Unfinished Business: Part 2
Completing the mudmap on the riverbed – the legal lacuna in the tri-state area of the River Murray

by M M Park and I P Williamson

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SOLUTION BASED ON CHRONOLOGY

[20] In the Journal of Spatial Science paper we considered the locations of the various borders at different times. Thus, the original SA-NSW border was fixed by the 1834 imperial statute at the 141st meridian of longitude (or 141º East of the Prime Meridian). At this time the only border separating the two colonies of NSW and SA was the ‘astronomical’24 or ‘geometric’25 border running North-South along the 141st meridian. This border is of course no more than an ‘imaginary’26 or ‘invisible’27 line on the surface of the earth and unascertainable by any of the inhabitants of the border area. It was for this reason that the respective governments of the two colonies agreed to the physical marking out of the border on the ground in the late 1840s. This border location remained until 1849 when the respective proclamations by the two colonies “adopted” the border as marked out on the ground by Wade and White in the 1840s which is the present Victorian-SA border located approximately 3.5 kilometres west of its intended location along the 141st meridian. Thus the location of the SA-NSW border was “shifted” westwards some 3.5 kilometres pursuant to the proclamations and the intention of the two colonies that the remaining border north of the Murray would continue as an extension or prolongation of the Wade-White border.
[21] In 1850 the Imperial statute creating the colony of Victoria out of the Port Phillip District of NSW (effective 1851) retained the 1849 border with the Wade-White line south of the Murray delineating Victoria and SA and the extension of that line north of the Murray delineating the SA and NSW border. Pursuant to common law the northernmost point of the Victoria-SA border was at the thread or thalweg or the river where the NSW-SA border there commenced.

[22] The 1855 imperial statute expressly displaced the common law location of the Victoria-NSW border with the consequence that that border was “shifted” southwards to the top of the south bank of the River Murray.

[23] Thereafter, with the SA and NSW colonies agreeing to re-establish the 141st meridian as their common border north of the Murray (in 1868) the actual SA-NSW border was re-established some 3.6 kilometres east of the Wade-White border and approximately 100 metres east of the 141st meridian. Thus there arose for the first time the 3.6 kilometre “dog-leg” between the Victoria-SA and SA-NSW borders and with it the ambiguity of the border linking the Victoria-SA and SA-NSW borders. The options described above illustrate the ambiguity of the location of this linking border.

[24] Based upon the agreement of the SA and NSW colonies to re-establish the 141st meridian in the 1860s it is possible to surmise that had the error in location of the Wade-White line been ascertained prior to the creation of Victoria then both colonies would have permitted the SA-NSW to be “shifted” eastward to its “correct” position with the consequence that the Victoria-SA negotiations culminating in the 1914 Privy Council litigation would have been avoided.
DISCUSSION

[25] We offer the conclusion that the whole of the River Murray between the NSW-SA and the Victoria-SA borders is wholly within SA jurisdiction (Option 1) with the NSW-SA border extending south beyond point T to point M and the Victoria-SA border extending westward from point M downstream to point W and running along the top of the south bank of the river (see figure 8).

[26] Although it is possible to uphold a 13 kilometre “finger” of NSW territory protruding westward from the present NSW-SA border to the Victoria-SA border and of width from the top of the south bank to the middle thread of the River and the northern portion of the watercourse being SA territory (option 2) we discount this conclusion because it requires the acceptance of the 141st meridian as the border between NSW and SA long after the Wade-White line had been accepted by all relevant parties (this is in addition to the infeasible nature of the territorial oddity and the difficulty of NSW exercising jurisdiction over this oddity). That two of the parties later agreed to adopt the Todd-Smalley line as the NSW-SA border should not retroactively alter the analysis offered here.

[27] Dunn has suggested this solution to be, despite its “bizarre outcome … from a strict interpretation of existing law …[seemingly] the most likely” apparently on the

Figure 8: The authors’ conclusion is that the northern border of Victoria continues along the top of the south bank of the River Murray with the consequence that SA alone has the sole jurisdiction over the whole of the river downstream from the NSW-SA border. Note that the Todd-Smalley border between NSW and SA has been prolonged due south from the point T to the point M.
basis that in 1869 SA declared the county of Hamley bounded on the east by the Todd-Smalley line and on the south by the middle thread of the Murray R.\textsuperscript{28} This may only have been in anticipation of Victoria “doing the right thing” and giving up the two-mile strip of disputed country running from the southern bank of the River (point W) to the Southern Ocean. Thus the specification of the southern boundary of the county of Hamley may be equivocal in that this boundary was also to serve as the northern boundary of another SA county immediately to the south of Hamley upon the expansion eastward of that other county upon Victoria acceding to the SA request to adopt a common border located along the southern prolongation of the Todd-Smalley line. Of course, over the next half-century, Victoria declined the numerous requests of SA forcing SA to initiate its ultimately unsuccessful litigation before the High Court and the Privy Council. The SA declaration of an \textit{ad medium filum} southern boundary of the county Hamley was not to unequivocally surrender territory south of this southern boundary to NSW (or Victoria for that matter). That is, the declaration of a southern boundary of the county Hamley is not necessarily a declaration of the southern border of SA.

\textsuperscript{28} Otherwise, SA may have specified the middle thread in accord with the general rule of riverine boundaries (the \textit{ad medium filum aquae} rule) and thus surrendered any claim to the whole of the watercourse (as in Option 1). However, surrendering or vacating does not necessarily result in another party coming in to take up or fill the territorial space and jurisdiction vacated by SA. We suggest the objective analysis of the 1869 SA declaration of its Hamley county being bounded on the south by the middle thread ceased in 1914 with the Privy Council decision in \textit{SA v Victoria}. 
[29] For Victoria to retain an *ad medium filum aquae* border with SA along the 13 kilometre watercourse (option 3) would necessarily entail the unilateral abandonment by NSW of the whole of the 13 kilometre watercourse lying between the Todd-Smalley line and the prolongation of the Wade-White line. Such a unilateral abandonment would allow both SA and Victoria to “expand” to fill the territorial “void” with the SA eastern border moving eastward to the current western border of NSW and its southern border moving southward to the northern border of Victoria which has also moved northward to where the two meet *ad medium filum*.

[30] Our conclusion that this part of the River’s course lies wholly within SA suggests that the passive participation by SA in the *Ward v R* appellate litigation was ill-conceived and it is indeed fortunate for SA that the High Court upheld the proposition advanced by NSW in the case. The purpose of SA’s intervention in the case, as summarized by the editors of the *Commonwealth Law Reports*,29 is difficult to discern and may possibly be a reference to the 1839 boundaries of the then Port Phillip District being bounded on the north and the east respectively by the 36° South parallel of latitude and the 146° East meridian of longitude (being both those east-west and north-south lines running approximately through the present day town of Corowa). If so, the submission ignores all that had passed since 1839. If not so, the submission appears to be no more than a belated plaintive cry by SA that “we wuz robbed” by the 1914 Privy Council decision. Implicit in the SA submission is the existence of a Victoria-SA border running in the general east-west direction. This necessarily requires that SA only accepts options 1 and 3 because options 2 and 4 have only a southern border of SA with NSW and the other options are discounted as unsupported in law. That there is a southern border of SA with Victoria had not been established and appears to have been assumed in the SA submission.
[31] Our conclusion also coincides with the simplest possible allocation of jurisdiction. Any alternative interpretation requires the adoption of a “discontinuity”. Simplicity or avoidance of discontinuity by itself does not support our conclusion but merely adds some (small) weight to the utility or veracity of our conclusion. That SA has jurisdiction over the whole breadth of the river west of the SA-NSW border is consistent with NSW having jurisdiction over the whole breadth of the river east of the SA-NSW border. While an argument can be mounted for SA and Victoria having territorial jurisdiction over half the breadth (to the middle thread) this results in a discontinuity in the Victorian border. Similarly, if SA and NSW have territorial jurisdiction over half the breadth (to the middle thread) this results in an outstanding discontinuity in the NSW border. Similarly, for NSW to have jurisdiction over the whole breadth of the river from the SA-NSW border downstream to the SA-Victoria border results in a similar discontinuity.

[32] The conclusion favouring SA exercising sole jurisdiction over the whole of the watercourse downstream from M to W is that the fewest possible assumptions are to be made in explaining a thing or result and is commonly known as Occam’s razor. Although acceptable in science and logic it is not a recognized tool in legal analysis. That is, both the interpretations here offered that SA and Victoria share an ad medium filum border (option 3) or that SA and NSW share an ad medium filum border (option 2) are not necessarily displaced by Occam’s razor. We offer the dictum of Justice Oliver Wendell Holmes that “[t]he life of the law has not been logic” as supporting the disallowance of the razor as an allowable legal tool. Nonetheless, that Victoria and NSW share a border along the top of the southern bank, our conclusion results in a similarly shared Victoria and SA border along the top of the southern bank (option 1) without any of the discontinuities as required by options 2 and 3 (or even option 4).
A CONTRARY VIEW

[33] Although we have offered our conclusion which does not accept the middle thread of the Murray River as the border between Victoria and SA or between the NSW “finger” and SA there does exist the anomalous instructions issued to the joint NSW-SA surveying party charged with the responsibility of marking out the NSW-SA border by both the NSW and SA colonial governments in the 1870s (following the acceptance by both governments of the 1868 location of the 141st meridian by Todd and Smalley). The joint survey party was directed to mark out the NSW-SA northwards from the River Murray commencing at the middle thread of the river. That the two colonial governments should have issued such instructions some 14 or 15 years after the passage of the 1855 Act suggests an unbelievable failure to comprehend the import of that Act by the respective governments. Further, for SA to have issued such instructions suggests an extraordinary prescience with regard to the determination by the High Court of Australia (1911) and the Privy Council (1914) some half century in the future.

CONCLUSION

[34] From the foregoing it is apparent that the chronological order of events is relevant to the determination of the location of the state boundaries. That is, the Wade-White line was ratified prior to the creation of the colony of Victoria which in turn preceded the 1855 statute that NSW retains the whole of the River Murray watercourse within its territorial jurisdiction which in turn was followed by the 1868 adoption of the Todd-Smalley line by NSW and SA as their common border. There is cause for believing the colonial government of NSW would have been less zealous in defending its territorial sovereignty over its far removed south-western corner had the
requests by SA that its eastern border be shifted eastwards from the Wade-White line
been able to be directed to Sydney rather than Melbourne.

[35] The foregoing also illustrates the futility of purporting to fix an astronomical or
geometric position with precision and enduring certainty.31 For example, Tyers’s
original 1839 marking of his preliminary estimate of the location of the 141st
meridian was believed in the 1840s (prior to the establishment of the Wade-White
line) to be “out” by approximately 3800 metres east of the true position. Recent
research including the relocation of the original 1839 marking has now established the
error to be of the order of 500 metres east of its true position.32 The same research has
suggested that a “blunder” committed by Wade in 1847 resulted in the Wade-White
line being marked some 200 metres east of the position intended by Messrs Wade and
White.33 Similarly the Todd-Smalley line of 1868 was in error by, according to the
calculations completed during the hearing of this 1911 High Court case,34 “at most, a
few hundred feet.” Four years later, this “few hundred” feet had lengthened to
“probably a hundred yards to the east of the meridian which it purports to mark
out”.35

[36] Moreover, it all depends upon the frame of reference or the starting point: in
terms of the Australian Map Grid related to the 1966 Australian Geodetic Datum, the
NSW-SA border as marked by Todd and Smalley is located 144 metres east of the
141st meridian.36 Recent historical research indicates that Todd and Smalley in 1868
were using a different Prime Meridian of 0° longitude than that used by Tyers in 1839
and relied upon by Wade and White in 1847-50. The Prime Meridian datum effective
from 4 January, 1851 (and used by Todd and Smalley in 1868) was approximately 7
metres east of the Prime Meridian datum previously used until 31 December, 1850\textsuperscript{37} and used by Tyers (1839) and Wade and White (1847-50).

\[37\] We acknowledge that our proposed resolution represents an opinion and a true resolution awaits a definitive determination.\textsuperscript{38} However we would suggest that the only alternative to our proposed resolution is the existence of a 13 kilometre “finger” of NSW territory over which NSW evinces no intention or desire to exercise jurisdiction (option 2).

\[38\] We conclude that with the passage of more than 150 years since the issue first arose and with the approaching centenary of the South Australia-Victoria border litigation, the time for a definitive determination is overdue. There exists a certain irony that with modern technology a traveler in the tri-state area can determine with precision the exact geographic location but is unable with any confidence to fix that location with reference to the law of the place; that is, there exists no doubt in regard to the \textit{locus} but this cannot be said of the \textit{lex loci}.

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**ENDNOTES**

* Malcolm Park first became interested in the various discrepancies of the Australian state and territory borders while studying discrepancies of registered title land parcel boundaries in the Department of Geomatics at the University of Melbourne. Conscious of the inordinate amounts of public moneys frittered away on his education, he seeks to make some small amends by drawing to the attention of secondary school student readers the rewards (both intellectual and financial) of a career in Geomatics (Universities of Melbourne and Adelaide) or Geospatial Science (RMIT University) or GIS (Adelaide and Flinders Universities). He is a Visiting Fellow at the Department of Geomatics, University of Melbourne. Mail to: mmpark@unimelb.edu.au.
Ian Williamson is the Professor of Surveying and Land Information in the Department of Geomatics at the University of Melbourne. He supervised Dr Park’s research thesis and is expected to effect a full recovery after counselling and extensive therapy. Mail to: ianpw@unimelb.edu.au.

It is with deep remorse that the authors acknowledge their grievous omission in not citing David Taylor’s *The States of a Nation* (2006) [ISBN 0 646 45681 4, published by the NSW Department of Lands] as a valuable reference for interested readers.


2 Waldon, Steve, ”A journey along the Murray” published in seven parts 16-23 May, 2005 with the last, “One last muddy quest before we end our watery safari”, *The Age*, Monday, May 23, 2005, page 6 raising the issue addressed in this paper.

3 Sloan, James G, *The Age*, Wednesday, May 25, 2005, page 20,


5 *SA v Victoria*, (1911) 12 CLR 667 (HCA); *SA v Victoria*, (1914) 18 CLR 115, [1914] AC 283 (PC).

6 *SA v Victoria*, 1911 at 696; *SA v Vic*, 1914 at 139.

7 *The Separation Act* 1850 (Act 13 & 14 Vict., ch 59) creating the colony of Victoria and *The NSW Constitution Act* 1855 (Act 18 & 19 Vict., ch 54) specifying the border between the two colonies.
Duncan suggests the watercourse has a length of 16 kilometres (“Chapter 1: Introducing Victoria”, in J S Duncan (ed), Atlas of Victoria, Government Printer, Melbourne, 1982) while Curnow describes the watercourse as being of length 10 kilometres (1994) note 1, at page 194).


Dunn, note 1, pp 66-8.

Dunn, note 1, 66.

Burke, J, Jowitt’s Dictionary of English Law, Sweet & Maxwell, London, vol 1, 45-6, (2nd ed. 1977); Hallman’s Legal Aspects of Boundary Surveying as apply in New South Wales (2nd ed by F K Ticehurst, 1994)), The Institution of Surveyors Australia, Inc (New South Wales Division), Sydney, ¶ 9.86.

Dunn, note 1, 66.


Dunn, note 9, p 3.


Ward, note 8, 323; Clark (1984), note 1, 263 and 323.

Linklater, A, Measuring America: how the United States was shaped by the greatest land sale in history, HarperCollins, London, 67-8 and 79 (2002); Ward, note 8, 317; Clark (1984), note 1, 263.


Dunn, note 1, 66.

Ward v R, note 8, at 311 per G C Prior for the State of South Australia intervening by leave.

There exists a similar border discrepancy with a 125 metre “dog-leg” between the Western Australia-Northern Territory and Western Australia-South Australia borders — the smaller discrepancy is a consequence of the improved technology available to fix the location of the borders in the early twentieth century: see J Porter, “Longitude 129 East, and why it is not the longest, straight line in the World”, 32nd Australian Surveyors Congress *National Perspectives*, Institution of Surveyors Australia, Canberra, 1990.


Middleton (2003), note 1, 28; Dunn, note 1, 29.

SA v *Victoria* (1911), note 5, at 696 per Griffith CJ.

SA v *Victoria* (1914), note 5, at 139 per Lord Moulton.

Curnow, 1994, note 1, ¶ 7.3.4, 194.


Curnow, 1994, note 1,196.
Author/s:
Park, M. M.; Williamson, I. P.

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