAFC 84 para 57).

4.3. Determinations and evidence

If the Court determines that Native Title exists in any part of the claim area it is obliged by s225 of the NTA to identify, amongst other things, where the Native Title is exclusive, non-exclusive, and extinguished. As full or partial extinguishment is a result of previous acts, these ‘internal’ boundaries are predominantly described by reference to existing non-Native Title interests and will have boundaries discernible through standard cadastral surveying approaches. However, that is not necessarily the case. *De Rose v State of South Australia (No 2)* [2005] FCAFC 110 (‘De Rose’) para 166 found that certain improvements extinguished completely Native Title in an area that otherwise had non-exclusive Native Title. The determination declines to determine a distance for an extinguishment buffer saying only that it is “any adjacent land the use of which is reasonably necessary for or incidental to the operation or enjoyment of the improvements”. It makes no statement about how that test could be applied, whereas in a similar situation *King v Northern Territory of Australia* [2007] FCA 944 para 168 give the applicant the “liberty to apply” to the Court if it ever needs to be determined. In contrast, the Court was comfortable in defining an extinguishment width for a constructed but unsurveyed road in that same application. The liberty to apply was used in both *Manado* (para 656) “If an issue arises in the future about the location of the boundary, the accurate position of the high water mark at the time in respect of a particular area of land will have to be determined” and *Hayes v Northern Territory of Australia* [2000] FCA 671 I para 6 “In the circumstances, I will reserve liberty to apply in the event that in the future it becomes necessary to establish a definitive boundary of the relevant area.” In such cases boundaries were definable, but it was seen as an unnecessary expense, given the economic advantage of the boundary. While these latter determinations are preferable in describing a mechanism to resolve any ambiguity, application to the Federal Court will always come at a considerable cost.

4.4. Boundary descriptions in determinations

If the result of the Native Title application is that the Court finds that Indigenous customary title of some form has survived, the NTA s225 requires that the ensuing determination delineate where within the claim boundary:

- Native Title has been extinguished (or not established) or;
- partially extinguished (non-exclusive) or;
- where extinguishment can be disregarded (ss 47, 47A & B) or;
- has survived in intact.

In some cases, such as ‘Manado’ areas have been allocated to sub-groups of the continued society in circumstances where the society

permitted it.

While the minimum content of a determination is controlled by statute, there are no requirements as to the structure or format. It is typical for a determination to commence by describing the external boundary of the determination. In most cases this will be the same as that described in the claim, but not necessarily so.

In many cases explicit instructions are included to resolve possible conflicts between description elements. For example, it is made explicit that the written description should prevail over the provided map in the case of an inconsistency (*Gumana v Northern Territory of Australia (No 2)* [2005] FCA 1425 & *Sampi v State of Western Australia (No 3)* [2005] FCA 1716 (‘Sampi Determination’)). In other cases, the geographic coordinates provided for cadastral or topographic boundaries are deemed subservient to position of those features on the ground and defined by “detailed ground survey” (*Brown (on behalf of the Ngarla People) v State of Western Australia (No 3)* [2010] FCA 859, *Rainbow on behalf of the Kurtjarj People v State of Queensland (No 3)* [2022] FCA 824 (‘Rainbow Determination’)). More commonly, other Native Title determinations or even registered applications are expressly excluded from area for “the removal of doubt” (‘Manado’, ‘Rainbow Determination’).

Within the external claim boundary, the description of internal boundaries between extinguishment, disregarded extinguishment, exclusive and non-exclusive Native Title depends on how the change in status occurred. Most simply are those boundaries that come about due to the creation of a previous land interest described by a European boundary. Of these, those established with field survey are the most reliable and well mapped. In general terms, the more expansive the rights associated with the interest, the more likely that it will be required to be surveyed rigorously. Likewise, the more expansive the right granted, the more likely that it will define the boundary between extinguished Native Title and some other type. However, this is not necessarily always the case. In ‘Sampi’ French J is unconvinced that all of the claim area to the south was Bardi and Jawi country at sovereignty and decides, based on the consistency of the lay evidence, that the southerly extent is limited by Kelk Ck in the west and Cunningham Pt in the east. He invites further submissions on the matter. The final determination finds no Native Title exists in two triangular portions to the east and west of the original southern claim boundary (see panel a) in Fig. 4). The internal boundary in the east is defined from the intersection of a line of longitude with the southern claim boundary to a line of latitude intersecting the “2 metre bathometric contour at lowest astronomical tide of the mainland coast” south of Cunningham Pt. The internal boundary in the west is defined “along the centre line of Kelk Creek” extended to its intersection with the southern claim boundary. This second description, being open to the most interpretation, is reinforced by giving an approximate distance between the two triangle apices on the southern boundary.

There appears to be two ways of dealing with extinguishment that arises from the public works provisions of the NTA, either the boundaries are excluded from the determination or are included but shown as having extinguished Native Title. The practical result is the same. In some circumstances the spatial extents of the public works are well known and defined by survey but in others the description is left open to some interpretation. The ‘De Rose’ determination reproduces the formulation of “any adjacent land the use of which is reasonably necessary for or incidental to the operation or enjoyment of the improvements” for the extinguishment around existing pastoral lease improvements.

4.5. A risk based approach to evidence

Our analysis of the judicial reasoning reported in the litigated determinations suggests that the notion of a hierarchy, akin to the traditional hierarchy, may not be an appropriate lens to look through. A one-dimensional list of evidence weighting is inadequate to capture the nuance in evidence being considered by the Court. All authors of

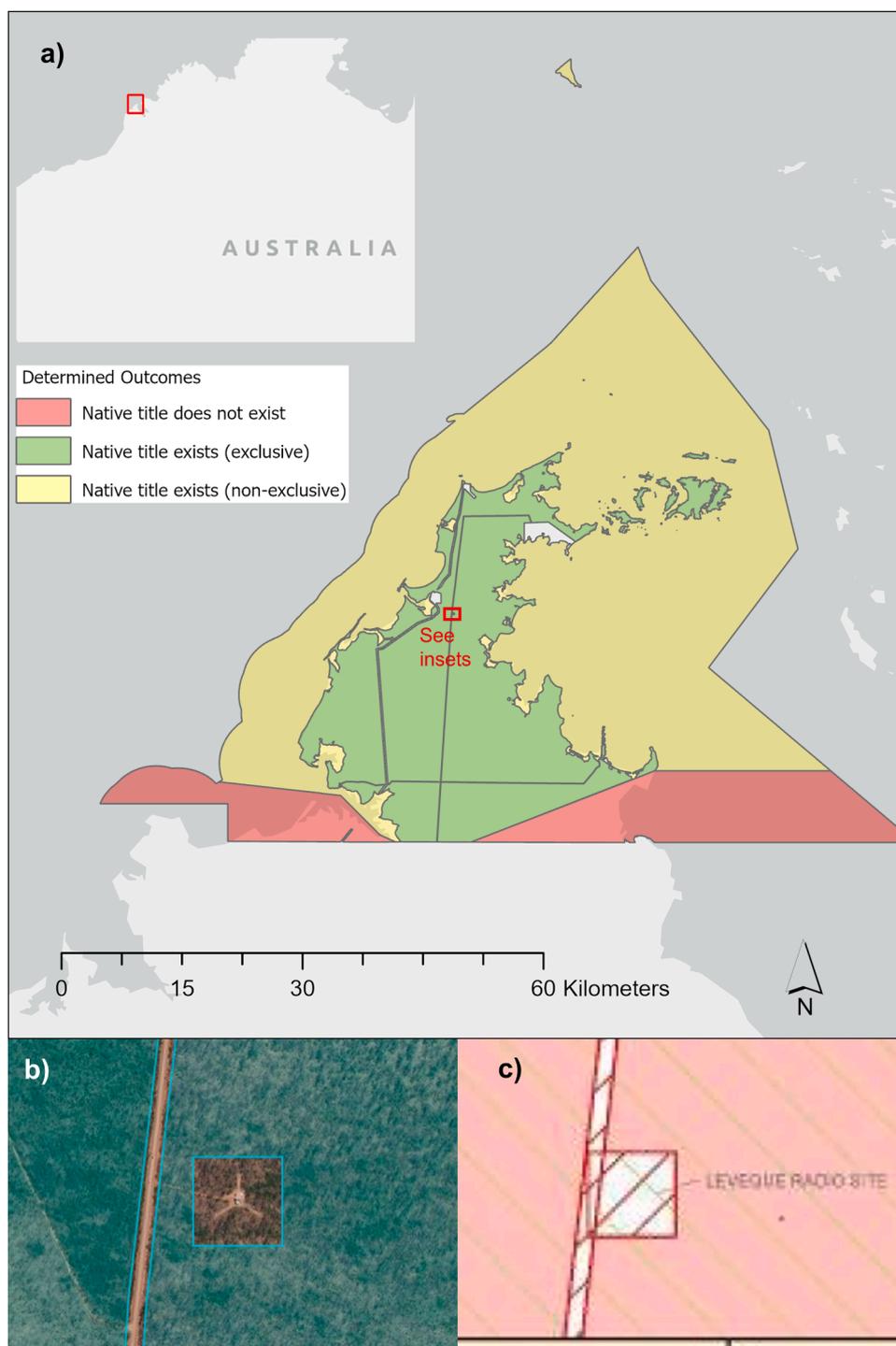


Fig. 4. Depiction the *Sampi* determination. a) The green and yellow areas show the where exclusive and non-exclusive Native Title was established, with the red area being that section where the claim was not substantiated. b) and c) compare of the Native Title boundary depiction around the Leveque Radio Site in the determination. b) shows it as depicted in the Native Title Vision GIS data set and c) shows it as depicted in the mapping within the determination itself.

hierarchies (Hallmann, 1973; Brown, 1980; Campbell, 2013) caution that the lists are not rigid and should be read in context of the history of the boundaries and the local cadastre so, it may be reasonably argued, that a hierarchy is inadequate to apply to traditional boundary evidence as well. These lists are a product of a nineteenth century frame and perhaps should be reimagined as an evidence weight matrix of two dimensions much in the same way risk is assessed in a workplace health and safety context. While reform of the traditional hierarchy is beyond the scope of this paper, we would contend that relative weight of

evidence accepted by the Court can be organised in a matrix with axes evaluating the certainty of identification on one limb and the uniformity of lay witness testimony on the other.

5. Reinstating Native Title boundaries

With traditional boundary surveys, surveyors only need to have recourse to a reinstatement approach if there is a conflict in the evidence of the boundaries. These ambiguities can be patent (within a single

document) or latent (a conflict between documentary evidence types, documentary, and physical evidence or even conflict between physical monuments). Likewise, we would be naive to assume that there are no potential conflicts within the often complex boundary descriptions contained in Native Title determinations. For example, on the simplest level, the ‘Sampi Determination’ has an exclusions area “(f) the Leveque Radio Site located on Dampier Location 297, being a square shaped area of four hectares (200 m x 200 m), the right side corner points of which are located 138.59 m from a station mark located at Longitude 122°54’52.6 Latitude 16°32’25 and the left side corner points of which are located 141.42 m from the same station mark, generally shown on the Maps in Schedule.” Notwithstanding the use of left and right for directions without an additional orientation (perhaps east and west is more appropriate), it is not possible to construct a figure that has those properties. Furthermore, as shown in Fig. 4, there is a conflict in its depiction in relation to other interests when comparing the Native Title Vision GIS interface with the determination mapping. Only time will tell what these conflicts will be or if enough will be at stake for it to be brought before a court. However, the litigated determinations examined in the preceding sections allow us to speculate on what the court’s view might be.

As described in Section 1.3 the traditional reinstatement approach has, as its talisman statement, that the expressed intention of the parties to the deed as being paramount. As always, careful reading shows that this is not as simple as it first appears. Sitting over this is the warning that the owners of a lot can only convey what they themselves received, so in some circumstances, adjoiners prior to the grant will prevail. In a Native Title context, it would be the Federal Court’s description of the external area contained in the determination, that should stand but this itself is constrained by the claim. In a practical sense, in determinations we examined, these are co-incident as they use the same form of words. That is not to say that they will always necessarily be. The Court can only determine what is within the boundary of the claim in the same way that an owner can only convey what they have received.

As stated in Section 4.2.1, adjoining determinations made prior to the claim should control any other description in the case of an overlap. However, that does not mean that adjoining claims should necessarily be co-incident. A claim without a call to a pre-existing neighbouring claim or determination could describe a line that leaves a gap between the two. Given the inclination to claim conservative boundaries discussed in this section, you would hope that the Court could avoid the pedantic approach, but it is not clear how that might be done.

While some determinations make explicit statements, even in their absence, it is most probable that the written descriptions would be preferred over the maps in the determination that likewise would be preferred to the GIS databases. This approach is consistent with the established common law reinstatement principles, that the physical manifestation of a land interest, being most easily understood by the giver and the receiver, should be given preference. The Native Title claimants’ understanding of the boundaries is rooted in the landscape, with boundaries that reference physical features. Hence, any inconsistency between the GIS data and the landmarks that established the bounds of the Native Title determination would need to be resolved in a similar manner.

Within the external determination boundary is a patchwork of exclusive, non-exclusive and non-existing areas. In rare circumstances, like ‘Sampi’, the Court may ascertain that the claim group’s interest does not cover the entire claim area. Normally, the starting presumption is that exclusive possession exists unless the area has been subject to some form of extinguishing action. The certainty with which these internal boundaries can be described is dependent on the creation of the extinguishing interest. In general terms, the greater the interest, the greater the degree of extinguishment and the greater emphasis is put by the State on the unambiguous definition of its spatial extent. It is reasonable to propose that, in the absence of any direct comment in the determination, a Native Title boundary created by an extinguishing action

should be reinstated according to the conventions that govern the reinstatement of the extinguishing interest. So those lines physically marked and surveyed will take precedence over those merely compiled from photography and other mapping. Extinguishment created by public works, by definition of a public work, or by pastoral lease improvements will have the advantage of physical infrastructure present on the ground. If the determination has defined a distance around it for extent of the extinguishment, then there should be minimal ambiguity. However, if the buffer for “reasonably necessary for or incidental to the operation or enjoyment of the improvements” is not defined there is no evidence in the examined determinations that would help in ascertaining the Court’s view. If, the determination, like ‘King’ and others, explicitly refers to a liberty to apply then clearly that needs to be exercised. Even without an explicit reference in the determination, application to the Court would seem inevitable.

6. Conclusion

This paper has examined the treatment of boundaries in all the currently litigated Native Title determinations to consider how they may be reliably integrated into the common law western boundary reinstatement regime. In doing that we have assumed that, as Australia moves into the post establishment phases of Native Title, there will be a need for a pragmatic way to resolve ambiguities or disputes without having to resort to slow and expensive court proceedings. This has been the long-established approach in dealing with traditional boundaries with cadastral surveyors being entrusted with the role as disinterested parties applying, as best they can understand it, norms expounded by courts as they have resolved more than two centuries of common law boundary disputes. The limitation in casting forwards, rather than back, is that it is not possible to reliably predict what the conflicts and ambiguities will be but, given the complexity of the task and the variety of boundary evidence, we suggest it is inevitable that there will be disputes. Whether they will be high stakes enough to warrant court resolution will be dependent on the value of Native Title when we come fully into the leveraging phase. In the absence of further direction from the courts, surveyors, if called upon, would be wise to adopt the risk-based approach when considering conflicting evidence. The framework described in Section 4.5, assessment based on axes evaluating the certainty of identification on one limb and the uniformity of lay witness testimony on the other, while rudimentary is consistent with our analysis of the judicial reasoning in establishing the boundaries.

High stakes disputes, in the context of Native Title, are not just those framed in economic terms. The ongoing cultural attachment to country has led to the survival of Indigenous customary title, meaning that emotional and spiritual elements will be as equally significant to disputants. During the establishment phase, the NTA, Federal Court and High Court have been very aware, and accommodating, around privileged cultural knowledge. It will be a question for Native Title holders themselves how much information that is currently not retrievable due to cultural sensitivity will need to be made available for an accurate appraisal to be achievable.

It should be clear, from our description of the recognition process, that the determined boundaries approximate the boundaries created and managed by the Indigenous Australians themselves. As many Judges pointed out explicitly, the NTA recognises and codes what already existed rather than creates a new interest. It is perhaps somewhat ironic that the recognition process, having brought to light the ongoing and dynamic nature of Indigenous relationship to country, now sets the boundaries in stone. It can only change by extinguishment. There is no simple mechanism¹⁰ by which two adjoining Native Title holding groups can agree to move a common boundary if they agree that it is not

¹⁰ Section 13(5)(b) of the NTA does allow for the variation in “the interests of justice” which, on the face of it, appears to be high bar.

culturally appropriate. The legislative concentration on the recognition phase in the *NTA* may have consequences for the implementation phase of Native Title land rights. Without at least some form of on-ground clarification regime post-recognition, it seems implausible that Native Title landholders would be able to fully benefit from the leveraging phase of Native Title, in which they have unambiguous certainty about the extent of their lands and their rights contained within it.

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Declaration of Competing Interest

None.

Data Availability

All data relied upon is available in open-access court decisions and is duly referenced

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