

WAYS OF SEEING: CRITICAL, DIGITAL, SPATIAL

16 February 2018 from 8.30am-6.00pm
EASS Digital Humanities Symposium,
Bradley Forum, Hawke Building,
University of South Australia, Adelaide.



University of
South Australia

*A memory garden as an
alchemical representation (detail)*

image: <http://www.telesterion.com/artofmem.htm>
accessed 28/11/2017 in Francis A. Yates,
The Art of Memory. London: Routledge 1966





Ways of Seeing: critical, digital, spatial

This symposium aims to investigate the opportunities “critical digital humanities” might offer to the fields of architecture, design and the spatial humanities. Degrees of criticality could occur around the terms themselves – for example, “digital” presents opportunities to revisit ways of “seeing” knowledge through software and computational tools – or through the design of the interfaces used for discovering, searching, as well as sustaining and disseminating information. What new research questions may be conceived through multi-modal forms of engagement with research data? How can we open up our understanding of the spatial through the application of digital tools, platforms and datasets?

Ways of seeing and representing knowledge using datasets of multi-modal forms can be seen as a knowledge building initiative. This way of seeing the world as a “direct experience of reality” is mostly a multi-sensorial response.¹ It also prompts the “inadvertent gaze” or ineffable which involves the mind attempting to have new experiences, therefore the rational mind and the inadvertent gaze are interdependent.

The premise here is that virtual immersion presupposes another way of interrogating the research subject/object.² Research questions in social sciences qualitative research come from multiple sources and

¹ Stephen Hirtenstein’s presentation at “Nazar: Ways of Seeing,” CAMEA Symposium, University of Adelaide, October 2017.

² Visual culture is wedded to the idea that immersion comes from narrative as opposed to database structures/ways of organising and building knowledge. Therefore, the immersion through narrative underpins the interpretive process/the subjective and the unknown is included in the construction of knowledge from the outset, this may also be the case for literature and film. Jeanne-Marie Viljoen 15.10.17

motivations. Visual analyses/observations represent some of them. Visual observations may also translate to investigating non-tangible aspects of a particular environment and culture. The visual is therefore essential in “knowing” the subject matter and how to investigate it. How is the digitisation and dissemination of multiple knowledges impacting creative industries, cultural and research institutions and socio-cultural practices? Is digitisation offering new opportunities?

*This symposium is generously funded by the School of Education, Arts and Social Sciences (EASS)
at the University of South Australia.*



Ways of Seeing: critical, digital, spatial

Program 16 February 2018 8.30am—6.00pm

- 8.30—9.00 Register (Bradley Forum, Hawke Building Level 5, UniSA City West Campus)
- 9.00—9.10 Welcome and introduction – Prof Denise Meredyth
- 9.10—9.40 **Keynote speaker**
Dr Andrew Yip
The Ekphrasis Engine: towards a new industry architecture for digital cultural heritage research
- 9.40—10.00 Q+A
Chair: Dr Julie Nichols
- 10.00—10.30 Morning Tea
- 10.30—10.40 Dr Kelly Greenop
Digital modelling and the testing of architectural history theories: The Windmill Tower on Wickham Terrace, Brisbane.

10.40—10.50	James Wilson <i>Production, limitations and possibilities of virtual reality for digital humanities</i>
10.50—11.00	Dr Chris Landorf <i>Digital Cultural Heritage: A summary of a meta-analysis</i>
11.00—11.40	Discussion: Digital Heritage Chair: Assoc. Prof Christine Garnaut
11.40—11.50	Break
11.50—12.00	Prof Paul Arthur <i>FloraCultures: Conserving Tangible and Intangible Heritage</i>
12.00—12.10	Dr Tully Barnett <i>Digitization, Critical Infrastructure Studies and the Cultural Record</i>
12.10—12.20	Jenny Fewster <i>Money or Love? The long-term sustainability of the AusStage database</i>
12.20—12.30	Alexis Tindall <i>Shaping the tools: Empowering humanities researchers through the Virtual Laboratory</i>
12.30—1.10	Discussion: Infrastructure and Initiatives Chair: Prof Simon Biggs
1.10—2.10	Lunch

2.10—2.40	<p>Keynote Speaker Dr Rachel Hendery <i>Mapping currents of change and exchange in the Pacific</i></p>
2.40—3.00	<p>Q+A Chair: Prof Paul Arthur</p>
3.00—3.30	<p>Afternoon Tea</p>
3.30—3.40	<p>Dr Simon Musgrave <i>Mapping the relationships of concepts in text</i></p>
3.40—3.50	<p>Dr Julie Collins <i>Using digital records and tools to explore social and spatial histories: the urban history of tuberculosis in South Australia at the turn of the twentieth century</i></p>
3.30—4.00	<p>Prof Ian Gwilt <i>Making Data: materialising digital information for discourse and understanding</i></p>
4.00—4.30	<p>Discussion: Visualising Data Chair: Dr Tully Barnett</p>
4.30—4.40	<p>Summary and closing remarks – Dr Julie Nichols</p>
4.40—6.00	<p>Drinks (Front Bar, West Oak Hotel, Corner of Fenn Place and Hindley Street)</p>



Mapping currents of change and exchange in the Pacific

Dr Rachel Hendery, Associate Professor Digital Humanities, Dean's Unit – School of Humanities & Communication Arts, Western Sydney University

Keywords: linguistics, mapping, virtual reality, Australia, Pacific

Mapping of linguistic features ('typology', or 'what's where why' (Bickel 2007)) has a long history, and has experienced increased attention in recent years with advances in digital mapping and modelling (see e.g. the World Atlas of Linguistic Structures Online (Dryer & Haspelmath 2011)) with interactive maps of grammatical features and downloadable datasets). Incorporating a time-dimension into such maps to show language change – 'diachronic typology', or 'what's where when and why' (Hendery 2012) – is a newer and growing area of interest (e.g. Givón 2012; Fleischer et al. 2015; Evans 2016). Mapping of words rather than features, and the diffusion of words through a region, is still under-researched (Koptjevskaja-Tamm 2016:4; McConvell & Ponsonnet 2013). Mapping of cultural practices or features is likewise rare, and rarer still is the layering of these with linguistic features or terms so as to better understand relationships between language and culture.

However, in recent years I have been involved with a number of projects demonstrating how such an approach can illuminate our region's history. In this talk I will discuss some of these, such as the AustKin project, which mapped kinship terms from Australian languages against social category systems and marriage rules to understand change in the linguistic and/or anthropological systems and how these changes reflect migration and/or contact; Glossopticon, an experiment with three-dimensionally mapping a digital language archive into Virtual Reality space; and Waves of Words, a new ARC-funded project to discover new visual analysis methods for integrating linguistic, anthropological and archaeological data from the Pacific region.

KEYNOTE

I am Associate Professor of Digital Humanities at Western Sydney University. My background is linguistics and my research mainly focuses on how new digital tools and techniques allow us to research language contact and change in new ways.

The ARC Discovery project I currently lead aims to integrate linguistic, anthropological and archaeological evidence for ancient contact relationships between Australia and the Pacific. I am also a CI on two further ARC projects led by other researchers: 'Howitt and Fison's Archive: Insights into Australian Aboriginal Language, Kinship and Culture', and 'Mapping Print; Charting Enlightenment'.

I am also a member of the MARCS Institute for Brain, Behaviour and Development, and the Centre of Excellence for Language Dynamics. I am the Treasurer for the Australasian Association of Digital Humanities and the NSW coordinator for the Australian Computational and Linguistics Olympiad.

E: R.Hendery@westernsydney.edu.au

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The Ekphrasis Engine: towards a new industry architecture for digital cultural heritage research

Dr Andrew Yip, Research Fellow, iCinema Centre for Interactive Cinema Research, University of NSW

Keywords: digital cultural heritage, immersive, interactive environments

In this paper I address two crucial and immediate concerns for the field of digital cultural heritage research and the application of experimental visualisation or simulation methodologies to traditional university research practices. Firstly, through new work in the field of immersive, interactive environments being produced at the iCinema Research Centre at UNSW, I demonstrate the potential for immersive environment research to explore key concerns in the humanities, particularly in the fields of theatrical design, art history, ancient history and archaeology. Secondly, I describe the new, networked and interdisciplinary industry design principles necessary to produce these complex projects. These new workflows necessarily blend industry outputs and technical specialisations with institutional research expertise. The result is a new paradigm of research practice that must be embraced in order to pursue cutting-edge digital research in the humanities in the future.

KEYNOTE

Dr Andrew Yip is a research fellow at the iCinema Centre for Interactive Cinema Research, University of NSW. His research concerns the design and application of embodied, immersive environments for digital cultural heritage research, and new collaborative design workflows for interdisciplinary research practice. Andrew designs virtual reality exhibition installations and applications for major Australian institutions and experimental artists and he publishes broadly across contemporary new media art, museological practice and art history.

E: andrew.yip@unsw.edu.au



Digital modelling and the testing of architectural history theories: The Windmill Tower on Wickham Terrace, Brisbane.

Dr Kelly Greenop, School of Architecture, University of Queensland

Jay Stocker, School of Architecture, University of Queensland

Keywords: digital cultural heritage; historic analysis; heritage interpretation; 3D laser scanning; digital modelling

The Windmill Tower on Wickham Terrace in Brisbane is the oldest building left standing in Queensland. Built in 1828, initially as a windmill, which failed in purpose due to lack of wind in Brisbane, it has undergone many adaptations and reuses over time. The Windmill Tower is now largely inaccessible to the public who maintain a frustrated fascination with one of Brisbane's few remaining convict-built buildings, which is also the location of both the original colonial mapping and claiming of the Brisbane penal settlement, and the punishment and execution of prominent Aboriginal resistance fighters.

The Windmill Tower was scanned using both static and mobile 3D laser scanners, and visualised to enable the public to access a virtual reality version of this heritage site. Two stages of the building's history have been modelled: the present day and the 1840s when it was an operational windmill with an additional convict-powered treadmill labour to operate the millstones within. The visualisation of the Tower in the form of a 3D digital model has enabled the recording and testing of the building's architectural history including the working of the windmill's 1840s mechanism, the location and configurations of the convict treadmill, and the recording of delicate aspects of the heritage significance of the which are at risk of disappearing over time. This model opened a fresh debate and reassessing of historical assumptions through combining archival research with 3D laser scanning of existing spaces and modelling of historic structures that no longer exist.

Presented by Dr Kelly Greenop

DIGITAL HERITAGE

Dr Kelly Greenop teaches design, architectural social science and research in the School of Architecture and conducts research within Aboriginal Environments Research Centre (AERC) and Architecture Theory Criticism History (ATCH) research centre at The University of Queensland. Her key research areas are: Aboriginal and Torres Strait Islander place experiences and attachment, and the importance of housing, place, family and country for urban Indigenous people; and digital cultural heritage using 3D laser scanning. Dr Greenop works with researchers from ATCH, CSIRO and the Queensland Parks and Wildlife Service to scan and archive fragile, remote and at-risk sites, and research the use of scanning in architectural heritage practice. She has been instrumental in gaining funding and managing the scanning of Queensland heritage sites for digital archiving onto the global digital heritage repository CyArk. Dr Greenop is co-editor of the Springer Handbook of Contemporary Indigenous Architecture, due mid-2018. Dr Greenop (with Dr Chris Landorf) co-convened two conferences in 2017 titled 'digital cultural heritage: FUTURE VISIONS', one in Brisbane in April and the other in London in September, the later in collaboration with the Bartlett Real Estate Institute, University College London. E: k.greenop1@uq.edu.au

Jay Stocker is a Master of Architecture student at the School of Architecture, The University of Queensland. Jay has been employed as a research assistant to develop a virtual reality model of the Windmill Tower, Wickham Terrace, Brisbane, the oldest building now standing in the city. This project follows a self-directed research project undertaken in the Master of Architecture course in which Jay scanned and visualised the Boggo Road Gaol heritage site. He developed a precise coloured point cloud mesh from a Leica P-16 scanner creating a virtual reality, immersive self-directed tour of the site. Jay has developed unique workflows to enable the use of multiple types of scan data, and the incorporation of on-site ambient noise to further increase a digital model's immersive experience. E: jay.stocker@uqconnect.edu.au



Production, limitations and possibilities of virtual reality for digital humanities

James Wilson, School of Art, Architecture and Design, University of South Australia

Keywords: virtual reality, 3D modelling, digital cultural heritage; interactive environments

Virtual reality technology affords the ability to represent spaces that can facilitate an emotional connection to that space. With the goal of achieving such a connection, a virtual reality 'experience' was produced featuring a 3D polygonal representation of traditional Acehnese architecture based on data collected from the 'EASS Digital Humanities Project' in mid-2017 and by using game technology and workflows.

A key objective of 'Digital Humanities Virtual Reality' (DH VR) project was to accurately translate not only the fundamental design of the building but also its vernacular and dilapidated qualities using sketches, photographs and video as reference material. This was a challenging prospect, especially when taking into consideration the need to balance optimisation of 'in-game' assets whilst ensuring there is enough detail in the environment to facilitate immersion and prompt an emotional response. Another key objective, and on a more practical level, was to find a method that enabled the user to 'self-navigate' the environment without the use of hardware inputs and select 'hotspots' that revealed another layer of data (that included images, maps and text) in the virtual space.

The artefact that resulted from this project has provided insight into the challenges, limitations and affordances of the hardware and development tools. It also has revealed the potential for this project to be developed into a virtual reality template that may be used and built upon further by other researchers in the future. In light of these key objectives and insights this talk details the mode of production, the limitations, possibilities and scope of the DH VR project.

Presented by James Wilson

DIGITAL HERITAGE

James Wilson is a PhD candidate in the School of Communication, International Studies and Languages at the University of South Australia (UniSA). His specialisation is educational technology with a focus on utilising the affordances of game design technology and techniques to produce learning tools for the gaming generation. Having a passion for all interactive media, James recently became interested in applying practices learnt during his time as a PhD student to virtual reality. This interest has led to opportunities at UniSA including tutoring visual arts students in the creation of unique digital experiences and assisting architecture students to develop virtual visualisations of their coursework. E: james.wilson@mymail.unisa.edu



Digital Cultural Heritage: A summary of a meta-analysis

Dr Chris Landorf, School of Architecture, University of Queensland

Dr Kelly Greenop, School of Architecture, University of Queensland

Keywords: Digital cultural heritage; authenticity; interpretation; conservation; meta-analysis

In the introduction to their landmark text *Theorising Digital Cultural Heritage: A Critical Discourse*, Cameron and Kenderdine (2007: 3) note that ‘. . . much of the discourse about the relation between cultural heritage and digital technology has been descriptive and introspective, focusing on projects and their technical considerations’. They describe an emerging field that lacks a body of sustained critical scholarship about the challenges posed by digital technologies for the meaning and practice of cultural heritage. It has been 10 years since these observations and 15 years since UNESCO adopted the Charter on the Preservation of Digital Heritage that acknowledges digital technologies as an effective means to record the world’s heritage and broaden access to historic resources.

This presentation will provide a summary of a cross-disciplinary thematic investigation into a decade of scientific development, methodological advancement and critical discourse on the relationship between digital technologies and cultural heritage. The investigation used a systematic review across four academic journal databases for relevant peer reviewed articles: JSTOR, ProQuest, Science Direct and Social Science and Humanities Index. Articles were selected based on a keyword search (Shaw et al. 2004), rated against quality criteria (Atkins et al. 2008) synthesised into generic descriptive themes before being further interpreted to yield analytical themes relevant to the meta-analysis (Loulanski and Loulanski 2011; Thomas and Harden 2008). The investigation establishes the factors regarded as critical to the field and tests the development of a foundational body of critical scholarship.

Presented by Chris Landorf

DIGITAL HERITAGE

Dr Chris Landorf teaches architectural technology, practice and heritage management in the School of Architecture, and conducts research within the Architecture Theory Criticism History (ATCH) research centre at The University of Queensland. She is a registered architect with postgraduate qualifications in business administration, facility management and the sustainable management of industrial heritage sites. Her key research areas are: sustainability and the built environment, specifically in relation to the management of complex historic industrial and urban environments; and the communication of information from multiple sources through virtual environments and digital platforms. Since 2014, she has been instrumental in gaining \$485,000 in university and nationally competitive funding to develop a 4-dimensional learning environment that immerses students in real construction projects captured digitally over time. E: c.landorf@uq.edu.au



FloraCultures: Conserving Tangible and Intangible Heritage

Prof Paul Arthur, Chair in Digital Humanities and Social Sciences, School of Arts and Humanities, Edith Cowan University

Keywords: heritage protection; biodiversity; memory studies; cultural identity

Botanist Stephen Hopper claims that “Perth is one of the world’s most biodiverse cities, especially in relation to plants [...] The rate of discovery of new plants here ... is equivalent to the rate of discovery in many of the rainforests” (cited in Perth Biodiversity Project, p. 1). In protecting biodiversity, cities also gain opportunities to conserve diverse forms of cultural heritage associated with plants. This heritage involves plants as food, ornamentation, medicine, and fibre; as literary, artistic and historical objects; and as sources of community memory, cultural identity, and personal well-being. The FloraCultures project develops theoretical and practical approaches to conserving botanical heritage in Western Australia by applying concepts of tangible and intangible heritage to plant conservation. Intangible heritage suggests the “forms of cultural heritage that lack physical manifestation. It also evokes that which is untouchable, such as knowledge, memories and feelings” (Stefano, Davis, and Corsane, 2012, p. 1). The 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage articulates five manifestations of intangible heritage, including “oral traditions and expressions [...] social practices, rituals and festive events [...] knowledge and practices concerning nature” (p. 2). Drawing on current developments in heritage protection, memory studies, and digital design, this paper presents an overview of the project’s model for conserving Perth’s botanical heritage. The premise behind FloraCultures is that digital humanities approaches can render cultural information about Perth’s plants accessible. The project consolidates materials dispersed widely across numerous traditions and sources, including Whadjuck Nyoongar (the Indigenous people of Perth) and colonial European expressions of knowledge and attachment to plants.

Presented by Prof Paul Arthur

INFRASTRUCTURE + INITIATIVES

Prof. Paul Arthur is Director of the Centre for Global Issues, and Chair in Digital Humanities and Social Sciences at Edith Cowan University. Dr John Ryan is Postdoctoral Research Fellow in the School of Arts at University of New England. He initiated the FloraCultures project at ECU and his current postdoctoral research is on "The Botanical Imagination: Poetry as a Means for Inspiring Ecological Appreciation and Community Wellbeing." Heather Boyd is eResearch Coordinator at Edith Cowan University. E: paul.arthur@ecu.edu.au

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Digitization, Critical Infrastructure Studies and the Cultural Record

Dr Tully Barnett, College of Humanities, Arts and Social Sciences, Flinders University

Keywords: digitization; critical infrastructure studies; digital humanities; cultural value

The future of cultural and text preservation is almost entirely digital and yet the approach we take as a nation and as disciplines in the (broader) Humanities has so far been piecemeal, short-term, funding-driven and blinkered. The federal government's 2017 Infrastructure Roadmap policy process has ensured space for the discussion of Humanities infrastructure in the national debate but this needs to be underpinned by more diverse research from the sector. Deb Verhoeven argues that "cultural infrastructure is not a passive conduit; it catalyses for better or worse. It is a technology that holds a social promise, not just a technical one" (Verhoeven 2016). The emerging field of critical digital infrastructure studies or critical humanities infrastructure studies (Smithies 2017; Liu 2016; Drucker and Svensson 2016) raises questions about the foundations underpinning knowledge production processes in humanities and cultural research and offers a way of thinking about how these different cultural infrastructure projects work together to build something for which we are as yet underprepared to analyse.

In this paper I use critical infrastructure studies as a way of talking about these often invisible elements of digital design and dissemination within which the cultural record is contained. I outline a rationale for a nuanced understanding of the history, impact and non-economic value of cultural digitization projects in and relating to Australia, as well as internationally and call for better research into digitization as a cultural strategy.

Presented by Dr Tully Barnett

INFRASTRUCTURE + INITIATIVES

Dr Tully Barnett is a Lecturer in English in the College of Humanities, Arts and Social Sciences at Flinders University and Research Fellow with the ARC Linkage Project Laboratory Adelaide: The Value of Culture. Amongst other things, she publishes across cultural policy, digital humanities, and reading as a practice in and out of the tertiary classroom. She is the author of "The Kindle's Social Highlighting Function and Emerging Reading Practices" (2014) and "Platforms for Social Reading: Material Imagery in Digital Book Formats" (2015). She serves on the boards of the Australasian Association of Digital Humanities and the Australasian Consortium of Humanities Research Centres. E: tully.barnett@flinders.edu.au



Money or Love? The long-term sustainability of the AusStage database

Julian Meyrick, Strategic Professor of Creative Arts and Jenny Fewster, Manager: AusStage Database, College of Humanities, Arts & Social Sciences, Flinders University

Keywords: funding models; open access; databases

In 2016, after AusStage was successful in its Phase 6 LIEF application, a decision was made by its leadership to approach non-ARC sources of funding, in order to put the database on a more sustainable financial footing. In 2017, a Pledge Drive commenced, focused on Australian university libraries and the State Government of South Australia. To date, nearly \$90,000 has been raised, spread over the coming triennium. Of more interest, however, is the debate around the Pledge to identify and communicate “the AusStage story”. What emerged from this process was not a brand but a commitment – to a national resource, freely available to all Australians, which imperfectly but uniquely captures this nation’s performing arts activities. The aim of the Pledge Drive was to raise money. An important result of it, however, was clarification of AusStage’s underlying mission and values.

Presented by Jenny Fewster

Julian Meyrick Ph.D (2000 La Trobe) is Professor of Creative Arts at Flinders University, Artistic Counsel for the State Theatre Company of South Australia (STCSA), and a member of both the Council for the Humanities and Social Science (CHASS) board, and the Currency House editorial committee. He was Associate Director and Literary Advisor at Melbourne Theatre Company (MTC) 2002-07 and Artistic Director of kickhouse theatre 1989-98. He is the author of See How it Runs, a history of Sydney's Nimrod Theatre company, and numerous articles on Australian theatre and cultural policy in Griffith Review, Australasian Drama Studies, Theatre Research International, Australian Studies, Contemporary Theatre Review, Text, Pacific Journal of Arts and Cultural Management, Cultural Trends and Journal of Arts Management, Law and Society. He is Chief Investigator for both the AusStage performing arts database and Laboratory Adelaide, a multi-disciplinary research project studying the problem of culture's value. The Retreat of Our National Drama, his second Currency House monograph was published in 2014. He is the director of over forty award-winning theatre productions, including Angela's Kitchen, which he co-wrote, and which attracted the national Helpmann Award for Best Australian Work in 2012. He was a founder member and Deputy Chair of PlayWriting Australia 2004-09 and a member of the federal government's Creative Australia Advisory Group 2008-10. A notable developer of new stage drama, he has led the debate about the establishment of a national theatre in Australia. E: julian.meyrick@flinders.edu.au

Jenny Fewster began working on performing arts databases in the early 90's in her role as Research Assistant at the Performing Arts Collection of South Australia. She joined AusStage, the Australian national online resource for live performance research, when the project began in 2000 and was appointed Project Manager in 2003. During her time with AusStage the project has been successful in gaining over \$5 million (AUD) in funding from the Australian Research Council, Australian National Data Service, National eResearch Architecture Taskforce, eResearch South Australia and the Australian Access Federation. Jenny is active in nurturing relationships between university researchers and cultural collections. She is currently the Deputy Chair and Secretary of the Performing Arts Heritage Network of Museums Australia and has served on that Committee for the last ten years. E: jenny.fewster@flinders.edu.au



Shaping the tools: Empowering humanities researchers through the Virtual Laboratory

Alexis Tindall and Sarah Nisbet eRSA

Keywords: tools, skills, capacity, open data, networks

In the research environment described by the Ways of seeing: critical, digital, spatial organisers, a world of opportunity opens ahead of us. Increasing availability of humanities data, digitised cultural heritage collections, shared research outputs, and tools that are becoming more accessible mean that humanities research is going through a period of transformative change.

It is important to empower the current and future generations of humanities researchers to operate optimally in this environment. The diversity of sources and motivations in qualitative social sciences research assert the importance of open and accessible tools, and ensuring researchers understand how they work. Digital technologies provide us with the opportunity to record, preserve and share non-tangible aspects of environment and culture, so we must use these tools effectively and preserve their outputs responsibly, thinking about future use. Large scale digitisation is offering new opportunities, an explosion of data is emerging, so researchers need to be ready to use it.

eRSA are leading the ANDS/Nectar/RDS funded Humanities Arts and Social Sciences Data Enhanced Virtual Laboratory (HASS DEVL), an initiative that aims to accelerate research in the humanities through improved and accessible tools, increased interoperability between data and platforms, shared workflows, best practice in data curation, and empowering the community through training and skills building. This presentation will outline the 2018 goals of the HASS DEVL, drawing on the background that informed this project, and our vision beyond this project.

Presented by Alexis Tindall

INFRASTRUCTURE + INITIATIVES

Alexis is part of eRSA's Research Engagement team, working with humanities and social sciences researchers to help them access data storage and compute facilities through eRSA. In this role she works on eRSA-led federally funded initiatives to advance digital humanities research.

Alexis has a postgraduate qualification in Museum Studies and extensive project management experience in a variety of environments. Between 2010 and 2016 she led the South Australian Museum's volunteer digitisation program, making data and multimedia from the museum's collection accessible online and has worked for the Atlas of Living Australia, improving digital access to the nation's natural history collections. E: alexis.tindall@ersa.edu.au



Mapping the relationships of concepts in text

Dr Simon Musgrave and Brian Zuccala, School of Languages, Literatures, Cultures and Linguistics, Monash University

Keywords: mapping, text analysis, distributional semantics

Distributional semantics assumes that patterns of co-occurrence of words in texts can tell us something about the meanings of words, but the relations between all the words in a substantial body of text are not accessible to traditional corpus methods such as n-grams and collocation analysis. Recently developed algorithms allow us to build models which locate every word in a corpus in relation to every other word in a multi-dimensional space – Vector Space Models. Such models can then be used as the basis for various two- and three-dimensional visualisations which can show relationships between words and concepts in texts.

Our presentation will briefly introduce the basics of the methodology used and will demonstrate the value of the techniques by comparing the visualisation of key concepts in the texts of the Italian ‘canonical’ author Giovanni Verga, with similar visualisations for two other writers generally considered to be influenced by Verga (Luigi Capuana and Federico De Roberto). Giovanni Verga is one of a few to be studied and translated in the Anglosphere as well. We discuss the ways in which these new techniques support and extend views based on traditional scholarship about the differences and similarities of this group of writers.

Presented by Dr Simon Musgrave

VISUALISING DATA

Simon Musgrave is a lecturer in linguistics at Monash University who locates much of his work in recent years in the field of Digital Humanities continuing a longstanding interest in the use of computational tools for linguistic research. This interest has been focused recently on the use of Vector Space Models for semantic analysis, including collaborating in textual analysis with scholars in other disciplines. Other current research projects include developing combinatorial search strategies for corpus-based study of pragmatic phenomena and exploiting the affordances of online presentation to make grammatical description more accessible. E: simon.musgrave@monash.edu

Brian Zuccala holds a MA in Modern Literatures and is completing his Ph.D in Literary and Cultural Studies (Italian) at Monash University, where he teaches language and culture. He has co-edited a collection of essays on Pascoli, Il seme di Urbino (Raffaelli, 2013) with Salvatore Ritrovato. Parts of his recent work appeared or are in press as essays, critical introductions, interviews, translations and reviews in Italian Studies in Southern Africa (ISSA), Spunti e Ricerche, Italica, LEA-Lingue e Letterature D'Oriente e Occidente, The Journal of Italian Cinema and Media Studies, Intralinea Online Journal of Translation and the Journal of Italian Translation. He is editing a forthcoming volume of collected essays on new approaches to Capuana Studies – Experimental Fiction and Cultural Mediation in Post-Unification Italy: The Case of Luigi Capuana – with Annamaria Pagliaro as well as the ISSA 2018 special issues (31.1 and 31.2) on Italian Postcolonialisms with Anita Virga, and is working on a translated volume of George Gissing's Racconti Americani with Luigi Gussago and John Gatt Rutter, under contract with Nova Delphi (Rome). Some of his Digital Humanities -related work (with Simon Musgrave) is available through Monash Figshare Repository (www.figshare.com). E: brian.zuccala@monash.edu



Using digital records and tools to explore social and spatial histories: the urban history of tuberculosis in South Australia at the turn of the twentieth century

Dr Julie Collins, Collections Manager: Architecture Museum, School of Art Architecture and Design, University of South Australia

Peter Lekkas, Centre for Population Health Research, School of Health Sciences, University of South Australia

Keywords: urban history, social history, health, digital mapping, historical geography

This presentation will outline interdisciplinary research-in-progress in the digital humanities which builds on previous qualitative architectural history concerning the urban, social and cultural history of tuberculosis – research which led to many questions, particularly in reference to those who died from tuberculosis: who were they, what were their social and residential circumstances, and were these social residential geographies consequential in any way to eventual outcomes?

In 1680 pulmonary tuberculosis was described by writer John Bunyan as “The Captain of all these men of death” and by the nineteenth century had become a global scourge. So much so, that by the turn of the twentieth century, and with an increased understanding of its contagious nature, it was declared a notifiable disease in South Australia. As such, records have been left from which we have been able to spatially trace the mortality of those who died from tuberculosis.

Specifically, this talk will discuss pertinent digital methods and demonstrate how primary data can be collected and collated from historical records, both paper-based and digital collections. We will illustrate how the locations of deaths can be historically spatially re-emplaced and augmented with historic records relating to social conditions and housing. Spatial analytical techniques being used to explore associations between the geographic distribution of deaths across metropolitan Adelaide and the socio-demographic and socio-economic geographies of the time will be touched upon.

Presented by Dr Julie Collins

VISUALISING DATA

Julie Collins and Peter Lekkas have worked together over several years combining their interests in health and place, and the historical design of institutional settings intended for therapy. Dr Julie Collins is Researcher and Museum Curator at the Architecture Museum, within the School of Art, Architecture and Design at the University of South Australia. Julie researches and publishes on various aspects of architectural, cultural and social history as well as in the field of archival theory. Peter Lekkas is a researcher and doctoral candidate within the School of Health Sciences, University of South Australia with a background in epidemiology, population health and Geographic Information Systems.

E: julie.collins@unisa.edu.au / panaiotis.lekkas@mymail.unisa.edu.au



Making Data: materialising digital information for discourse and understanding

Prof Ian Gwilt, Research Professor: Design, School of Art, Architecture and Design, University of South Australia

Keywords: digital fabrication, data visualisation, data-objects

This paper will introduce methods, processes and theories around the translation of digital data into material forms, and proposes that the making of data into physical objects and located experiences will be an important development in the data visualisation phenomenon. For many outside of the scientific community digital data and the conventional forms this takes, such as statistical lists and graphs, remain abstract and unintelligible. The paper investigates how this emergent approach to the creation of data-objects can help to engage, and aid understanding of digital information by a variety of different stakeholders and community users.

As new types of digitally enabled printing and fabrication technologies become more accessible, these technologies are being employed by artists, designers and scientists to create new and novel ways of representing data that move beyond the digital domain. These practices are contingent on the relationship between digital and material cultures and necessitate a dialogue between these two domains, which are increasingly being drawn together in hybrid configurations. The concept of the data-object further challenges this separation and the ontology of digital content. The paper discusses a selection of practices and research activities that explore the translation of digital information sources into material forms and discusses the sociocultural implications inherent in doing so.

Presented by Prof Ian Gwilt

VISUALISING DATA

Ian Gwilt is Professor of Design in the School of Art, Architecture and Design and Research Lead in Match Studio at UniSA. Current areas of research include communication design and knowledge mobilisation, design in the healthcare environment, data visualization and the design of hybrid environments from museum experiences to human-robotic interactions. He is also interested in how we can incorporate visual communication design practices into interdisciplinary research teams and in better defining design research practices.

He has a PhD from the University of New South Wales, Sydney, Australia, which examines the theory and practice of mixed-reality in creative contexts, an MA in Interactive Multimedia (MAIMM), jointly conferred by the University of Balears (UIB), Spain and the Royal College of Art (RCA) London and an undergraduate degree in Visual Communication (Design for Learning) from Manchester Metropolitan University. He works across a number of media often combining analogue and digital forms including digitally enabled fabrication processes such as Rapid Prototyping and 3 dimensional data-objects. He has been making and writing about digital media since the mid-1990s and has exhibited at a number of international events and galleries.

E: Ian.Gwilt@unisa.edu.au

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WAYS OF SEEING: EXHIBITION

16 February 2018 from 8.30am-6pm

Bradley Forum, Hawke Building,

University of South Australia, Adelaide.

Featuring works by Russell Fewster, Belinda McGill, Tim McGinley,
Dan Mclean, Ning Gu, Peter Walker and Chris Burns



**University of
South Australia**

Abstracted vernacular space (detail)

James Wilson UniSA DH Project 2017



The **Australasian Association for Digital Humanities** (<https://aa-dh.org/>) is pleased to announce its fourth conference, to be held at the University of South Australia from 2 to 5 October 2018.

The conference will focus on 'Making Connections' – between disciplines, sectors, countries, ways of thinking, people and ideas – and applying data and digital tools to connect people and possibilities.



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