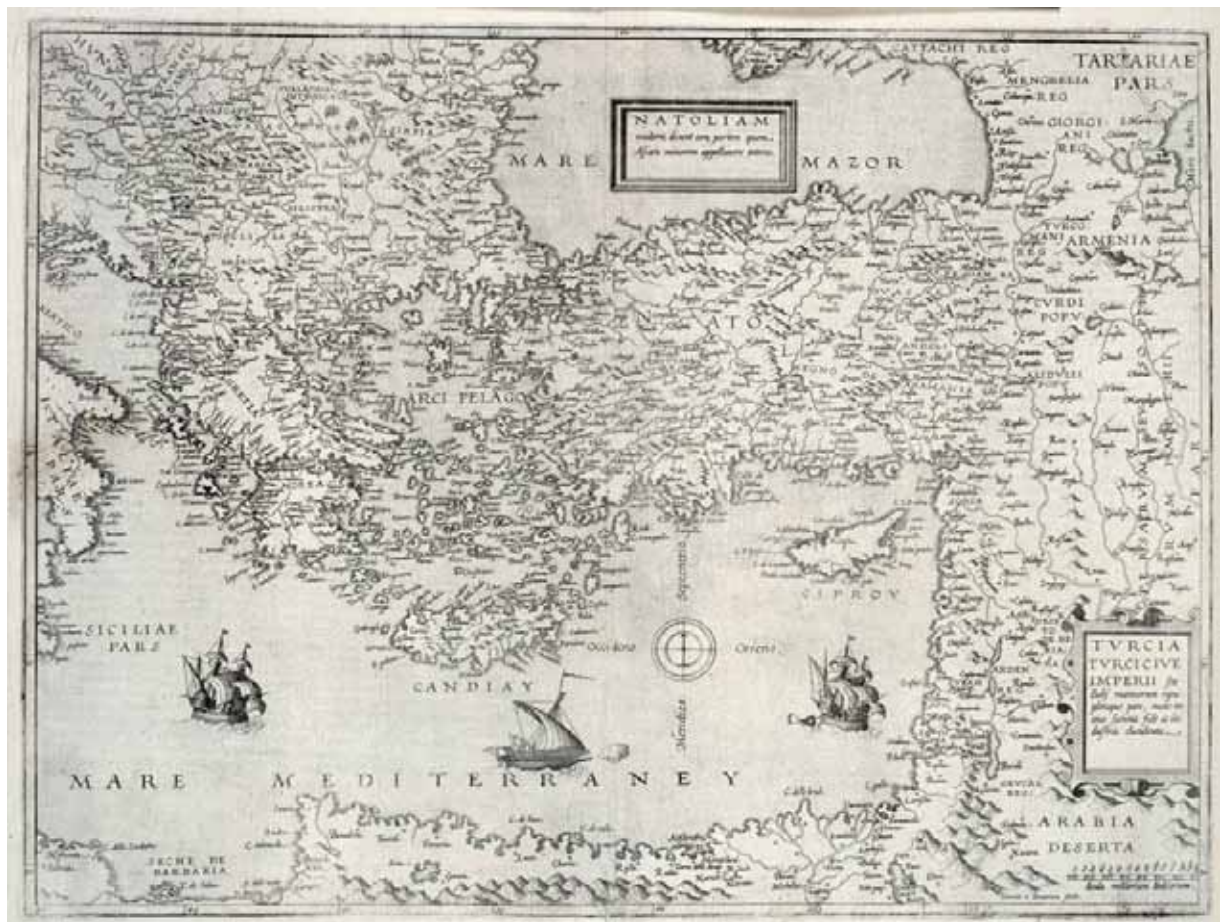


## Australian Map Circle 33rd Annual Conference

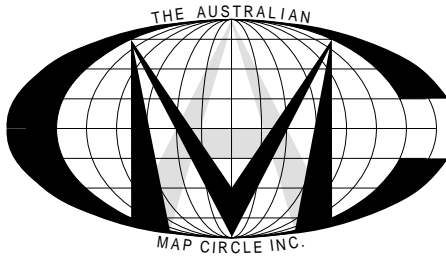
# Programme and Abstracts



**The University of Melbourne  
Graduate House  
6 - 9 February 2005**

**Cover illustration:** Jode, Gerard de, *Natoliam modern, dicunt eam partem quam Asiam Minorem appellavere veteres*, 1578?

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## Australian Map Circle 2005 Conference

**Welcome** to the Australian Map Circle (AMC) 2005 Annual Conference at the University of Melbourne. The program for this conference will demonstrate the great changes in maps and mapping from local contributors since the last Victorian AMC conference in 1997.

Included in this volume you will find the programme of activities, followed by abstracts for the papers with biographies of speakers. Please also note the following general information about the conference:

**Venue.** Activities will commence promptly at 9:00 am each day at Graduate House. Graduate House is located at 224 Leicester Street, approximately 2km north of the centre of Melbourne, and is next to The University of Melbourne, Parkville. All papers will be presented at Graduate House.

**Transport.** Transport to and from Graduate House is possible via convenient public transport, and both on-street parking in Leicester Street and nearby underground parking is available. The technical tours and site visits will take conference delegates to other locations around Melbourne; transport by mini-buses will be provided for these activities.

**Meals.** Morning tea, lunch and afternoon tea will be provided each day for all delegates and speakers. Also included in the full registration are the Welcome BBQ on Sunday evening and the Conference Dinner on Tuesday evening. Delegates should make their own breakfast arrangements each day, as well as arrangements for dinner on Monday evening.

**Acknowledgements.** The Conference Planning Committee wishes to thank the following for their assistance in making this conference happen. The staff of Graduate House, especially Eugene Spanti (Secretary Warden), Lyn Weston (Secretary) and Lauren McKerley (Accommodation Officer); State Library of Victoria, especially Anne-Marie Schwirtlich (CEO and State Librarian), Judy Scurfield (Senior Librarian, Map Collection) and Shane Carmody; Department of Sustainability and Environment, especially John Tulloch (Surveyor General of Victoria), Campbell Forsyth (Manager, Crown Land Registry), Peter Knights (Plan Expert), Bruce Thompson (Director, Spatial Information Infrastructure), George Mifsud (Project Manager, Multi-Purpose Published Mapping Series), and Rod Flynn (Manager, Product Marketing); Australian Bureau of Meteorology, especially Mike Rosel (Public Affairs); Public Record Office, especially Justine Heazlewood (Director and Keeper of Public Records), Shauna Hicks (Senior Manager, Access Services), Charlie Farrugia (Coordinator, Archival Records) and Phillippa Nelson (Archivist, Custody), Helen Pearce (National Meteorological and Oceanographic Centre), together with officers of the Victorian Regional Forecasting Centre, the Geospatial Data Unit, and the National Climate Centre. A special thanks to David Godfrey, Melway, for providing special colour maps for the conference, to Hema for donating various items of stationery, and to MapWorks for generous assistance. Finally, we thank all the speakers and delegates who have made the conference possible.

### AMC 2005 Conference Planning Committee.

Greg Eccleston, Barbara Wojtkowski, Ian Morden, and David Jones.



## About the Australian Map Circle

The Australian Map Circle (AMC) is a national group of map producers, users and curators, which acts as a medium of communication for all those interested in maps. The AMC was founded as the Australian Map Curators' Circle in 1973.

The aims of the AMC are:

- To promote communication between producers, users and curators of maps.
- To improve the skills and status of persons working with map collections.
- To promote the development and effective exploitation of map collections throughout Australia.

The AMC Annual Conference is held in a different city each year. All aspects of map use and mapping are discussed and the proceedings of the conference are published as part of the journal of the AMC, *The Globe*. The diversity of the papers presented at the AMC's annual conferences reflects the broad range of interests of its members. Topics covered at these conferences include historical maps, map production techniques, the cataloguing and archiving of maps, government policy and technological change.

Membership of the AMC is available to anyone who has an interest in maps. Subscription rates for an individual are \$30.00 a year, for which you receive the AMC journal *The Globe*, and the occasional *Newsletter*.

For more details or for a membership brochure, please see our web site:

<http://australianmapcircle.org.au>

or write to:

Australian Map Circle  
c/o Map Collection, ERC Library  
University of Melbourne, VIC, 3010  
AUSTRALIA

## Conference Programme

### Sunday 6 February

#### Technical Tour 1 [Optional event]:

1:30 Meet at Graduate House (224 Leicester Street, Carlton). Proceed by Tram (along Swanston Street and St Kilda Road) to Royal Botanic Gardens.

2:00 Walk around Royal Botanic Gardens

4:30 Tram to Graduate House

6:00 - 9:00 Early Registration followed by Welcome BBQ at Graduate House.

### Monday 7 February

8:30 **Registration** at Graduate House

#### Technical Session 1 & 2

9:00 **Welcome** & Housekeeping by John Cain (AMC President) and David Jones

9:15 **Keynote Address by Victor Prescott**

9:45 **Jean-Pierre Lacroix and Robert Bywater**

*Map Projections used in selecting Portolan style Maps including the Piri Reis Map of 1513*

10:30 -- Morning Tea --

11:00 **John Robson**

*The Toponymy of Northern Marquesas*

11:45 **Mercedes Maroto Camino**

*Viceroy Amat's Tahiti: Eighteenth Century Maps and Narratives of Pacific Exploration*

12:30 -- Lunch --

#### Technical Tour 2 & 3

1:30 Tram (along Swanston Street) to State Library of Victoria, cnr Swanston and La Trobe Streets.

1:45 Visit State Library of Victoria. Guided tour by Judith Scurfield and Shane Carmody.

3:00 Tram (along Bourke Street) to Marland House, Level 17, 570 Bourke Street

3:15 Visit Department of Sustainability & Environment. Guided tour by Campbell Forsythe.

4:30 Tram back to Graduate House.

5:30 Launch of Historical Cartography Exhibition at Baillieu Library.

*Peregrinations in Asia Minor: European description and cartography in the 16<sup>th</sup> & 17<sup>th</sup> centuries.* (Library **closes 6pm** sharp. Please enter beforehand!)

## Conference Programme

### Tuesday 8 February

#### Technical Sessions 3 & 4

9:00 **Bernie Joyce**

*Back to the pre-European Landscape: an Exercise in Reverse Mapping for Inner Melbourne*

9:45 **Charlie Farrugia and Philippa Nelson**

*Artefact or Evidence? – the 1862 ‘Land Act Map’*

10:30 -- Morning Tea --

11:00 **Berres Hoddle Colville**

*Aspects of the Life of Robert Hoddle: Pioneer Surveyor 1794-1881*

11:45 **Dianne Rutherford**

*Gallipoli’s Graves: the Establishment, Loss and Rediscovery of the Cemeteries at Anzac 1915-1928*

12:30 -- Lunch --

#### Technical Tour 4

1:30 Minibus to Bureau of Meteorology

1:45 Visit Bureau of Meteorology. Guided tour by Mike Rosel.

#### Technical Tour 5

3:00 Minibus to Victorian Archives Centre

3:15 Visit Victorian Archives Centre

4:30 Minibus back to Graduate House.

#### Conference Dinner

7:00 for 7:30 *Graduate House, 224 Leicester Street, Carlton. Phone 03 9347 3428. Partners and Friends welcome, but please confirm on registration.*

## Conference Programme

### Wednesday 9 February

#### Technical Session 5 & 6

- 9:00 **Bernie Joyce**  
*The Hills Model*
- 9:45 **Peter Richardson**  
*New Directions of the National Mapping Program*
- 10:30 -- Morning Tea --
- 11:00 **Amy Griffin, Alan MacEachren, Bonan Li, and Frank Hardisty**  
*Can Movement help Map Readers see Clusters that Move through Space and over Time?*
- 11:45 **Rod Flynn and George Mifsud**  
*Vicmap Topographic Online 1:30 000*
- 12:45 -- Lunch --
- 1:30 **Ian Clark**  
*The Value of Victorian Aboriginal Clan Names for Toponymic Research*
- 2:15 **Australian Map Circle 2005 Annual General Meeting**
- 3:20 Presentation of Estelle Canning Memorial Prize and
- 3:25 Official Closure
- 3:30 -- Afternoon Tea --

Monday 7 February

9:15 – 9:45

**Key note address speaker**

**Victor Prescott**

Victor Prescott is a political geographer, studying the reciprocal relationships between geography and politics. He regards political geography as a practical subject rather than a search for theories of state behaviour. After flirting with electoral geography he focussed on international boundaries on land from 1956 to 1971. Then he turned to the new field of international maritime boundaries and that has remained his main interest. Victor started his academic career at University College Ibadan in Nigeria; it was then a College of the University of London. He came to The University of Melbourne in 1961, was awarded a personal chair in 1986, and retired in 1996. His latest book, 'International maritime boundaries of the world' (2nd edition), written with Clive Schofield, was published by Brill in December 2004.

Monday 7 February

9:45 – 10:30

***Map Projections used in selecting Portolan style Maps including the Piri Reis Map of 1513***

**Jean-Pierre Lacroix and Robert Bywater**

Renaissance portolan style maps are reputed to show some precision in their cartography, particularly those of the Mediterranean. The authors used computer-assisted superpositions to investigate the map projections used in selected portolans. The authors suggest that some portolans are likely to be combinations of two or more cylindrical equidistant projections. Results obtained on the Piri Reis map of 1513 will include a discussion of this map's association with Columbus, the width of the Atlantic Ocean and a suggestion as to why a southern continent appears to be drawn at middle latitudes. The authors will also briefly describe their initial results on the features depicted along the South American coast on this map; these appear to involve compilation errors with the inclusion of shorelines which the authors will suggest are located in Asia.

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**Jean-Pierre Lacroix and Robert Bywater, Monash University,**  
[email@ancientcartography.net](mailto:email@ancientcartography.net)

**Jean-Pierre Lacroix** is a retired college teacher living in Belgium. **Robert Bywater** is an Associate Professor at Monash University in Australia. Both authors have made studies on the Piri Reis map of 1513 for several years.

Their studies on the north-western region of the map have recently been published in a research paper in the inaugural issue (Vol. 49, June 2004) of the academic serial *Journal of Spatial Science* (until recently entitled *Cartography*).

Monday 7 February

11:00 – 11:45

*The Toponymy of Northern Marquesas*

**John Robson**

The Northern Marquesas were visited by outsiders for the first time in 1791 when Joseph Ingraham, an American whaler, arrived in 1791. He made landfall at several islands, produced a map on which he applied several names.

Etienne Marchand, a French whaler, visited a few months later and repeated the exercise.

The British were not far behind and Richard Hergest on his way to meet George Vancouver stopped off in 1792 and ascribed even more names.

Not to be outdone, Josiah Roberts sailed by in late 1792 and a fourth set of names appeared.

The sailors were oblivious of each other's presence but in less than two years four sets of names were applied to the islands.

With the aid of maps I will provide details of the visits and the final outcome.

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**John Robson, Map Librarian, University of Waikato, Hamilton, New Zealand,**  
[jrobson@waikato.ac.nz](mailto:jrobson@waikato.ac.nz)

John Robson is 55 years of age, and was born in the UK. John is author of "Captain Cook's World" (2000), the "Captain Cook Encyclopaedia" (2004) and the "Historical Dictionary of the Discovery and Exploration of the Pacific Islands" (due early 2005). Unfortunately, John was unable to get time off to attend the conference, but has consented to his paper being read on his behalf.

Monday 7 February

11:45 – 12:30

***Viceroy Amat's Tahiti: Eighteenth Century Maps and Narratives of Pacific Exploration***

**Mercedes Maroto Camino**

Among the eighteenth-century voyages of Pacific exploration, the two journeys sponsored by the Spanish crown in 1770-73 to establish a Mission on Tahiti must surely stand out. This one-year "mission" was composed of four people: two reluctant friars, a sailor and an interpreter, Máximo Rodríguez. Wholly conversant in Tahitian, Rodríguez is probably one of the most interesting characters to have entered the Pacific at this time.

The voyages in which Rodríguez took part were sponsored by the then-viceroy of Peru, Manuel Amat y Junient, also famous for his outings with his Peruvian lover, La Perricholi, as well as the constructions he promoted in Peru and in Barcelona. The enlightened spirit of this unusual viceroy can clearly be seen in the list of questions he prepared for the expedition, which clearly fit within later ethnographic paradigms of participant observation.

This paper will discuss the maps produced and used during those journeys in the light of Viceroy Amat's instructions for the voyage as well as some of the narratives of the mission's sojourn. This material gives us a unique insight into the cultures of the South Pacific at the time of the European Enlightenment, which, unlike the most famous voyages undertaken by the French and the English, still remains to be studied in some detail.

**Mercedes Maroto Camino, University of Auckland, [m.camino@auckland.ac.nz](mailto:m.camino@auckland.ac.nz)**

Mercedes Maroto Camino is an Associate Professor in Spanish at the School of European Languages and Literatures of the University of Auckland. Her main research areas are: cultural, film and media studies, early modern women's writing, history of cartography and colonialism. Her publications include two books and twenty articles as part of books or in refereed scholarly journals edited mostly in the US but also in the UK, Spain, Australia and Taiwan, including *Hispanic Review*, *Letras Peninsulares*, *Forum of Modern Language Studies*, *Revista Canadiense de Estudios Hispánicos*, *Cartographica*, *Modern Language Review*, *The Globe* and *Bulletin of the Comediantes*. She has received various international Fellowships and awards, including two from the Newberry Library (Chicago), the inaugural J. B. Harley Fellowship (British Library), the inaugural J. Best Fellowship from the American Geographical Society (University of Wisconsin-Milwaukee), a Caird Fellowship at the National Maritime Museum (London), two Fellowships from the Spanish Ministry of Foreign Affairs and, recently, the second Holzheimer Fellowship at the Institute for Research in the Humanities of the University of Milwaukee-Madison. She has also received nine Research Grants from The University of Auckland, including the inaugural Emerging Research Award (2000) and a Marsden Grant from the Royal Society of New Zealand (2002-03). Currently, she is revising her third book on Spanish voyages, which is forthcoming from Rodopi (Amsterdam). This work will be furthered thanks to a second Marsden Grant which provides funds for travelling as well as relief teaching. In this project, Associate Professor Maroto Camino works as part of an international team that studies cross-cultural exploration of the Pacific from 2004 to 2006 and which is lead by Distinguished Professor Dame Anne Salmond.

Tuesday 8 February

9:00 – 9:45

***Back to the pre-European Landscape: an Exercise in Reverse Mapping for Inner Melbourne.***

**Bernie Joyce**

The overlay of 19<sup>th</sup> century and later roads, buildings and other infrastructure across central Melbourne and its inner suburbs makes it difficult to see the original landscape. Where were the former riverbanks, creek valleys and swales, the swamps, basalt plains, and the bedrock plateaus above? And what was the vegetation like at that time?

Walking the streets of Melbourne and the inner suburbs with a Melways can reveal some details. Some map sheets show green linear parks, marking the line of a former creek. We can also look down a road as we walk through the streets, or as we travel by tram and train, and just by eye identify the gentle swales of former creeks (especially after local rainfall).

We can use observations from early writers, and the annotations about vegetation, soils and rocks on maps made by Grimes, Hoddle and others. 19<sup>th</sup> century geological Quarter Sheets show the bedrock plateaus, the creeks, and the basalt plains. Early vegetation maps also exist, and the former vegetation cover can be recreated by a rule of thumb—basalt plains were grassy, bedrock plateaus and ridges had woodlands with scattered trees, and red gums lined valley floors. The maps of the planning authority MMBW, and even estate agents sales maps, can help identify features of the past landscapes, and also the sequence in which housing, roads and railways, parks and other reserves were developed.

Once we have a pre-contact map it can have several uses – helping explain the order in which Melbourne developed, and why some areas were set aside for parks, or for markets and shops, and why water today runs in unexpected areas. And local people may get a better sense of place, knowing where past creeks flowed, forests grew, and aborigines may have camped.

In the Melbourne-Carlton area, we can identify long-vanished drainage lines such as Curtain Creek in North Carlton, Bouverie Creek within the University, Ievers Creek in Parkville, Arden Creek in North Melbourne, and Jolimont Creek in the Treasury Gardens east of the city (my suggested names). These run southwards, down from the bedrock ridges and the high northern plateau of Royal Park, an early reserve on the fringe of mid-nineteenth Melbourne. They drain into the Yarra River, Moonee Ponds Creek and Merri Creek, and the long buried but still active Elizabeth St Creek.

The latest digital terrain models provide an excellent base for such mapping, and when we add vegetation, rock outcrops and soil we can suggest where hunting and fishing areas, and likely aboriginal campsites, were located, and so more accurately visualise the old pre-contact landscape, and its relationship to the layout of our modern city.

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**Bernie Joyce, The University of Melbourne, [ebj@unimelb.edu.au](mailto:ebj@unimelb.edu.au)**

After thirty-five years teaching geomorphology and surficial geology at the University of Melbourne, Bernie Joyce took early retirement from the position of Senior Lecturer in Geomorphology in January 1997 and is now Honorary Principal Fellow in the School of Earth Sciences.

For forty years he has worked on the Newer Volcanics of Victoria, especially of the Western Plains. He co-authored the Geomorphology chapter in the *Geology of Victoria* volume published in 2003, and is a member and sometime chair of the Victorian Government's Geomorphological Reference Committee.

He is also the departmental coordinator for the "History of the geology department Project" (H.g.d.P) in the University's School of Earth Sciences. The School's archives include material on the Hills relief model of Australia. After living in the Carlton area for 40 years, he has developed an interest in reconstructing the original landscape of the city of Melbourne and its inner suburbs.

Tuesday 8 February

9:45 – 10:30

*Artefact or Evidence? – the 1862 ‘Land Act Map’*

**Charlie Farrugia and Phillippa Nelson**

The theme of archival documents providing evidence of and accountability for the actions of Government will be explored by focusing on a highly significant accession to Public Record Office Victoria (PROV). The 1862 *Land Act* map not only fulfilled the requirements of Section 12 of the *Land Act* but also summarised on the base map, published in 1856, the previous actions of Government in relation to the alienation of Crown Lands. Additionally the map, measuring 4.5 by 2.5 metres, is a continuing testimony to the skills and work of the surveyors, cartographers and lithographers of Colonial Victoria.

The map, retained by the Parliament of Victoria until 1999, is today preserved and managed for all Victorians by PROV, the archival authority of the State Government. Conference participants will also be given the rare opportunity to examine this and other valuable archival cartographic records during their visit to PROV.

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**Charlie Farrugia and Phillippa Nelson, Public Record Office Victoria,**  
[ask.prov@dvc.vic.gov.au](mailto:ask.prov@dvc.vic.gov.au)

**Charlie Farrugia** is currently the PROV’s Coordinator, Archival Records at the Victorian Archives Centre at North Melbourne. He is one of PROV’s most experienced archivists and commenced his career in 1985. Charlie also conducted the original archival research for *A Matter of Record: A History of Public Record Office Victoria* published in 2003.

**Phillippa Nelson** is currently Archivist, Custody having worked for PROV since 1998 after two years as an archivist at the University of Queensland. Since mid 2002 Phillippa has been working on a major project, restoring the original record-keeping systems of Lands records in PROV custody.

Tuesday 8 February

11:00 – 11:45

*Aspects of the Life of Robert Hoddle: Pioneer Surveyor 1794-1881*

**Berres Hoddle Colville**  
(great-granddaughter of Robert Hoddle)

This paper is based on the author's recently-published historical biography of Robert Hoddle, which in turn is based on substantial extracts from Hoddle's own diary and his other writings. It is the first biography of the man who became Victoria's first Surveyor General. The author has blended these extracts with her own comments which give a strong sense of his times together with modern interpretation. In his self-deprecating style Hoddle writes of people he meets, governors and bureaucrats, convicts and bushrangers, squatters and Aborigines. It is a microcosm of colonial history from a point of view rarely found in historical writing, for biographies of surveyors are few.

Robert Hoddle was one of the very earliest surveyors to explore, measure and map large areas of our vast, varied and difficult countryside, in a burgeoning era of pastoral settlement.

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**Berres Hoddle Colville, Vermont, Victoria**

Berres Hoddle Colville (née Mogensen) was born in Melbourne and educated at Melbourne Girls' Grammar and The University of Melbourne. She is married, with three children. On retirement in 1987 after a career in school librarianship she turned to the researching and writing of a biography of her maternal great-grandfather Robert Hoddle (1794-1881), Victoria's first Surveyor General.

Tuesday 8 February

11:45 – 12:30

***Gallipoli's Graves: the Establishment, Loss and Rediscovery of the Cemeteries at Anzac 1915-1928***

**Dianne Rutherford**

During the campaign at Gallipoli tens of thousands of men lost their lives. Many of these men were buried where, or near where they fell, others were left unburied. At the beginning the records kept for the dead were haphazard, however eventually a system was established to record and survey the cemeteries and keep the records for future reference. After the evacuation in 1915 the cemeteries were left to vanish into the landscape - their crosses were used as firewood by the Turks and the cemeteries were reclaimed by the native flora. With the return of the Allies in 1919 the monumental task of rediscovering the graves through the plans, maps and records kept during the campaign began.

Finally in the 1920s the cemeteries were permanently established and became the cemeteries we see today. This paper will look at the history of the Anzac cemeteries through cemetery plans, maps, photographs and other records.

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**Dianne Rutherford, Australian War Memorial, <http://www.awm.gov.au/>**

Dianne Rutherford is Assistant Curator, Published & Digitised Collections at the Australian War Memorial in Canberra, and is the librarian responsible for the map collection. She recently completed a special research project on the maps of the Gallipoli campaign. Dianne is a member of the AMC and of the British Cartographic Society.

Wednesday 9 February

9:00 – 9:45

### *The Hills Model*

#### **Bernie Joyce**

During World War II the Australian Army decided to commission a relief model of Australia (and adjacent areas) to help in planning the defence of the continent, especially of northern Australia. Professor Edwin Sherbon Hills was appointed a Captain in the Army, and the sculptor Orlando Dutton became his assistant and was made a Sergeant.

Hills travelled over much of Australia in the war years with the Royal Australian Air Force, making observations, and collecting maps (often without contours) and air photos, which can be identified in today's School of Earth Sciences Map Room, sometimes still bearing the annotations made.

The model was constructed as a number of smaller models from sheets of plywood, cut to represent contours traced from maps, or constructed for such information as railway surveys. These were then glued together to form a base, which was filled in with "plastic wood". 1940s students sometimes helped with the preliminary work as part of the war effort, and Orlando Dutton sculpted the final model with a scalpel. Plaster casts were then made and several final solid plaster casts produced for each of the 22 (?) sheets involved.

When the war ended, southern Australia was not finished, and Hills applied to National Mapping in Canberra for funds to complete the work, and after some correspondence, he received support.

The whole model was laid out in the Geology I laboratory for the 1967 ANZAAS conference (photo). A full set of the parts of the model was in the store at the Albert Park Australian Government archives in the 1960s. Further individual duplicate plaster blocks were stored under the Geology (1927) building until the move to the present Earth Sciences McCoy Building in 1975(?).

A section of the model showing the region from southern Queensland to Victoria and across to Adelaide was mounted on the wall of the Geomorphology Laboratory in the 1927 building in the 1960s and is now on the wall of the Fritz Loewe Lecture Theatre in the McCoy building, on the corner of Swanson and Elgin streets, Carlton.

Hills used the model in his later work on continent-wide lineaments, and photos of parts of the model have been used as illustrations in several textbooks.

Photomosaics of the complete model at several scales are in existence. At one time maps sheets showing contours for the whole of Australia, made from the completed model, were in existence, and were said to be the first complete contour map of Australia.

More intriguing is the possible existence of models of part of New Guinea, and of Timor.

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**Bernie Joyce, The University of Melbourne, [ebj@unimelb.edu.au](mailto:ebj@unimelb.edu.au)**

See biography on page 10

Wednesday 9 February

9:45 – 10:30

*New Directions of the National Mapping Program*

**Peter Richardson**

A report on the progress and future progression of the National Mapping Program.

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**Peter Richardson, Geoscience Australia, [PeterW.Richardson@ga.gov.au](mailto:PeterW.Richardson@ga.gov.au)**

Peter joined National Mapping in 1974 after a period with NSW Lands and local government. In the period to 1979 Peter worked on the production of IMW, 100K maps and was part of the team that produced the revised 2.5 million maps still in production today. In 1979 the world of computer assisted mapping was evolving and Peter had a major contribution in the digital capture boundaries for the 1981 & 1986 Census. The Atlas of Population covering each of the major cities in Australia was a derived product.

Peter returned to the topographic mapping area to produce the numerous 250K maps derived from the capture of digital information at 50k from aerial photographs and generalised to 250K. Since 1998 Peter has been part of the team managing the outsourcing the commercial production of the 250K Series 2 product. During this period Peter has participated in field liaison with local councils and landowners for the production of selected 100K maps in the Jerilderie, Cootamundra, Mackay areas and in the NT between Katherine and Kununurra. Peter is currently managing the production of the WAC series of maps from the 250K dataset as a joint agreement with Airservices Australia.

Peter has a B App Sc in Applied Geography together with post graduate studies in Applied Computing and Management. Peter is currently assisting the head of the Topographic Mapping Program, Phil Tickle in working more closely with State jurisdictions and industry supporting contemporary government policy. This involves Geoscience Australia placing greater emphasis on the development and maintenance of fundamental spatial data, from which standard and customised maps are derived products.

Wednesday 9 February

11:00 – 11:45

***Can Movement help Map Readers see Clusters that Move through Space and over Time?***

**Amy Griffin, Alan MacEachren, Bonan Li, and Frank Hardisty**

Animated maps have often been promoted as effective tools for helping map readers see changes in spatio-temporal patterns. However, some cognitive psychologists have proposed that animated graphics are no better than static small multiple graphics at promoting faster or more complete learning. We propose, however, that this view is based on evidence from studies that did not use animated graphics for the types of activities for which they are most likely to be helpful (i.e., exploratory data analysis). This paper reports the results of an experimental study designed to test whether map readers are better able to identify moving clusters from an animated map or a set of static small multiple maps. We compared map readers' performance with animated and static maps under a range of experimental conditions (length of time the images were available for viewing and the level of coherence (i.e., obviousness) of the moving clusters).

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**Amy Griffin, The University of New South Wales@ADFA, [a.griffin@adfa.edu.au](mailto:a.griffin@adfa.edu.au)**

Amy Griffin is a Lecturer at the School of Physical, Environmental and Mathematical Sciences at UNSW-ADFA, where she teaches undergraduate and postgraduate G I Science courses. She recently completed her PhD thesis, which examined how scientists used maps and other statistical graphics to hypothesize about a case study geographic problem. Her main research interests are in the perceptual and cognitive processes involved in reading maps.

Wednesday 9 February

11:45 – 12:30

***Vicmap Topographic Online 1:30 000***

**Rod Flynn and George Mifsud**

A report on the recently released updated Vicmap topographic maps at 1:30 000. Access to this series is via the Victorian Land Channel web site (<http://www.land.vic.gov.au>) with maps available in PDF format convenient for A4 size printing. Each map is a quarter of the previously printed 1:25 000 Vicmap series.

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**Rod Flynn and George Mifsud, Spatial Information Infrastructure, [www.land.vic.gov.au](http://www.land.vic.gov.au)**

**George Mifsud** has been involved in the mapping industry since 1985. He has the degree of B. App. Sc. (Cartography). He has had extensive experience in the fields of cartography and GIS analysis, and has successfully managed projects in the areas of land management and natural resources. He has had 10 years' experience in GIS and digital mapping, and has been extensively involved in evaluating, developing, implementing and maintaining cartographic, GIS and remote sensing projects for both the government and the private sector. Currently George is the project manager for the Multi Purpose Published Mapping Series project for Spatial Information Infrastructure, Department of Sustainability and Environment. This project involves the evaluation, development and implementation of topographic mapping content for a variety of products of different scales, formats, and sizes, both digital and hardcopy. One such product is Vicmap Topographic 1:30 000 Online.

**Rod Flynn** has a survey drafting, cartography, project management and information management background. He has had several (many) years' experience in the government sector working in the spatial industry, and has been involved in the development, implementation and management of some of Victoria's state-wide spatial framework information creation and data capture programs. In Rod's current role as Manager Product Marketing he has been responsible for, and/or been involved in establishing, agreements with private sector spatial industry companies in the licensing, on-selling, distributing and value-adding to the State of Victoria's framework spatial products. He is also involved in developing marketing strategies and fostering spatial information industry growth as well as establishing framework spatial information pricing based on government policy. Rod is also the Project Director of the Department of Sustainability and Environment Multi-Purpose Published Map Series Project, which will be outlined as part of today's presentation.

Wednesday 9 February

1:30 – 2:15

***The Value of Victorian Aboriginal Clan Names for Toponymic Research***

**Ian Clark**

This paper is concerned with the demonstrate the value of Victorian clan name research for the documentation of Aboriginal toponyms; to show the proportion of clan names that are derived from placenames, and to reveal the extent of clan names that are in current use.

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**Dr Ian Clark, The University of Ballarat, [i.clark@ballarat.edu.au](mailto:i.clark@ballarat.edu.au)**

Ian D. Clark is a senior lecturer in tourism at the University of Ballarat with a doctorate in Aboriginal historical geography from Monash University. He has published widely in the areas of Aboriginal history, geography, and toponymy of Victoria, and is currently the chair of the Victorian State Committee of the Australian National Placenames Survey.

– Notes –