

Locating, negotiating, and crossing boundaries: a Western Desert land claim, the Tordesillas line, and the West Australian border

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Abstract. This is a story about the bounded nature of stories and the storied nature of boundaries. It concerns a modern ‘scientific’ boundary: the West Australian border. In the process of trying to locate Aboriginal boundaries in a native title claim, this border is revealed as problematic and bent, and as rooted in the colonial history of the last 500 years. The tensions between Western and Aboriginal conceptions of boundaries open up a space for the exploration of the hidden social and narratological dimensions of land and knowledge, ownership, and authority.

“The settlers properly speaking, are those who, either by purchase or grants, are possessed of landed property within the boundary; and the squatters those who live and depasture their sheep and cattle outside the boundary. By the boundary is meant a line that separates the land already surveyed...from the lands in the interior called in the colony ‘bush’ which are not surveyed.”

O Balfour (1988 [1845])

“A bound is the limit or boundary, that to which anything extends in space.”

Oxford English Dictionary (1971, page 1021)

“The simple ideas we receive from Sensation and Reflection are the Boundaries of our Thoughts.”

John Locke (1959 [1690])

Introduction

This is a story about boundaries: about how messy they are, how hard they are to define and disentangle from their histories, how difficult it is to locate them even by using the latest of modern technologies. But it is also a story about cultural encounters over boundaries and how such encounters reveal the invisible spatial narratives subtending the concept of ‘boundary’, which is so profoundly embedded in Western thinking and conceptions of rationality.

This is also a story about storytelling, as boundaries are basic components of narration. As well as being one of the conditions for the possibility of storytelling, boundaries are a subject of, and a creation of, stories. Also, this is a story about the ways in which people live with a multiplicity of spatialities and the essential tensions between movement and fixity, between simplicity and complexity, between order and disorder, between similarity and difference, and between inside and outside. These are multiplicities and tensions that are implicit in the Aboriginal understanding that “boundaries are to cross” (Williams, 1982) and in the biological conception that the condition for the possibility of life itself lies in the role of the cell boundary in allowing selective permeability and communication (Becker et al, 2000; Cohen, 2000, pages 1–14).

Boundaries are framing devices thoroughly entrenched in modernist metaphysics, colonial ontologies, and international power politics. From a postmodern perspective they would appear to have been dissolved in the flood of rethinking around the spatial

and the mobile, the transgressive and the postcolonial, especially as exemplified by the figure of the trickster, the ‘enemy of boundaries’ (Ashcroft, 2001; Mol and Law, 1994; Soja, 1989; Turnbull, 2000; Urry, 2000). Nonetheless, boundaries persist: spatially as geopolitical entities, temporally as historical periodicities, socially as national, cultural, and individual identifiers, epistemologically as knowledge limits and category definitions, and ontologically as object–subject domains. It is more or less a commonplace that, as Harrison White puts it, “the main business of human discourse is to put an orderly face on the underlying mess” (1992, page 127), and that boundaries are the products of human action, effects of struggles for control and identity (pages 127–128). Hence, they have to be constructed, negotiated, and maintained and are often produced through narrative in the endeavour to achieve meaning and order.

Boundaries, as many of the papers in this issue show, are a central concern right at the heart of science studies, where some of the most important and enduring understandings have come from the consideration of boundaries: for example, Bruno Latour’s insistence on watching boundary creation at work, rather than taking boundaries for granted (1987), Leigh Star’s ‘boundary objects’ (1989), Tom Gieryn’s ‘boundary work’ (1999), and Peter Galison’s trading zones (1997).

“In the trading zone of technoscience, engineers and scientists invent ways of communicating through instruments, habits and words to coordinate a project even though they come from different professional cultures. The vitality of trading zones, technoscientific or otherwise, lies in breaking down boundaries, keeping things mixed up, developing, a lot of interfaces, going with the flow” (Galison, 1997, cited in Williams, 2003, pages 26–27).

Territorial boundaries are of course in constant dispute, so much so that there is even a subdiscipline ‘boundary studies’ which itself seems to exemplify classic disciplinary boundedness in paying little attention to the science studies emphasis on boundaries (O’Tuathail, 1998). It is in the hope of building bridges and in the spirit of Rosi Braidotti’s ‘epistemological nomadism’ (1994) that I want to ground this exploration of boundaries in its originary territorial context. My own adopted country, Australia, like every nation-state ‘abounds’ in boundary disputes; a recent, slightly perverse and unusual example is the redrawing of the Australian national boundary to exclude, rather than include, territory from ‘Australia’, in order to prevent ‘boat people’ from making claims to asylum by landing on offshore islands. So 4000 offshore islands are now legally excluded from being part of Australia for the purposes of immigration. Ironically, one of those islands, which are no longer part of Australia, is Possession Island in the Gulf of Carpentaria. It was here, in an act of ‘magical capture’ (Patton, 2000, page 124), that Captain James Cook, on 22 August 1770, planted a flag and told a story expropriating the whole East Coast of Australia in the name of King George III of Great Britain (Turnbull, 2001). What kind of narrative will now provide for authorised ownership, sovereignty, and continuity of occupancy one wonders?

Another instance of a boundary dispute is the recent ‘Contested Frontiers’ exhibition at the Australian National Museum in Canberra, which itself is now the site of a boundary controversy over the nature and limits of history, and over whether Aborigines were slaughtered in large numbers in a guerilla-war-like situation in the colonial attempt to establish boundaries of civilisation, or whether they were simply overtaken by ‘progress’ (Attwood and Foster, 2003).

But one of the areas in which boundaries have the most enduring and the most problematic and contentious presence is in land claims, especially in native and indigenous title claims. As it is from territorial land boundaries that most of our understandings are derived, and as the struggle over the definition of boundaries is itself one of the most important boundary markers between the colonising Europeans and the colonised

Australian Aborigines, my story starts with the difficulties encountered by an Australian Aboriginal group in having their determination and location of their land claim boundaries accepted.

The Ngaanyatjarra claim

The difficulties in this case were reported by Jan Turner and David Brooks, two anthropologists working for the Ngaanyatjarra Council in the Western Desert region of West Australia (2000) (see figure 1).

In recent years the Ngaanyatjarra Council has, like so many other Aboriginal land councils, been struggling to achieve some rights and protections over its own territory (Cane, 2002). At the same time it has been under pressure to delineate precisely the boundaries of its area, because the mining companies want certainty and expeditiousness in establishing their mining leases.

And here, in the manner of storytelling, I have to make a couple of small digressions: it is the precise delineation of aboriginal boundaries and mining leases that was at the heart of a recent controversy over mapping Aboriginal tribal areas. Stephen Davis and Victor Prescott produced a map marking the extant and imputed boundaries of Aboriginal territories (Davis and Prescott, 1992). This map brought about a heated and sustained debate, resulting in a major compilation of anthropological work by Peter Sutton (1995). Sutton concludes that Davis and Prescott's claim to mark

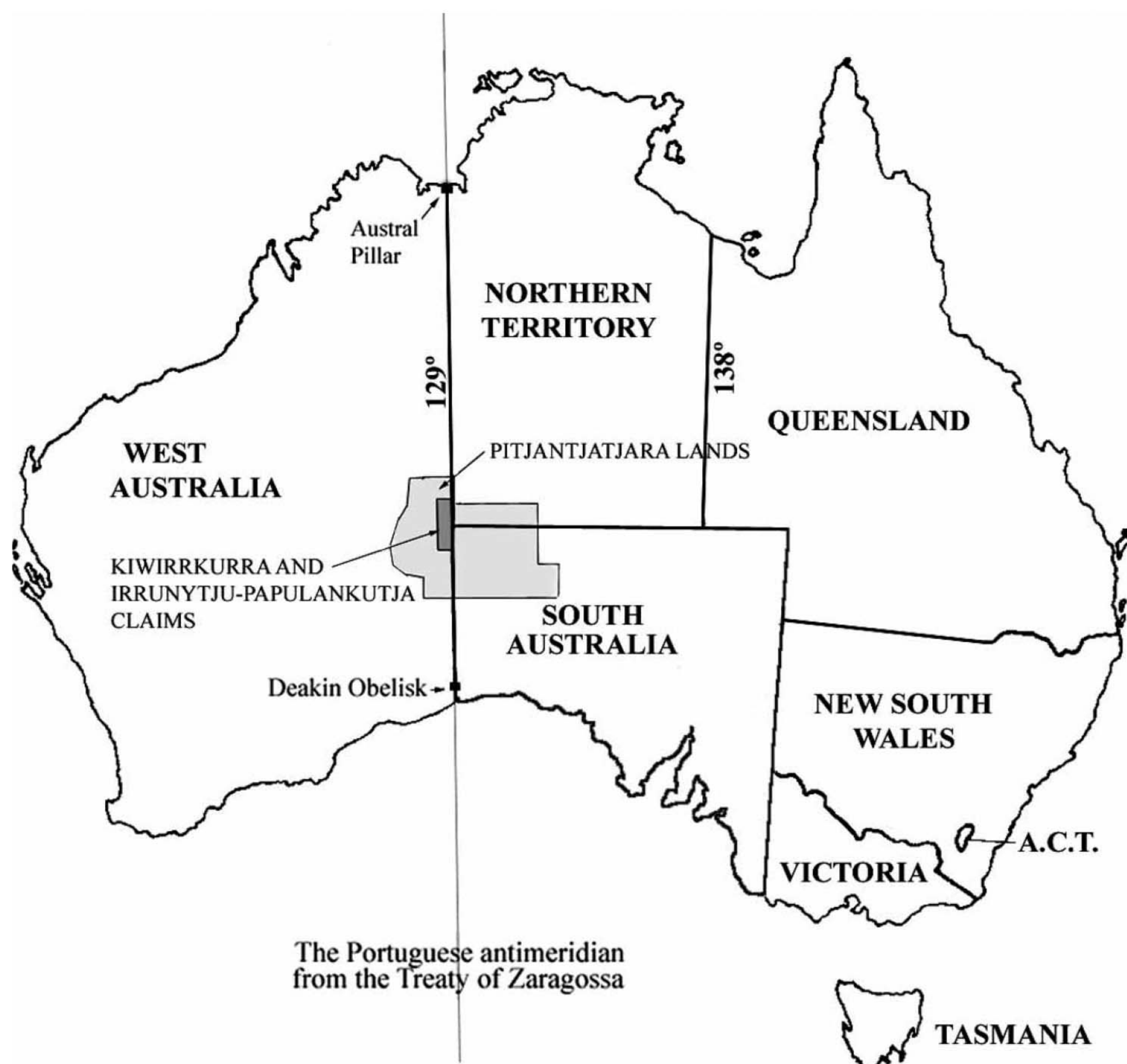


Figure 1. The West Australia border, the Ngaanyatjarra claim area, and the Pitjantjatjara lands.

tribal boundaries as fixed lines corresponding to Western notions of territorial or land boundaries reflects a misunderstanding of Aboriginal conceptions and practices, on the one hand, and bias, on the other, as a result of the commissioning of Davis's work by the Australian Mining Industry Council who published the map (Sutton, 1995). The situation is further complicated by the reality that for some Aboriginal groups, particularly those who have been displaced, there is an advantage in Western mapping and precise boundary demarcation in the fight for autonomy and place-based self-determination (Jacobs, 1986).

Davis and Prescott's map is used to argue for a form of geographical determinism in matching the physical characteristics of a region and the boundaries and frontiers (1992, page 133), a view summarised by Sutton as "either you live in better watered country and have boundaries or you live in the desert and (mainly) have frontiers" (1995, page 126). But Sutton argues that understanding Aboriginal boundaries requires recognition of "the complexities, indeterminacies and multiple layerings that are characteristic of Australian land tenure systems" (page 126). He calls for the recognition of a gradient of degrees of unboundedness, which may vary with the type of country, and also of varieties of boundedness, where in some cases an estate have may some precise boundaries such as a river, and some degrees of imprecision where boundaries are blurred in forest uplands. In addition, estates may be discontinuous, have multiple owners, or have transitional or provisional status. As Scott Cane has shown boundaries, especially in the Western Desert, are "to a degree, arbitrary" (2002, page 54). "The gradation of ownership creates a degree of permeability and flexibility in the delineation of cultural boundaries. Inter-group boundaries are 'relatively flexible ... one gradually merging into another with boundaries more or less fluid' within and between which 'socially recognised demarcations' exist" (page 56, citing Berndt, 1976, page 183; Tonkinson, 1978, page 9).

Sutton's and Cane's emphasis on the indeterminate and negotiated character of Aboriginal boundaries complements the view of Nancy Williams, who argues that "the location of boundaries may be indicated by the ways, sometimes very subtle ways, in which people ask to cross them" (Williams, 1995, page 126). Fred Myers also finds the same thing among Western Desert people, for whom "the content of ownership is the right to be asked" (1986, page 99).

However, the orthodox ethnography of the 18th century claimed Aborigines as mere 'wanderers' with no form of social organisation (Turnbull, 2004a). Fidelis in the *Sydney Gazette* 1824 argued:

"Any doubt, therefore, as to the lawfulness of our assuming the possession of this Island must arise from the opinion that it was the *property* of its original inhabitants. Such opinion, however, would be incorrect; for the very notion of property as applicable to tribal possessions, did not exist among them ... Each tribe wandered about wheresoever inclination prompted without ever supposing any one place belonged to it more than another. They were the *inhabitants* but not the proprietors of the land" (cited in Reynolds, 1987, page 167, emphasis in the original).

As Alexandro Malaspina, the Spanish commander, put it in his report on the newly established British colony in 1793, Aborigines are "a wandering nation, without agriculture and industry, and without any product that would attest their rationality" (quoted in King, 1990, page 84).

These claims are still made today. The historian Keith Windschuttle, for example, asserts that "Aborigines showed no evidence of anything that deserved the name of political skills at all" (2002, quoted in Reynolds, 2002, page 12). But I would argue that a strong case can be made, reinforcing Williams's and Myers's view, that many Australian Aboriginal groups developed a form of social organisation based in boundary practices—a

system of norms and signs that made such negotiated boundary-crossing permissions possible. In brief, Aboriginal groups recognised the social role of the ambassador or go-between, someone who could move freely across boundaries without interference so that permissions and negotiations could be sought (Howitt, 1996 [1904], pages 678–691; Turnbull, 2001). They developed social protocols about how authority and ownership should be acknowledged, and how permission should be sought and granted (Hallam, 1983; Myers, 1986). To cope with the vast range and variety of spoken languages, they developed a sign language with usage across very large tracts of country (Roth, 1897, pages 71–75). In other words, indigenous Australians had, and have, a systematic form of social organisation that governs the flow of knowledge and the relationship of people and place, which are the primary values in their society (Palmer, 1991; Watson et al, 1989).

The colonial and the enlightenment projects were in large part concerned with the establishment of boundaries to determine and delimit sovereignty over territory, and authority over knowledge. “The bureaucratic nature of state practices” led to the subjugation of the unbounded and establishment of the frontiers of rationality through “the conversion of messy places into rational spaces” (Taylor, 1999, page 104). It is from within this colonising spatial narrative that Aboriginal groups were framed as irrational, nomadic wanderers unable to delineate boundaries with precision or speed—an understanding whose contradictions are revealed by the example that I now want to get back to, that of the Western Desert land claim.

The *Native Title Amendment Act, 1998* requires that in mapping a land claim information must be provided that enables the boundaries to be identified. Turner and Brooks found that, despite the presence of the multiple groups in the land claim area, with complex histories of displacement, and substantial disagreements over boundaries, negotiated outcomes could be accomplished, provided due consideration and recognition were given to ceremonial forms and knowledge ownership. They claim that in an ideal world with no pressure to register land claims in response to mining lease applications:

“the project would have generated a strictly Aboriginal level of involvement, in the form of certain Law men and women of the desert acting on their own initiative to travel the boundaries between groups, talking here and there as necessary, acting discursively and ritually, weaving together the pieces of the pattern. Movement at this level is critical to meaningful social action in the desert” (2000, page 111).

Turner and Brooks invoke the term ‘boundary riders’ to refer to the ambassadors or go-betweens involved, and found they can “obtain outcomes through consensus on a range of issues related to representivity” (2000, page 114), a process they describe as “mapping people to country”.

Turner and Brooks imagined that the actual mapping would be “a purely technical task, and one would think, a fairly straightforward one at that” (page 109), but it turned out that “boundary definitions and maps are a seemingly endless source of headaches” for the land council (page 109). The native title process also reveals the emergence of another set of boundary riders, the geospatial information officers of the native title tribunal.

“These people who, of course, are completely unknown to their ‘counterparts’ in the desert, work from administrative centres, where they verify boundaries, update the accuracy of geospatial coordinates and cross-reference the updated information to the claim application as it proceeds through the reregistration process ... resulting in a delay of several months before final acceptance. The source of the problems has been boundary definition” (page 114).

Turner and Brooks found the Aboriginal Affairs Department could not give any coordinated specificity to any of the leases on Aboriginal reserves: “the Government

knew where the boundaries were legally, but there was insufficient on the ground survey data to allow these boundaries to be tied to known survey points” (page 114). But they also found that the bureaucratic agencies with responsibility for this area include the following: the Department of Land Administration for pastoral leases, the Department of Conservation and Land Management for nature reserves; the Department of Mineral and Energy for tenement information; the Aboriginal Affairs Department for Aboriginal community and registered site locations, reserve and lease boundaries; and the West Australia Municipal Association for local government boundaries. They concluded many of their difficulties stemmed from there being “too many boundary riders” (compare Kleinart and Neale, 2000, page 96)

But, in addition to the multiple forms of boundary making and the collision between Western European and Western Desert boundaries, a fundamental problem has been the precise location of the state border of West Australia, which forms the boundary with the Northern Territory and South Australia, and which is supposed to follow the meridian—longitude 129 degrees east. The determination of this boundary has been so messy that it is backed by eight volumes of information in the attempt to specify its location. Consequently, the Kiwirrkurra and the Irrunytju–Papulankutja claims, which were lodged and described as wholly within the State of West Australia, were rejected because the registration process found that the first one overlapped the boundary with the Northern Territory by 37–42 metres, and the second went into both the Northern Territory and South Australia (Turner and Brooks, 2000, page 115)

The West Australian border

It is to the revealing indeterminacy of the West Australian border and its historical complexities that I now want to turn. The problems that the Ngaanyatjarra Land Council encountered reflect not the imprecise and indefinite nature of Aboriginal boundaries but the difficulties of determining a boundary, which at first glance looks as if it is a classic, nonproblematic, exemplification of Western cartographic framing in action—the imposition of an abstract, rational, scientific grid on an unmarked, messy landscape. [See Anne Salmond (2000) on the limits and strengths of such contrasts.] The West Australia border should in theory be the longest straight line in the world, representing as it does a section of a line of longitude, the 129th meridian, 1843 kilometres from the Kimberleys to the Great Australian Bight (Porter, 1990).

Though there are no maps that show it (which is itself an interesting example of cartographic silences concealing the practices that underpin the possibility of cartographic maps), the slightly embarrassing reality is that the boundary is not straight, it has a kink in it at the T-junction with the Northern Territory and South Australia borders where there are two surveyors’ posts 127 metres apart (the junction is known, somewhat confoundingly, as Surveyor General’s Corner) (Sheather, 1990).

According to John Porter, a one-time South Australian surveyor general: “The two markers are a fascinating legacy of the pioneering surveying techniques used in the 1920s” (1990, quoted in Sheather, 1990, page 24). But, in fact, the mensurational difficulties go back to the inception of the border and its origins in the Spanish and Portuguese attempts to map and control the world: origins which have profound ontological and historical connotations. In another struggle over an ill-defined border, that between South Australia and Victoria, the Privy Council constructed a spatial narrative spelling out what is at stake in boundaries, and how those political realities need to be reproduced on the land itself:

“The inhabitants of the country on one side are to be subject to one set of laws and authority, and those who inhabit the other side are to be subject to another. It is essential that the given boundary should be such that fixes the rights and duties of

the people and their rulers, and this can only be done by fixing the boundary on the surface of the earth which divides the two" (Spigl, 1940, page 103).

The Commission for the Province of West Australia declared the border descriptively in 1831 as being the 129th meridian or line of east longitude. Many earnest efforts were made to locate the border on the ground. The first marker was placed at the southern end in 1866. But actually fixing the so-called Douglas Cairn was problematic. By 1902 they had five different longitude readings, some done by traverse from Adelaide and then Perth, some done by chronometer, and some by telegraph signals leaving a disputed strip 40 chains wide. [On traverse surveys and boundaries see Burnett (2000).]

In the 1900s there was pressure to clarify the position of the border coming from cattlemen wanting to build a fence to separate Northern Territory and West Australia cattle, and from the administrators of the Transcontinental Railway Line completed in 1917, who wanted to delineate the differing. The special Longitude Committee convened in 1921 gave the go-ahead to fix the border definitively by building a southern marker, the Deakin Obelisk, near Deakin, South Australia, and a northern marker, the Austral Pillar, on Argyle station near Wyndham in West Australia. In 1922 the three governments involved determined that the position of the border be surveyed by running lines due south and north from the marked points, though the board and the governments were concerned that "the work should be carried out with a reasonable degree of accuracy at minimum cost and that an academic result was not to be sought after with high and fanciful degrees of accuracy" (Porter, 1990, page 22).

The use of wireless to measure star-zenith times as the technique for locating the 129th line of longitude was held to be the epitome of modern scientific accuracy and cost-effectiveness, and, despite its problems, it became the world standard technique. The techniques involved solving the 'problem of simultaneity' (Nowotny, 1994, page 10) by employing the time difference between the zenith of a star on the meridian at Greenwich and at the meridian: a matter of 8 hours 36 minutes. The surveyors attempted to measure the time the star passed over the crosshairs of the telescope by tuning their radio receiver into specially broadcast 'pips' to synchronise their watches to Greenwich mean time. But, despite the surveyors best efforts, the equipment they were using, and the act of switching stopwatches on and off, introduced tiny errors. Their fixing was west by 0.2 second at Wyndham and by 0.1 second at Deakin. Translated into distance this 0.3 second discrepancy, meant the two markers straddled the 129th meridian 127 metres apart. The error was not noticed for 40 years and even then nothing was done to correct it (Sheather, 1990).

The land survey was carried out in the Kimberleys in 1936–37, by using chaining and star azimuths, but, again, there were considerable difficulties. Severe crosswinds prevented chainage, the surveyors had to cope with peculiar light effects in the desert, and they encountered very rough country. At one point in the Kimberleys, 30 miles of broken gullies and rocky hills, being traversed in the middle of a two-year drought, took two months to negotiate, and at another point the line ran along the edge of some cliffs (Barclay, 1938). Azimuths proved only slightly less hard to determine, because of the personal equation of the observer and fatigue (Spigl, 1940). A basic and often overlooked difficulty lies in ensuring accuracy of recording observations, in bookkeeping, and in the ancillary reliance on such accounting practices for the production of the star tables that were essential to their calculations (Schaffer, 1988; 2005)

In 1967 the Commonwealth, West Australian, Northern Territory, and South Australian governments decided to mark the corner where the two states and the Northern Territories meet, to avoid conflict over mining leases and to clarify the boundaries of the Pitjantjatjara Aboriginal reserve, which spreads over all three borders. In 1981 the South Australian government gave the Pitjantjatjara freehold title over their land, while

West Australia and the Northern Territory resisted ceding any entitlement to the indigenous occupants, leaving the portions of Pitjantjatjara lands in their jurisdictions as crown land. It was the marker at Surveyor General's Corner that was to determine the extent of freehold and to come to serve as an icon of the messiness, permeability, and historically irruptive character of boundary marking.

The northern part of the line could not be moved because of improvements already established, and aboriginal reserves were in place, leaving the surveyors with a conundrum. According to Porter, the surveyors who pinpointed Surveyor General's Corner in 1968 erected two markers, because they interpreted the wording of the 1922 agreement formalising the border too strictly. That agreement stated that a line due north through the Deakin marker to the 26th latitude at the junction with the Northern Territory–South Australia border would be the West Australia–South Australia border, and that the line due south from the northern marker to that junction would be the West Australia–Northern Territory border. According to the agreement the line joining these two points was to be “forever recognised as the boundary” (Sheather, 1990, page 25).

When the lines did not meet at the junction, the surveyors took the politicians at their word and erected two markers 127 metres apart. Porter says: “I believe the politicians meant the border to be a straight line, but the surveyors took the wording of the agreement literally, so today we have this curious kink in the border” (quoted in Sheather, 1990). This shows, I think, that inscribing the grid on the earth is neither easily accomplished nor merely technical; it is, as John Law would say, an example of ‘heterogeneous engineering’, requiring as much social and literary technology as it does surveying techniques (Law, 1986; 1987).

The social and narrative work involved in achieving a smooth seamless scientific result is revealed in the post-hoc account given by auslig, the official Australian federal government mapping organisation:

“the [1922] agreement required that the boundary be defined by lines running north and south from independently fixed points at Deakin and Argyle. When survey work began on the South Australia–Northern Territory border in 1963, it was quickly realised that the earlier agreement precluded the possibility of these lines meeting exactly. Precise survey methods confirmed this and in June 1968 two monuments approximately 127 metres apart were erected at the junction of the boundaries” (auslig, 2003).

This is a nice example of an *Alice Through the Looking Glass* reversal of the orthodox relationship between representation and reality in accounting for error.

According to the geopolitical theorist Ewan Anderson: “one quarter of the world's land boundaries are unstable, two thirds of maritime boundaries have yet to be settled”, and lines of longitude are “bad boundaries” because they are arbitrary (1999). So why was the 129th meridian chosen to mark the border? Was it merely arbitrary? I think a strong case can be made that, far from being arbitrary, it has a long historical linkage back to one of the most politically consequential and cartographically difficult acts of boundary drawing: the Tordesillas line.

The Tordesillas line

By the late 15th century, Spain and Portugal, the two major colonising nations of the day, were starting to fall over each other in their explorations of the New World. To reduce the conflict and to keep them separate, Pope Alexander VI, under the Treaty of Tordesillas 1494, stipulated that:

“a boundary or straight line be determined and drawn north and south, from pole to pole, on the said ocean sea, from the Arctic to the Antarctic pole. This boundary or line shall be drawn straight, at a distance of three hundred and seventy leagues west of the Cape Verde islands” (quoted in Brotton, 1997, page 72).

This line of demarcation ran down the middle of the Atlantic (figure 2). Spain got everything to the west, mainly South America, and Portugal got everything to the east, mainly Africa. The treaty created all kinds of problems, because there was no clear agreement as to which island in the Cape Verde group the line was supposed to be based on. The archipelago covers 3 degrees and the Portuguese measured from the most westerly island Santo Antao, and the Spanish measured from the most easterly Boavista. Nor was it clear which parallel it should be measured along; hence there was no agreement on how long a degree is. But, the really hot point of contention was the Moluccas—the Spice Islands. Where were they located in relationship to the antimeridian, the extension of the line around the globe into the Pacific? No provision had been made for this in the original Tordesillas Treaty.

In order to resolve the question of the location of the demarcation line, an expert conference was convened in April 1524. Delegates, mathematicians, lawyers, and other experts met on the bridge crossing the river Guadiana, marking the Spanish Portuguese border, between Badajoz and Elvas: a classic exemplification of a trading zone—an interstitial or third space for negotiation (Turnbull, 1996a; 1996b; 1998). Each side tried to gain advantage by lining up a winning team of cartographers, and by assembling the most recent and accurate information. Diogo Ribeiro, the leading Portuguese cartographer, was on the Castilian side, and on the Portuguese side were the Reinel brothers. The conference dragged on for two months and was abandoned

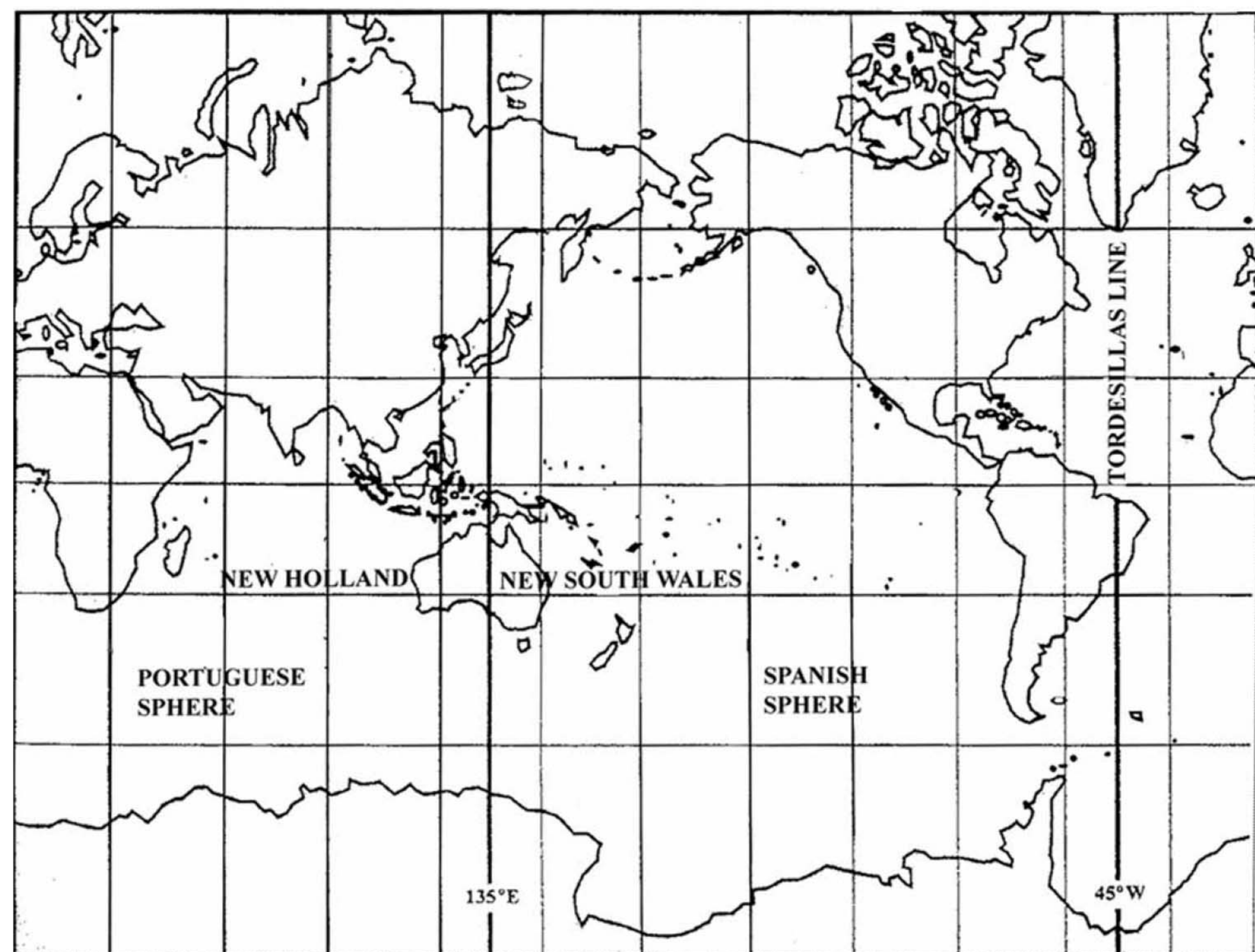


Figure 2. The Tordesillas Line and its antimeridian forming the 1786 boundary dividing New South Wales from New Holland.

when no agreement could be reached. The Castilians claimed the Moluccas are 183 degrees east of the island Sal in the Cape Verdes and the Portuguese claimed they were 137 degrees east. There were no publically acknowledged techniques for resolution of the issues, as the Portuguese kept their tangent tables method quiet (McIntyre, 1977). In the end it was decided each nation would have its own line without prejudice to the right of the other nation, and would have it rectified if and when more accurate surveys became possible (Brotton, 1997, pages 133–135; McIntyre, 1977, page 133)

Sometime later, Governor Arthur Philip, having been employed by the Portuguese navy in the war against Spain and in the defence of Colonia in Brazil, established the Australian colony of New South Wales on 7 February 1788. He set the western boundary at the meridian 135 degrees east of Greenwich: “that meridian coincided with the reciprocal of the line of demarcation claimed by Spain under the Treaty of Tordesillas” (King, 2002). This was a claim supported by the fact that in 1811 Sir Joseph Banks was asked to write an introduction to Mathew Flinder’s book *A Voyage to Terra Australis* (1814). In it Banks remarked that the then boundary between New South Wales and New Holland was “nearly corresponding with the ancient Line of Separation” (McIntyre, 1977, page 196)—that is, the Tordesillas line. Sir Robert Peel, the British prime minister, when shown the manuscript, revealed the political connotations by writing back saying he had amended it “to omit any notice of the reasons which are supposed to have informed Her Majesty’s Government in placing the western boundary of New South Wales” (1977, page 196; see also King, 1990, pages 9, 16; Randles, 1995).

The Spanish, their power declining, eventually negotiated a new deal, the Treaty of Zaragossa, under which, in return for 350 000 ducats, the demarcation line was relocated at the 51st meridian, with its reciprocal at 129 degrees—that is, the line of longitude that became the border of West Australia in 1824 (McIntyre, 1977, pages 31, 129; Marchant, 2000, page 45).

The precise whereabouts of the 129th meridian has thus been subject to dispute and negotiation for over 500 years, and, despite the most earnest attempts to tie it to the land, the West Australia border ended up with a 127 metre kink in it, and it still has not been purged of its indeterminacies. The intractably social and cultural nature of such indeterminacies was famously revealed by Benoit Mandelbrot, the father of fractals, who was led to ask the question ‘how long is the coastline of Britain?’ by his observation that the length of the border between Spain and Portugal varies with which side you are on and who measures it: in Spain it is 987 kilometres; in Portugal it is 1214 kilometres (Mandelbrot, 1983, page 33).

In yet another twist, it is also now becoming apparent that the arbitrary division by the West Australia border of the Ngaanyatjara from the Pitjantjatjara, with whom they share religion, language, and country, is neither rational nor any longer tenable. The governments of the Northern Territory, South Australia, and West Australia have started holding discussions about the joint administration of the Pitjantjatjara lands. The Northern Territory attorney general, Peter Toyne, says “I can’t see any reason to put boundaries on it ... The practice of containing state services within state and territory boundaries is crazy” (quoted in Plane, 2003).

Conclusion

This has been an exercise in ‘peripheral wisdom’ in James Fernandez’s phrase (2000) or ‘epistemic nomadism’ as Braidotti calls it (1994, page 93). It has been a story about boundaries, and a boundaried story; it has been not a dissolution of boundaries, but rather an exploration of the practices of bounding. What I think this shows is that contemporary Western spatial practices, just like those of Australian Aborigines,

are messy, indeterminate, incomplete, fundamentally social and negotiated, and that there are a wide variety of, sometimes incommensurable, boundaries across and within cultures (Lawrence, 1996). It also shows, I think, that we tell stories about boundaries; we use them to assert and delimit authority and to differentiate between forms of rationality. We use them to divide territories politically and to make cognitive distinctions. At the same time, according to Paul Cobley, in telling a story, the notions of narrative progress and movement, of detours, of the play of similarity and difference imply a kind of narrative space. Hence, I would argue, boundaries and spatiality are implicit in the performance of stories. It is in the creation, elision, and deconstruction of boundaries that narratives are spatially constituted (2001).

Telling stories is a primary way of making meaning and creating an identity, of ordering our interactions with each other and the environment (Turnbull, 2004a; 2004b). To tell a story is to organise things in space and time and vice versa; to reference or factor events and people temporally and spatially is to construct a narrative. Narrative, space, and time have developed in complex interactions and coproductions, forming what Mikhael Bakhtin calls ‘chronotopes’ (1981; 1986). Narratives are thus spatial and temporal. They produce spaces and forms of spatiality by creating and performing links and connections between places, people, and events (Barth, 2000; Turnbull, 2000). They create time and temporality by identifying, labeling and ordering actions and events. Ultimately, narratives, knowledge, and space–time are linked through movement—the movement of people in the landscape (Ingold, 2000).

Narratives, in their construction of coherent persuasive accounts, create ontologies—what sort of things exist, in what kind of causal relationships. They frame the world in Kuhnian-style paradigms, determining what sort of questions can be asked and what counts as an answer (Kuhn, 1970). The great strength of narratives lies in their capacity for bridging incommensurabilities, and, in handling gaps and elisions, they create continuity and commonality of reference across the varieties of local practices and hence they play much of the role of boundary objects (Star, 1989). At the same time it makes persuasive and legitimates particular ways of seeing the world and treating evidence. However, our mental, narrative, and linguistic structures do not map onto reality any more directly than our maps do. We therefore need to keep in tension the storied nature of boundaries and the boundaried nature of our stories.

The emergent, subdominant spatial narrative is one in which boundaries are recognised as being as much about engaged, embodied, movement, multiplicity, and communication as they are about representations of limits and exclusion (Burnett, 2000, page 264; Ingold, 1987, page 156). Navzat Soguk and Geoffrey Whitehall point out “the open secret of modernity’s dominant spatial story is that it is itself a movement, one of many movements of transversality” (1999, page 686). Boundaries, then, are an “ensemble of interstices through which bodies and ideas pass” (page 685). For Doreen Massey space is “the product of interrelations”:

“space is the sphere of the possibility of the existence of multiplicity; it is the sphere in which distinct trajectories coexist; it is the sphere of the possibility of the existence of more than one voice. Without space, no multiplicity; without multiplicity, no space” (1999, page 28).

Consequently, boundaries and stories are dynamic sites, zones of irruption, where new spaces emerge, fresh encounters occur between people, multiple voices speak, and narratives are transformed. By contrast, the dominant spatial narrative of boundaries is one in which a static nature can be separated from culture and divided at its joints. “Messy places” can be converted into “rational spaces” (Taylor, 1999, page 104), the landscape can be represented, grided, surveyed, measured, owned, and commodified, and scientific knowledge can be portrayed as a rational, unified

territory with self-defining, bounded disciplines. But, if boundaries are themselves transversal ‘boundary objects’ and ‘trading zones’, a more fruitful, irruptive narrative space can be imagined—one in which the multiple contesting stories of boundaries are told in the “complexities of tension” (Law, 1999, page 12) with one another, and the boundaries of stories are performed together in dynamic interaction.

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