Mapping in the time of COVID-19

Comment

As the world grapples with the fall-out of the COVID-19 virus, we have seen maps being used as a medium to explain the severity of the outbreak. The internet has profoundly shaped how we view and interpret cartography, but I am not so sure it has made the map more ‘honest’ in communicating the message. As cartographer Kenneth Field states, the chosen mapping techniques, the manipulation of underlying data and cartographic design can all lead to different versions of a truth that speaks to a particular narrative. We have been led to believe that if the map says so, then it must be true. In fact, it can be said that all maps lie, even good ones, said professor Mark Monmonier, author of the seminal tome ‘How to Lie with Maps’ (now in its 3rd edition).

People have a thirst for information in times of crisis and maps play an important role in relaying this information spatially. In most cases news items contain a geographical component, with the “where” question being of importance. Maps can also help inform us of the “why” and “how” by describing relationships and correlations – the geographical extent and networks of infections, tallies, anticipated spread and response to mitigation mechanisms.

Of course, making maps of disease are nothing new for epidemiologists. The 19th century British physician John Snow pioneered the fields of Geographic Information Systems (GIS) and epidemiology with his famous map of cholera cases clustering around a water pump in a London neighbourhood. Even then his maps created consternation as they were updated and modified over the period. More than 100 years later Regmarad made an adaption of John Snow’s cholera outbreak, replacing bars with dots to represent deaths and in the process introduced errors.

In times of war and crisis newspapers have traditionally published maps to inform its readers. With the ongoing shift from hardcopy print to online platforms we are turning to a new type of cartography to feed our geographic desires. Not only does the internet allow us to be more cartographically creative, it allows the addition of the fourth dimension – time. We are now able to view data in near real time.

National newspapers (probably better described as multi-national media conglomerates) have also been producing both static maps for their print editions and dynamic maps and charts for their digital versions.

The Guardian newspaper has done a good job in collating the various data feeds. Other dashboards such as ESRI Australia rely on The Guardian’s data and major tech giants such as Facebook and Microsoft have added COVID-19 maps to their platforms.

US based GIS powerhouse ESRI has led the way with a set of products and templates to allow local, state and federal governments to monitor COVID-19 outbreaks. These templates connect into multiple web services and turn this information into dynamic charts and maps. One of the first dynamic web apps was from Johns Hopkins University.

ESRI has also compiled a website resource showing COVID-19 apps from around the world.

Australia’s mapping response to COVID-19 has been at both a federal and state level. The Queensland Department of Transport and Main Roads has added border closures to their map web service as has Western Australia.

National TV networks have also been using maps to further explain COVID-19 related news and events.

With the lock down in effect, cartographers and map aficionados have had to look to new avenues to get their daily map fix. CityLab recently invited readers to draw maps of their worlds in the time of coronavirus and isolation. The maps included physical neighbourhoods, walking tours, imagined gardens, birdsong, domestic arrangements, games, and treasure maps.

Kenneth Field recently tweeted for people to tell us about the maps and map paraphenalia they have at home. A glimpse into the wealth of fascinating maps and the community of global map lovers.

So, as we have seen with a global pandemic such as the COVID-19 maps are still able to tell a story, just as John Snow’s maps did 150 years ago. The difference is that now they have been reinvented using dynamic web services, live charts, and of course pretty graphics. But do the maps still lie?

Greg Lauer
ANZMapS Committee Member
In February 2020, through an ANZMapS bursary, it was possible for me to attend the five day Australasian Rare Book Summer School course, ‘The History of Maps.’ Presented by Julie Sweetkind-Singer, Assistant Director of Geospatial and Cartographic Services as well as the Head of the Branner Earth Sciences Library & Map Collections at Stanford University, the course gave an extensive overview of cartographic history from the earliest known maps to more recent innovations, covering technical aspects of mapping and print history and as well as the development of different genres such as nautical charts, town plans and national atlases.

The course was also extremely hands-on, with dozens of maps from the State Library of NSW’s collection brought out for examination and tours of the Library’s digitisation and conservation facilities. I have been working with this collection for a couple of years now but was delighted to discover some new favourites. Particularly useful for emerging professionals like myself were dedicated exercises on research methodology and reference materials (both print and online).

The course brought together colleagues from institutions across Australia and provided time for discussion about the challenges and opportunities we face working with map collections. Julie also shared her insights from her career working with significant collections, such as the David Rumsey Map Collection. Another highlight was a public lecture Julie delivered to coincide with the course, titled ‘The State of the map’ in which she gave case studies of inspiring digital projects that involve unlocking and presenting data from paper based and historical maps.

I would like to sincerely thank ANZMapS for this opportunity.

Alice Tonkinson
State Library of New South Wales
In February I had the pleasure of attending The History of Maps course delivered by Julie Sweetkind-Singer from Stanford University as part of Australasian Rare Book Summer School hosted by SLNSW. All my knowledge about maps up to then was acquired on the job as I built up expertise working with the collection. It was wonderful to be provided with a general overview of the history of maps in a dedicated and structured setting. I really enjoyed getting to know other professionals in the Library sector and beyond.

We had a visit from American historian of cartography, Chet Van Duzer, in early March. He was in town to deliver a seminar at The University of Melbourne on early Renaissance cartography. Chet was particularly impressed with The Dome at SLV and interested to learn it was modelled on reading rooms in The Library of Congress and the British Library.

Libraries play an important role documenting this remarkable moment in our history and we along with other organisations in the sector have instituted a community collecting campaign seeking COVID-19-related ephemera for the collection. The SLV building will remain closed until 30 June 2020, but we are open for business online! We have always been a place where people can come together, learn and exchange ideas and this remains unchanged in the virtual world.

We are engaging audiences with a range of new initiatives and have launched the first instalment of our guided education resources to assist with remote learning. The new eight-part series of tutorials is designed for secondary school students. Other community projects include #AskSLV, an invitation to tell us how we can meet your needs while at home when the Library building is temporarily closed.

State Library of Victoria

UPDATE
a #StayAtHomeChallenge encouraging people to choose a favourite painting, find three things lying around the house and recreate the painting with those attributes and #SLVBookClub where you can receive staff tips and recommendations on the latest must-reads.

In an exciting development earlier this month, our Velvet Iron Ashes exhibition won a GLAMi award at the MuseWeb conference in LA. The exhibition’s Map-o-Matic feature took out the award for best Exhibition or Experience Gallery Interactive. The feature allows visitors to print out a map giving them a personalised tour of the exhibition.

I’ll wrap up with some local history pertinent at this time. On 13 December 1839, the Glen Huntly emigrant ship left Greenock, Scotland and arrived in Hobson’s Bay on 17 April 1840. The ship flew the yellow flag at its mast declaring it as a typhus ‘fever ship’. 10 people died during the voyage resulting in the establishment of the first quarantine station in Victoria at Point Ormond, Elwood. Last week marked the 180th anniversary of the ship’s arrival.

Sarah Ryan,
Senior Librarian, SLV
State Library of New South Wales

UPDATE

COVID-19 arrangements
The State Library building has been closed to visitors until further notice however all staff are working from home and any inquiries including map-related questions can be sent through to our Ask A Librarian service.

Recent acquisitions
We have acquired a rare 1781 printing of Albrecht Dürer’s [Star Chart of the Southern Hemisphere]. In 1515 Dürer produced two woodcut star charts of the northern and southern celestial hemispheres, in collaboration with Johann Stabius (who drew the coordinate system) and Konrad Heinfogel (who positioned the stars). These were the first printed star maps. The Southern Star chart includes a small selection of constellations, compared to our present knowledge of the stars, including Orion, Canis Major, Canis Minor, Centaurus and Argo Navis. It is not known how many prints were made from the printing blocks created in 1515. The blocks were rediscovered at Castle Ambras, Tyrol, around 1780, after which a limited edition was printed.

We have also acquired a small volume – Cartes du Ciel réduites en quatre tables, contenant toutes les constellations,... by Augustin Royer, 1679 which includes one of the earliest depictions of the Southern Cross as a distinct constellation, separate to Centaurus.

Both of these acquisitions provide context to the extremely rare printed illustration of the Southern Cross by Corsali which we acquired in 2018.

Maggie Patton,
Manager Research and Discovery  SLNSW

Events
Unfortunately, due to the impact of COVID-19, the Mapping the Pacific exhibition planned to open this July 2020 has been postponed until July 2021. The exhibition will belatedly commemorate Magellan’s entry into the Pacific 500 years ago and the 250th anniversary of James Cook surveying both New Zealand and the East Coast of Australia. It will also highlight many of the rare and spectacular maps, globes and atlases in the State Library collections.

Image: Cartes du Ciel réduites en quatre tables, contenant toutes les constellations,... Photo: SLNSW
Recent acquisitions

Sheet 1 of a 1:40,000 British 3-sheet map set of Gallipoli, covering Cape Helles and the southern end of the peninsula. This particular copy was owned by Lt. G.W. Binnie, 13th Bn A.I.F. from Sydney, who was killed at Gallipoli on 3 May 1915. The Library already held 2 copies of sheet 2 in the set, covering ANZAC Cove & Suvla Bay, one of which was owned by Maryborough headmaster Lt-Col Harry William Lee (1868-1932) of 9th Bn, AIF, and who landed at Gallipoli on 25 April.

A hand-drawn map of Stalag IV-B POW camp, depicting also the representative inmate nationalities, including an Australian.

The Deluxe collector’s edition of the world’s largest boardgame, World in Flames, by former Canberra-based designer Harry Rowland. The library’s copy of the game, whose maps cover 23,279.3 cm² includes an official Guinness World Record certificate.

The late Canberra-based ANZMAPs member Victor Isaacs, who died last year, donated to the Library part of his collection of maps of international boundaries, and local and foreign railway, airline and bus routes to the library. These include maps issued to the public, as well as track diagrams and other maps for working use.

A very large (2x2m) 1963 survey map of Granite Peak Station, Western Australia. The map was donated by descendants of P. B. Cresswell, a working partner of the Station along the Canning Stock Route. The hand-drawn map shows the location of wells, springs, bores and camps near the Station. The map was donated with a surveyor’s level and tripod.
Restructuring the National Library – update

As reported in the December 2019 newsletter, the Library is restructuring its programs and services, with significance for Maps. Maps and other collections such as Manuscripts, Pictures, Asian Collections and Oral History will soon be managed through a functional structure, instead of through format-based sections. This means that as of July 1 Maps as a section will be abolished, and functions associated with acquiring, managing, preserving, cataloguing materials and engaging with researchers will be distributed into new composite sections. Recruitment has commenced for managers and staff in each of the new sections, and as the new teams are formed these will begin reorganising the work.

While this is momentous for Maps and other ‘special collections’ each currently with their own curator, the Maps Collection will continue to be built upon and curated. A ‘Curatorial and Collection Research’ section will manage many of the existing and future relationships and guide the development of the Maps collection and map-related research. It is anticipated that Maps staff will continue to play a part in shaping the collection and how it is used.

The Library had hoped to be somewhat further advanced with the restructure, though as everyone knows who hasn’t just awoken from a deep long sleep, other events have somewhat overtaken us all!

COVID-19 arrangements

Due to the need to contain the spread of coronavirus (COVID-19), the Library building has been closed to visitors until further notice – this includes our reading rooms, exhibition galleries, Bookshop and cafes. While the building is closed, we look forward to staying connected with you online.

Behind the scenes, staff are making sure our popular digital services are available. Over 80,000 maps have been digitised, and a new Map Search will be launched in July, bringing with it the ability to overlay our Australian maps on OSM and other layers.

To explore the Library from home see the National Library catalogue; Trove; website and eResources

• Discover our free learning resources for primary and secondary students in our Digital Classroom;
• Participate in our online events by attending webinars, listening to podcasts and reading our blogs;
• Continue to Ask a Librarian for help with research questions or navigating our collections;
• Visit our online Bookshop for a wonderful selection of Australian books.

And even further behind the scenes, Library staff are all learning to work and conduct other aspects of our lives online through various apps, and new ways of organising the work. It’s interesting to see ideas emerge from staff, with changes in the ways in which we engage with the public such as more crowd-sourcing, and I expect these will become apparent in coming week and months.

Dr Martin Woods,
Senior Curator,
Maps & Research Programs, NLA

Dr Brendan Whyte
Map Collection, NLA

Image: Map of Gallipoli (detail)/ reproduced by the Survey Dept. Egypt from a map supplied by the War Office (683)
Photo: NLA
Advance notice

ANZMapS 2020 Conference & AGM
National Library of Australia, Canberra, September 10-11
Magellanica: the Pacific after Magellan

The Mapping the Pacific conference planned for September in Sydney this year has been rescheduled to August 25-27, 2021 when international travel is more likely to be available to enable our international speakers and map enthusiasts to attend.

For 2020, ANZMaps is grateful to the National Library of Australia who has agreed to host our 2020 conference. The conference will take place in Canberra at the National Library of Australia, on September 10-11.

While the virus has been playing havoc with many events, planning for the annual conference in September is well under way, with a program just about in place. Join us for a stellar two day symposium, great speakers and a ‘white gloves’ tour of the National Library’s Pacific map treasures.

“A villain in the Philippines, arguably a traitor to Portugal and politically suspect in the eyes of the Spanish noblemen who manned his fleet, in death Magellan joined the pantheon of heroic navigators in an age of European exploration. Yet Magellan could not have imagined the magnitude of the Pacific Ocean, which his men thought they would cross in a few days. The scientific and cartographic achievements of the expedition transformed knowledge, and generated ever more speculation about Pacific realms. Come relive Magellan’s contribution and reassess these Pacific spaces.”

Speakers will include authors Granville Allen Mawer, Ian Burnet, Robert J. King, Margaret Sankey, Bronwen Douglas, Jan Tent and more. All going well, bookings will be available via the website from June 1.
The Southern Ring Continent
Chet Van Duzer

On the 5th of March 2020, American historian Chet van Duzer presented to an audience of 140 guests at the National Library Theatre, Canberra, “Hypothetical Lands in the Far South: The Southern Ring Continent, 1515-1587”

Chet’s talk covered some of the key theories and theoreticians of the southern continent present in the early modern period, when it was believed that there had to be a substantial landmass in the south to counterbalance the continents in the north. While this was a purely hypothetical construct, not based on any “pre-discovery” of Antarctica or Australia, the imaginary landmass was depicted on many maps and globes beginning in about 1508, when such a continent appears on a world map by Francesco Rosselli.

On Rosselli’s map it is essentially a very large island at the South Pole, but some globes and maps from the sixteenth century illustrated a remarkable variant of this geographical myth: a continent-sized landmass that forms a ring of land around the South Pole, with open water at the pole itself.

Chet explored several of the theories about this ring continent, in the maps and globes of Johann Schöner (1515 and 1520), on the anonymous Green Globe (ca. 1515), an anonymous world map in the Biblioteca Apostolica Vaticana (ca. 1530), a world map by Michele Tramezzino, (1554), and another by Urbano Monte (1587). Chet’s talk revealed an unusual view of the Southern Polar Regions in classical, medieval, and Renaissance hydrographical theories and geographical texts.

Text and audio

Member Profile
Kay Dancey

How & why did you get into cartography?
I was raised in Hay on the plains of western NSW where the landscape set the context for lives and livelihoods. Seasons were measured by bushfires, sand storms, river swimming, mushroom foraging, and 3-day car trips to reach our annual beach holiday destination. Geography was tangible and my love of landscapes and cartography grew out of this I think.

What has been your career path?
First stop Bathurst, to study cartography and then to work at the Central Mapping Authority. From there to Canberra to work at government departments, Division of National Mapping and eventually to managing the CartoGIS Services team in the College of Asia and the Pacific at the Australian National University (ANU).

At the ANU the cartography is varied and bespoke as it responds to custom needs of multidisciplined research. Along the way a BSc in Natural Resource Management introduced me to the power of Geographic Information Systems (GIS).

What changes have you seen in the profession?
Cartography is not alone in being a profession to see huge changes brought about by technology. The concept of GIS has been around for more than 50 years, widely applied since the 1990s and there has been an explosion of digital data visualisation in the past 10-15 years. It is a natural progression in the art and science of map making and has brought about a democratisation of cartography. While some concerns are expressed at times about the product quality this allows, I see it as an opportunity to entice and educate everyone into the world of data visualisation and cartography.

In this time of isolation where are you vicariously travelling to?
The nature of my work means I ‘travel’ often to Asia and the Pacific but New Zealand is my go-to vicarious place at the moment. In the small window between Australia’s bush fires and COVID-19 isolation I spent two glorious weeks of perfect weather travelling the north island of New Zealand. A virtual Bay of Islands, is my pick.
Emeritus Professor Clive Kessler’s interest in maps began with a gift from his parents of a small 19th century Southeast Asia map by Lapie. With a particular fondness for Jacque-Nicolas Bellin’s maps from Prevost’s history of voyages of discovery, his private collection grew and complimented his research and writing on Islam in Southeast Asia.

Dr Kessler first gifted six rare maps to the CartoGIS Services and the College of Asia and the Pacific, at the Australian National University (ANU) in 2017. This generous philanthropic gift of Southeast Asian maps was in tribute to his sister Naomi Kronenberg and Prof Virginia Hooker who had both worked at the ANU.

The initial gift of historic maps from the 17th, 18th and 19th centuries included items from renowned mapmakers, Vincenzo Coronelli (1650-1718), Isole Dell’ Indie, diuise in Filippine, Molucche, e della Son-da 1697 and Sir Robert de Vaugondy (c1723-1786) Royal Geographer to Louis XV Archipel des Indes Orientales (Archipelago of the East Indies)1750.

The Kessler Collection now comprises sixty historically valuable maps and views within the Asia-Pacific Map Collection with digital versions available online.

The research significance of these historic maps was quickly recognised by Indonesian PhD student Norman Ohira, visiting the ANU under the Partnership in Islamic Education Scheme (PIES). Norman was able to study a number of the maps in the collection and included the Coronelli map in his dissertation on the Construction of Malayness between 16-18th century in the Melaka Straits.

In 2018, maps from the Kessler Collection formed the basis of the College of Asia and the Pacific map exhibition Telling Tales: A Look inside the Asia Pacific Map Collection. The exhibition showcased a selection of maps and their stories from the Australian National University’s rich map collection.

The Kessler Collection is now permanently housed and on display in the College of Asia and the Pacific Map Room.

Jenny Sheehan
CartoGIS Services
Australian National University