

DATA CURATION AND
INFORMATION SYSTEMS DESIGN
FROM AUSTRALASIA

ADVANCES IN LIBRARIANSHIP

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ADVANCES IN LIBRARIANSHIP VOLUME 54

**DATA CURATION
AND INFORMATION
SYSTEMS DESIGN FROM
AUSTRALASIA**

**IMPLICATIONS FOR
CATALOGUING OF VERNACULAR
KNOWLEDGE IN GALLERIES,
LIBRARIES, ARCHIVES, AND
MUSEUMS**

EDITED BY

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INVESTOR IN PEOPLE

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SERIES EDITOR'S INTRODUCTION

I am delighted to take this opportunity and introduce myself as the new Series Editor of *Advances in Librarianship* since January 2021. In this capacity, I extend the series' impact via a critical perspective that spotlights social justice and inclusive praxis from the shadows to become an emerging canon at the very core of who we are and what we value as legit in library and information science (LIS) scholarship and practice. This strategic vision requires destabilising of entrenched hegemonies within our privileged ranks and external communities to alleviate intersecting political, economic, social, and cultural anxieties and power imbalances we witness today. As we move towards the quarter-century mark, we also need to effectively document such paradigm shifts in LIS, serving as a foundation of inspiration upon which, together in our multiple identities and diversities, we can proudly contribute to the building of a meaningful society towards a brighter future for our children to inherit.

New stimulating models reimagining the roles of cultural memory institutions (e.g. libraries, museums, archives, schools, etc.) and the field of information are much required to develop symbolic and real infrastructures for moving us forward. We also need to better tell our stories of information activism and community mobilisation in the face of overwhelming challenges to human existence, from forces of neoliberal corporatisation, political ransacking, media irresponsibility, climate change, environmental degradation, and pandemic dis/misinformation, to name a few. What do the contemporary threats of human extinction and cultural decay mean for LIS professionals, be it scholars, researchers, educators, practitioners, students, and others embedded in a variety of information settings? Not only does it require actions in the 'doing' of resistance via information to decentre dysfunctional powerbrokers and their oppressions and entitled privileges. However, disseminating a forward-thinking agenda and narrative beyond our internally focussed bastardised institutional bastions is equally important, as we adopt an active stance to promote fairness, justice, equity/equality, change agency, empowerment, community building, and community development.

Advances in Librarianship holds a special place in the hands, hearts, and minds of readers. The book series serves as a key platform to support creative ideas and practices that change and better articulate the vital contributions of libraries and the impact of information on diverse multicultural communities in a global network information society. Moving forward, my aim for the series is to engage our diverse professional communities in critical discourse that enable real transformations to occur. It is important to propel progress in shifting entrenched positionalities in LIS, while making visible content related to the 'margins'. Decentring canons and practices towards equity of representation, inclusivity, and progressive change will naturally occur. Intersecting social, cultural, political, and economic

upheavals in recent times demand an urgent response from the LIS professions in this regard. I am truly honoured and privileged to build on the legacy of Paul T. Jaeger, who served as Series Editor of *Advances in Librarianship* since 2013. His research helped to mobilise LIS in addressing concerns surrounding equity, diversity, and inclusion more substantially beyond past lip-service, also shaping the focus of the book series. I plan to operationalise new directions for single or multi-authored book-length explorations and edited collections by shifting focus on understudied spaces, invisible populations from the margins, and knowledge domains that have been under-researched or under-published in what we consider as high impactful venues in LIS and beyond. Examples might involve a reflective journey that established, or newly emerging LIS scholars, researchers, practitioners, and students critically reflect, assess, evaluate, and propose solutions or actions to change entrenched practices and systemic imbalanced inequities in different library and information-related settings. It might also involve decolonising LIS publication industries in their biased Euro/Anglo centricities with inclusion of content from geographical diversities around the world.

I am reaching out to our multiple audiences for their support towards these goals in spreading the word for proposals to new volumes in the collection. Let us find our 'collective voice' in the LIS professions to make us all uncomfortable as we continue to 'push the buttons', thereby, becoming stronger in our quest to further social justice and develop our humanity, human dignity, respect, and potential to the fullest.

Bharat Mehra, PhD
Professor and EBSCO Endowed Chair in Social Justice
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ABOUT THE CONTRIBUTORS

Quenten Agius is an Aboriginal Elder of the Ngadjuri and Narungga First Nations people. He is the former chairperson of the Ngadjuri Nation Aboriginal Corporation, named applicant on the Ngadjuri Nation's Native title application, experienced Aboriginal Heritage and Cultural Consultant, multi-award winning South Australian (SA) Aboriginal Tourism operator including three SA Tourism Hall of Fame awards (Aboriginal Cultural Tours SA), and a multi-award winning filmmaker. He has also been working with the University of South Australia as a Cultural Advisor for four years.

Rebecca Agius is a Ngadjuri woman, mother of three, and a grandmother. She is learning to pass on knowledge to the next generation and forthright of caretakers of the land to keep practising our culture beliefs so the land stays healthy to keep feeding us and we feed the land.

Alice Beale is a Senior Collections Manager at the South Australian Museum [SAM]. As an archaeologist, she brings her expertise in collection management to the museum, the Australian Aboriginal Cultures collection. Before she joined the SAM, she worked as a curator for the Western Australian Museum in the Anthropology and Archaeology section. She received a Bachelor of Archaeology (Honours) from the Flinders University in 2015.

Erik Champion is an Enterprise Fellow and Associate Professor in Architecture at the University of South Australia. He currently holds honorary positions at the Australian National University, the University of Western Australia, and Curtin University, where he was a UNESCO Chair. He researches areas related to virtual heritage, serious games, and digital humanities.

Lynette Crocker is a senior Kurna Elder who for 30 years has worked to raise awareness in the areas of reconciliation, employment, native title, education, health, and conservation. In 2020/2021, she received the AMaGA National Award and Best in Heritage, Project of Influence award for work on exhibition *Tiati Wanganthi Kumangka*.

Susannah Emery is a Game & Narrative Designer and Lecturer at the University of South Australia. Her research interests explore the use of games and technology for learning and to promote social change and she has worked as a game/narrative designer on several award-winning and nominated games on personal computer (PC), console, and mobile.

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Deirdre Feeney is a cross-disciplinary artist and Lecturer of Contemporary Art at the University of South Australia. Her research interests include the materiality of image making, media archaeology, and the history of optics. Her practice-led research collaborates across the STEM disciplines, and her work has been exhibited nationally and internationally.

Julia Garnaut is currently Curator – History and Exhibitions for the City of Holdfast Bay. She has a Master’s in Cultural Heritage Management and has worked in roles across archaeology, cultural heritage, and museums. She has worked alongside the Kaurua community for the past five years, supporting them in various pursuits within the local government.

Georg Grossmann is a Senior Lecturer in the Industrial Artificial Intelligence (AI) Research Centre at the University of South Australia. He works on the integration of business processes and complex data structures for systems interoperability. He received a PhD from UniSA in 2008 and was awarded the Ian Davey Research Thesis prize for the most outstanding PhD thesis. His current research interests include integration of service processes, ontology-driven integration, information visualisation, and the management of digital twins.

Mairi Gunn is a Pākehā of Scottish descent and is a Senior Lecturer in Design at Waipapa Taumata Rau, the University of Auckland. She is an award-winning documentary maker, cinematographer, and digital designer, using extended reality (AR/VR) experiences to foreground intercultural relationships and community economies, including “commoning” thinking and practices.

Deanne Hanchant-Nichols is a Ngarrindjeri/Barkindji woman who worked in the Galleries, libraries, archives, museums (GLAM) sector as a Collections Manager, Archivist and General Manager. She now works in the Higher Education sector. Her research interests are repatriation, identity, genealogy, and DNA/genomics and how this relates to identity. Sharing her culture is her passion.

Irene Hancy (Ngāpuhi, Te Hikutū) Whaea (Elder) is a facilitator based in the Hokianga in the Far North of Aotearoa New Zealand. She is guided by Māori concepts and customary practices. Through *Kimihia ko wai au* (who am I – a search for identity), she helps her people reclaim and appreciate their authentic indigenous Māori world.

Eloise Labaz is a final-year Master of Architecture student and Bachelor of Architectural Design Graduate at the University of South Australia. As a current

University of South Australia Creative Academic Unit Board (AUB) Student Representative and previous University of South Australia Vacation Research Scholarship recipient, her four years of studies have been spent exploring a broad spectrum of typologies, ideologies, and skills, igniting a passion in architectural history, heritage, and social justice-orientated design.

Anna Leditschke is a Lecturer in Urban Planning in the School of Social Sciences at the University of Western Sydney (with campuses located on Darug, Dharawal (or Tharawal), Eora and Wiradjuri lands). She has a background in archaeology and cultural heritage management. Her research interests lie in ethics, cultural heritage, urban governance, and statutory planning systems.

Brye Marshall is an Indigenous Archaeologist and Cultural Heritage Consultant. He has over 15 years' experience in Indigenous community engagement and Indigenous workforce reform. He has five years' experience in Aboriginal cultural heritage and non-Aboriginal urban environments. He has undertaken site surface analysis, excavation/transport and forensic analysis of skeletal remains, stone tool analysis and classification, rock art documentation and reporting, excavation supervision, ArcGIS, as well as ethno-archaeological surveying.

Bharat Mehra is Professor and EBSCO Endowed Chair in Social Justice in the School of Library and Information Studies at the University of Alabama. His research focusses on diversity and social justice in library and information science and community informatics or the use of information and communication technologies to empower minority and underserved populations to make meaningful changes in their everyday lives. Over 25 years, he has applied action research (i.e. collaborative engaged scholarship via information-related actions to achieve social justice outcomes) to further community engagement while partnering with racial/ethnic groups, international diaspora, sexual minorities, rural communities, low-income families, small businesses, and others, to represent their experiences and perspectives in the design of community-based information systems and services. He has developed a national and international reputation as a scholar with >175 peer-reviewed authored/co-authored publications on equity, diversity, inclusion, accessibility, and international (EDIA+I) social justice content (including >65 in refereed journals). He is the Series Editor of Emerald Publishing's *Advances in Librarianship*.

Tinesha Miller is a Ngadjuri young woman and mother.

Ann Newchurch is a Kurna Narungga woman.

Jeffrey Newchurch is a Kurna Narungga man and respected Elder. He is heavily involved in advocacy for the Kurna community and has worked extensively with community and government organisations to repatriate Kurna old people from across the world back to Kurna Country.

Lynette Newchurch is a Ngadjuri Narungga woman and a Director on the Ngadjuri Nation Aboriginal Corporation Board.

Julie Nichols is Senior Lecturer in Architecture for the Creative Academic Unit at the University of South Australia. She is the Founder of the Vernacular Knowledge Research Group and on the leadership team for the Australian Research Centre of Interactive and Virtual Environments. Her research is interdisciplinary and cross-culturally focussed on architectural anthropological methods to understand vernacular knowledge in the production of cultural heritage, for First Nations Peoples in Australia and Indonesia. Co-design strategies for dissemination, curation, and reconceptualisation of the role of cultural heritage knowledges for First Nations peoples are her current research interests.

Stephen Nova is a researcher, heritage advisor, and artist. He completed his Masters by Research in 2021 while working as a research assistant with the Vernacular Knowledge Research Group at the University of South Australia. His work sits within the interdisciplinary field of digital humanities and creative arts to document and record heritage at risk and their related socio-cultural stories.

Katica Pedisic is an Architect, Artist, and Lecturer at the University of South Australia. Her research explores sites of architectural interest, engaging storytelling possibilities through drawings and digital animations. Her drawings have been exhibited at the Bartlett, UCA, London, and the Royal Danish School of Arts. She has spoken at conferences (*Drawing Millions of Plans*, KADK), contributed to books (*The Artful Plan*), and invited public colloquia such as the Parlour salon series and MPavilion's MTalks (*Storey/Story*) on enabling diverse voices in architecture and public space. Her architectural work has been published widely and received numerous Australian Institute of Architects awards for design excellence. As an academic, she has won prizes for teaching excellence as an Early Career Academic and was a finalist for the AASA Education Prize for Early Career Academics. Her project *Revolutionary Terrains* will be exhibited in the Australian Pavilion for the 18th Venice Biennale of Architecture.

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Yali Leanne Windl is a Wiradjuri Dharawal woman, with many familial, cultural, and community ties to 'Australia' and internationally. She is working within a university, making changes to ensure inclusivity, safety and the ability to pursue

higher education. She is a published Blakademic, who loves writing and teaching others about her culture, their protocols, practices and knowledges. She is an avid weaver, practising continuously in workshops she teaches, and by surrounding herself with aunts from many countries. She is also passionate about speaking and teaching her mother tongue, while also researching and learning multiple Australian Aboriginal Languages, to enable revival and survival of the languages. Her other passions are mentoring the Aboriginal and Torres Strait Islander youth, encouraging each to pursue their dreams and be the best they each can be. Social justice means to her preventing deaths in custody, self-determination and self-sovereignty for her people and ensuring her people's practices can survive for all Millenia. Her work also extends internationally to other First Nations people and their research.

Rui Zhang is a PhD candidate at the University of South Australia. Her PhD topic is *Improving Visitors' Immersive Experience in Online Museum Exhibitions on Australian Contemporary Craft From a Human-Centred Design Perspective*. She also has over eight years of experience in academic research and tertiary education in exhibition design.

ACKNOWLEDGMENT OF COUNTRY

We acknowledge the traditional custodians of the lands on which we live and work, and where the book was written. We acknowledge the cultural diversity of all Aboriginal and Torres Strait Islander peoples and pay respect to Elders past, present and future.

We acknowledge the stories, traditions and living cultures of Aboriginal and Torres Strait Islander peoples on this land and commit to building a brighter future together.

Warning: Aboriginal and Torres Strait Islander readers are advised that this book may contain images, yarnings, and names of deceased persons.

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I would like to acknowledge the role of my Series Editor, Co-Editor and friend Bharat Mehra for this opportunity to work with him, to brainstorm big ideas and organically uncover new insight throughout the journey of this project. This has been a wonderful collaboration across disciplines and a special thanks goes to all the contributing authors, as well as our highly valued peer reviewers.

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I am very grateful to Julie Nichols, Lead Editor and dear friend, for the countless insightful dialogues and meaningful synergies across cyberspace that led us to this life-changing and spiritual collaboration. It is with a deep sorrow of the pain that our Indigenous brothers and sisters and Native people all around the world continue to experience every day, and an awakening consciousness that connected us across so many spheres of existence, with the hope of resistance and action towards progressive change in cultural memory institutions and beyond that might herald a vision of reconciliation, advocacy, human dignity and social justice.

Our sincere gratitude and humble respect to the incredible Indigenous scholars and other voices that are part of this collection, and to the multitudes who continue to raise awareness and attention of the human rights struggles against the ongoing atrocities towards First Nations people and the many dispossessed and dislocated across remote physical and cultural geographies. Our call to action so that we can truly acknowledge and rectify the terrible wrongs that we subject upon Indigenous communities and Our Sacred Earth that we recognize as home.

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POEM

Yali Leanne Windl

University of South Australia, Australia

When Yali Weaves – What it means to her...

When I weave, the world comes to a standstill.
There is nothing else that matters to me.
The weight of the world is no more.
It is only the fibres, silence, my hands, and me, each woven together and feeling quite free.
Peace surrounds all of me. Oh, the serenity that envelopes me.
The feel, the sounds, and the smell of fibres from my Country take me back to what used to be.
The freedom, the joy, the simplicity.
I see, hear, and feel – being taken back to yesteryear.
My people show me how it once used to be.
Long before we became enslaved and lost all, showing me what I could have had, who I could have been.
The needle in one hand, the fibre in the other – oh how this is where I love to be.
Weaving the stories, the love, the knowledge – this is how I love to be.
Knowing my knowledge has been passed down to me, from my Ancestors to my Aunties and now to me.
What a feeling, knowing I am doing just as those before me.
I feel my women beside me weaving and laughing alongside me.
When I am teaching my women to weave, oh how proud this makes me.
The knowledge I have deeply embedded within me is now passed to the next generations below me.
When I am on Country, collecting fibres, just as my women once did, how powerful this makes me feel.
Sitting on Gunhi-Dhaagan and weaving peacefully – just the fibres, Country, weaving, and me.
Oh, the peace and serenity. I am powerful when I am on Country – nothing and no one can harm me.

I am a powerful Yinaa and I am healing.

You see, I have so much personal trauma, and then the intergenerational and transgenerational trauma come and lay on top of me, threatening to smother me.

Weaving has come along and saved me, pulling off the many layers and slowly has been healing me. Connecting to my Women, to my Ancestors, to my Country, and all she offers me – this is my healing.

This is where my heart will always be.

Weaving is not only my healer, and saviour, but is also what settles, envelops, and heals me.

I am weaving, weaving is a part of me.

Weaving fills some of the void from what was taken from not only me but all of my people. Weaving is what saves me – weaving is what heals me – weaving is my sanity.

Weaving is everything to me. Weaving gives me the strength to walk into the future.

To heal, to be. Weaving is the connection that had been missing from my life.

Weaving comes with me everywhere I go, as this keeps me connected to my Country, to my women – to me.

Weaving connects me to my country through intangible fibres, connecting me to all that is country – my stories, my songs, my women, my country.

I feel lighter when I am weaving. Weaving is instilled in me, deep within my DNA. It will never leave me.

When I am weaving with fibres that connect me to my Country, I am home, I am strong, I am loved, everything is brighter and less worrisome.

Weaving has this exceptional ability to connect me with all and everything. Regardless of the time, the space, or the distance – I am connected through intangibility.

I am weaving and weaving is me.

PREFACE

Kirsten Thorpe

In order to situate my positionality within cultural protocols of research with/for Indigenous communities, it is important that I introduce myself. My family are Worimi people from Port Stephens, New South Wales. My experiences of employment and professional practice provide a significant backdrop to my standpoint in the research. I came to the library and archives field through an Aboriginal cadetship programme in the late 1990s. Although my entry into the archive and information world was accidental and inspired by an interest in history and social justice, I have found my lifework situated in contributing dialogue and engagement on the intersections between Indigenous knowledge and world views and archival studies.

Currently, I am a Senior Researcher at Jumbunna Institute for Indigenous Education and Research, University of Technology Sydney (UTS). I lead the Indigenous Archives and Data Stewardship Hub, which advocates for Indigenous rights in archives and data and develops research and engagement in relation to refiguring libraries and archives to support the culturally appropriate ownership, management, and ongoing preservation of Indigenous knowledges. My broad interests are grounded in research and engagement with Indigenous protocols and decolonising practices in the library and archive fields and the broader galleries, libraries, archives, and museums [GLAM] sector. I strongly advocate for the ‘right of reply’ to records and capacity building and support for the development of Living Indigenous Archives on Country.

After the release of *Bringing Them Home*, the report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from Their Families (1997), the GLAM sectors became more acutely aware of the importance of access to records for Aboriginal and Torres Strait Islander people. Access to records and information was vital for understanding the impacts of racist and discriminatory policies that produced state-sanctioned control. Aboriginal and Torres Strait Islander people sought justice and reparations by engaging with the archives.

However, it was my experience working as an archivist to support access that I recognised that the systems and processes were stacked against Aboriginal and Torres Strait Islander people. Although the calls for greater access were critical, Aboriginal and Torres Strait Islander people were engaging in harmful spaces. [Fourmile \(1989\)](#) described the sense of isolation that Indigenous people experience when wanting to access materials in the archives arguing that: “Aboriginal people feel ill-at-ease and self-conscious when entering white institutions which emanate an entirely alien cultural presence” (p. 3).

Having worked in the GLAM sector for over two decades, I now see the urgent need for new approaches to be designed. New frameworks that support Indigenous people's needs beyond mainstream bureaucratic practices and instead focus on strengthening the support for the spiritual and emotional care of knowledges. Rather than being places of harm, violence, and erasure, these new approaches must increase their support of Indigenous well-being, justice, and healing.

My research seeks to contribute to an agenda of Indigenous-led community-based research that speaks back to traditional practices within GLAM. My doctoral research *Unclasping the White Hand: Reclaiming and Refiguring the Archives to Support Indigenous Wellbeing and Sovereignty* (Thorpe, 2022), explored Indigenous self-determination and sovereignty over the management of Indigenous knowledges, with a particular focus on engagement with archives. The research identified immediate reforms required to support Indigenous peoples' archiving needs and outlined a transformative model of Indigenous Living Archives on Country to support Indigenous ways of knowing, being, and doing in the archives and redress from the impacts of colonisation.

In my research and engagement broadly with the GLAM sector, I see a significant desire for people to support practices that dismantle privilege. This book seeks to inspire GLAM workers to reflect on their practices and engage or further cement approaches supporting community self-determination and agency.

GLAM institutions play a critical role in supporting memory keeping and the care and protection of documentary heritage. These cultural and collecting institutions hold significant power in making the stories of society accessible, useable, and understandable for this generation and those to come. Currently, there is a reckoning across the GLAM sector where people are becoming more aware of the dangers of institutions supporting dominant approaches that silence the world views of Indigenous people and other marginalised communities. Without intervention, GLAM practices support dominant historical narratives that present a biased view of history. GLAM institutions then enable opportunities for hegemonic cultures to diminish other cultures through denial and misrepresentation.

I come from a community where my community never stepped into the library and probably still do not today. Because when you think about it, like we probably don't have any representations of ourselves in there. (Charlotte Moar, in Thorpe, 2022, p. 134)

This reckoning questions how GLAM has and continues to support colonial processes of dispossession and othering. How GLAM privileges dominant histories over others, and how Eurocentric ways of knowing drive the systems and structures of collecting and keeping within GLAM. The chapters in this book encourage a critique of the systems and structures of GLAM and inspire thought on how to conceptualise new approaches and ethical practices.

- How do you engage in ethical practice in GLAM as a response to past practices that failed in this regard?
- How do you manage reforms that are needed retrospectively while also designing futures that dismantle colonial approaches?

- How can Indigenous Living Archives on Country be developed to nurture and support community cultural information flows?

Internationally, Indigenous people and other diverse communities are challenging hegemonic structures of colonial and imperialist power that still exist. This action can be witnessed in calls for the repatriation and return of cultural heritage to local areas and through demands for collections to be managed and curated according to communities' local protocols. Once silenced, the need for the spiritual and emotional care of collections is now recognised as a critical component of stewardship practices that need to be built into GLAM approaches.

While there is a significant movement of grassroots community efforts to reframe GLAM practices and dynamic projects being led by professionals to dismantle hegemonic process, there needs to be greater attention placed on a research agenda to theorise and conceptualise different ways of knowing within GLAM. In a GLAM context, participatory frameworks are needed to enable voice and agency of communities who have been marginalised and silenced in GLAM collections.

This book responds to this gap by providing a series of chapters on data curation and information systems design and the need to dismantle the authority that prevails in institutional GLAM practices. The range of papers brought together by editors Julie Nichols and colleague Bharat Mehra highlights opportunities for more ethical practices grounded in principles of co-design and social justice to be considered within cataloguing practices.

The book's four main sections urge new frameworks for supporting data curation of cultural heritage materials by drawing specifically on research and practice being undertaken in Australasia. These approaches to curation encourage alternative cataloguing methods that seek to empower and awaken Indigenous voices. This activation ranges from examples of projects aiming to embed cultural protocols based on Indigenous practices to altogether abandoning mainstream GLAM processes that do not meet communities' needs.

Part 1: Infrastructure – explores co-design and social justice opportunities in information systems design, considerations of the ethics and cultural sensitivities of data management, data curation, and games and gamification in GLAM contexts.

Part 2: Bodies of Knowledge – highlights several case studies relating to vernacular knowledge and GLAM. Participatory GLAM models are explored that centre the voices of Aboriginal and Torres Strait Islander people and communities across curatorial practices.

Part 3: Bodies of Experience – has two chapters (amongst others) that focus on First Nations authors' perspectives. First, through direct and personal *yarnings*, as transcribed accounts of their experiences, they outline advocacy for reform in the GLAM sector and its management of Ngadjuri Aboriginal cultural heritage materials. Second, one chapter was prepared as an opinion piece from personal experience working in the GLAM sector that is provided by Ngarrindjeri woman, Deanne Hanchant-Nichols. Brye Marshall, Aboriginal archaeologist, proposes a future research methodology for investigating intangible cultural heritage.

Part 4: Representation – shares emerging practice relating to the use of Indigenous knowledges in moving images and using augmented reality. These examples demonstrate how technologies can activate GLAM collections and challenge current normative practices.

Overall, the contributions made in the book chapters encourage new priorities and approaches for data curation across GLAM institutional practice. Through the incorporation of case studies, this book demonstrates new methodological and practical approaches to support the care and maintenance of Indigenous knowledges. Methods of yarning, deep listening, and the embedding of cultural protocols encourage reflection on new transformative practices within GLAM.

GLAM institutions operate in a space that has a history of white supremacy and white privilege. The institutions have traditionally supported elitism, and the processes of colonisation have been embedded in the traditional approaches of GLAM. Significant work must be done to support reforms in GLAM around decolonisation. Without GLAM spaces being decolonised, significant harm will continue to be perpetuated. Similarly, there are great opportunities for GLAM practices to be transformed to support diverse ways of knowing. Embedding care to support the emotional and spiritual care of materials informed by local protocols.

This book sheds new light on approaches that can reduce the harm and dangers of the GLAM sector. Being exposed to stories of practice being generative rather than extractive helps model methods for GLAM to move beyond the status quo. To explore data curation approaches and information systems design beyond normative Western systems, which are damaging and detrimental to Indigenous communities and other marginalised communities.

When we read these examples of partnership approaches outlined in this book, we can imagine GLAM practice that enables appropriate voice, representation, and agency in ways that are currently only at the margins. The field of librarianship and the practice of cataloguing have the potential to respond deeply to the needs of communities beyond the status quo. These approaches should not be viewed as ‘special’ but considered as core requirements for projects to support community well-being.

Reflecting on my research, I see the need for reform and transformation of the archives. The desire for decolonising the archives is a first step in reducing the harms of the current dominant systems and approaches. Decolonising acts and interventions are critical as they will make the archives more welcoming and friendly. These steps in my research are about reframing. However, this reframing and supported reforms must be coupled with a view for a significant transformation of approaches: approaches that are based on Indigenous ways of knowing, being, and doing. The agenda to indigenise GLAM must be distinct from the necessary work required for decolonisation. They are two separate but interrelated agendas.

Currently, the increased focus on the Indigenous data sovereignty movement provides opportunities for Indigenous people to govern their knowledges and cultural heritage materials in ways not conceived before. In entering into these spaces of increased recognition of rights and the need for social justice aligned

with better control of data, we must seek to identify and challenge the colonial paradigms perpetuated by GLAM practices. In some cases, they may be able to be refigured or, in some cases, entirely abandoned.

The chapters presented in this book testify to the need for significant transformations, continuing dialogue, and the development of Indigenous-led research agendas in GLAM. My research has identified the need for a new transformative model of *Indigenous Living Archives on Country* (Thorpe, 2022, p. 240). The Indigenous Living Archives on Country framework is an approach to support Indigenous archival sovereignty. These approaches have implications for current archival practice and theory, proposing pathways for growing archival landscapes embedded with respect for Indigenous world views and cultural knowledge flows. The new models suggest pathways to reframe the archives as an act of rebalancing power, restoring dignity to Aboriginal and Torres Strait Islander people, and caring for people's information and archiving needs today and for future generations. McKemmish et al. (2019) also describe a radical reimagining of archives in their description of *Living Archive of People and Place* in the following ways:

Imagine ... if we could bring all records relating to a particular community together in a new, radical form of Living Archive, one that turns the assumptions behind the institutional collecting archival model on their head. What if the dispersed and fragmented archival records relating to an Indigenous community were accessible on and embedded in Country. Instead of visiting a number of institutional archival silos or trolling through numerous web pages to search for often poorly indexed and contextualised records relating to a community, imagine accessing them on Country. And what if the records were not so much read as experienced in the context of other records that have always been connected with that place, including those embodied in the landscape and in the community through reembracing, storytelling, dance, art and artefacts? Imagine an immersive experience of Country as it existed back through time. Walking through Country, ancient landscapes would come to life through layers of storytelling, images and documents, deepening perspectives through extra-sensory interaction. Animated forms that give meaning to a dreaming, creation story or song could be seen to come to life beside, around, or above a rock formation central to their ancestral narrative. A long extinct volcano on the horizon could be witnessed in the throes of an eruption as the visualisation of a distant geological phenomena passed down through Indigenous oral traditions. The more recent past would be similarly revealed through the unlocking of archival material and repatriation to country. Imagine if, through augmented reality, an information board next to the ruins of a nineteenth-century mission was not limited to words and images printed indelibly upon it but acted like a window to the world wide web. Where superimposed images, text, videos and recorded speech emanating from the space of the board would be movable, searchable and navigable.

The authors contributing to this important book extend our understanding of the need for relational and living archives. Futuring our new archival spaces requires a radical reimagining of practice and theory encompassing different ways of knowing, being, and doing in GLAM practice. Views, aligned with a reciprocal archive, are most eloquently described by the late Ally Krebs:

[...] an archive needs to be a yarning, a conversation, with all the tacit protocols involved in a conversation between people, the respect in engagement that allows a conversation to continue over time, to be returned to, to grow and deepen, within a shared creative space. Yarning implicitly acknowledges the various contributors, embraces their contributions. It is by nature co-creative. (Ally Krebs, in Faulkhead & Thorpe, 2017, pp. 4–5)

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INTRODUCTION

CO-DESIGN AND SOCIAL JUSTICE OPPORTUNITIES IN DATA CURATION AND INFORMATION SYSTEMS DESIGN

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ENGAGING WITH BIG CHALLENGES

In an era of climate emergency, global pandemics, war and death in Eastern Europe and the Middle East, and ongoing tension with regard to China and Taiwan, society is at a crossroad. Cultural memory institutions, such as galleries, libraries, archives, and museums [GLAM] have an urgent responsibility to participate and invest intellectually in the exploration of meaningful solutions to these contemporary challenges (Bulkeley & Newell, 2023; Chapman et al., 2023; Goodenough et al., 2023). This includes championing new and innovative approaches to decolonising established systems and challenging accepted and dominant narratives. Even though the GLAM sector globally has taken strategic actions, such as the dedication of working groups as well as grant allocations to the process, the reality is that the decolonisation and Indigenisation of collections from a systems change perspective is enormous (Vieira, 2023). As Mel Bach, Head of Collections from Cambridge Universities, who initiated substantive decolonising actions in 2020 with their staff, noted: “decolonisation work will never end” (Vieira, 2023, p. 5). However, there is a plethora of recent literature suggesting methods for decolonising across the GLAM sector, such as announcements in public media,

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and buildings and departments dedicated to its implementation (BCM, 2021; Crilly & Everitt, 2022). Many of these initiatives relate to the efforts of large-scale institutions and appear to correspond with the COVID-19 pandemic.

The modern GLAM sector has a long and contentious history. In the tracing of their cultural provenance to the Greco-Roman traditions, the sector as we know it in the Western world has emerged as self-identified storehouses of world knowledge and cultural memory. These institutions have relied solely on hegemonic mechanisms of authoritarian organisation, control, privilege, and power (Gutek, 2022). They represent a problematic historical legacy dated to the colonial and imperial world order (Hodsdon, 2022; Mehra & Gray, 2020). Hence, it is not surprising that as ‘institutions of the people’, there has been a marginal acknowledgement and integration of any alternative ways of knowing and structuring knowledge for a permanent and wholesale structural change. It is noteworthy that this ontological and epistemological tradition, also pervasive in information systems design methodology, has endured not only as a legacy of the west. Other non-Western regimes, such as Japan and China, have also emphasised this narrative, through their own processes of colonisation within a neoliberal culture (Cua & Garrett, 2008). Dominant economies of the world order have adhered to these processes of structuring and ordering knowledge for its preservation, conservation, dissemination, accessibility, and curation. In the end, this has resulted in the construction of a hierarchical, discriminatory, elitist, and exclusionary history. Nathan Sentance (2021), Wiradjuri Man, First Nations public programmer at the Australian Museum and academic at the University of Sydney explains,

Our hope is to get visitors to be constructively critical about public memory. But also to see how whiteness and the patriarchy can inform what museums preserve and how exhibitions are constructed and perceived. Part of this is also trying to get visitors to engage with brutal histories and uncomfortable facts. It is important to understand that those past injustices are connected to the injustices of now and that people do not live outside of history. We reside in its legacy and we need to reckon with brutal history so we can better understand the present and change it to be more just. However, this is often difficult. (Sentance, 2021)

Overall, the GLAM sector has been slow to engage in community mobilisation for progressive actions representing alternate points of view of vernacular knowledge world views and systems of thought (e.g. Asian, African, Aboriginal, and Indigenous) (Mehra, 2022). The exceptions to this rule are the galleries or libraries at a local scale, with programmes operated by the marginalised communities themselves. Another example is those organisations built out of sheer determination by local artists and cooperatives. The North American example ‘BUSH’ Gallery, established in 2013, is one of these types of initiative (Johnson, 2022).

This edited collection provides a gap in what may be considered a radical reframing of Western ontological and epistemological processes to review, reflect, and advocate for Indigenous data governance and Indigenous data sovereignty strategies in the GLAM sector. This involves the acknowledgement, valuing, prioritisation, and integration of alternate world views in this sector. In this way, this book seeks to bring about different and seemingly disparate realities: in art, vernacular knowledge, architecture, information technology, artificial intelligence,

history of science, Aboriginal cultural heritage, archaeology, museum studies, immersive storytelling, and gamification case studies as ‘data’ complex forms that symbolically contribute to disruption of entrenched colonial systems within the GLAM sector. In the consideration of the precariousness of our future existence, there is an urgency to pursue a multiphase process to negotiate alternative understandings of ways of being in the world. This may include simply contemplating existential questions such as ‘what does it mean to be “human”?’.

Therefore, this book is valuable, timely, and necessary in its focus on a rethinking of information systems design. It reconceptualises the fragmentation of knowledge domains and investigates Indigenous knowledge systems as another way of knowing. Holistic, embodied, sensorial, and spiritual understandings of the world highlight the limitations of existing practices, policies, and services in the current GLAM sector. These present biased (and limited) information systems that have always been reductive frameworks, employed to poorly represent complexities of the human condition. This series of essays and projects brings together intangible, symbolic, conceptual, as well as spiritual know-how and associated practical examples. It seeks to understand tacit and vernacular modes of production of knowledge to provide a conceptual fulcrum to reposition the piecemeal approaches of an entrenched order in the GLAM sector.

Ultimately, this book calls again for the urgent need of the Indigenisation of GLAM processes, so Aboriginal people self-determine the need and the appropriate mode of collection and preservation of their cultural material, knowledges, and histories. In doing so, the GLAM sector may potentially discover nuanced narratives that illuminate underreported temporal forms of knowledge and find reconsidered solutions embedded in tacit knowledge. Furthermore, alternative ways of thinking may be revealed as potential methodologies to tackle our dominant and alarmingly 21st-century predicaments, destabilising them in the process.

RESEARCH QUESTIONS

Some of the questions addressed in the chapters in this collection include the following:

- Does the rethinking of epistemological and ontological systems in GLAM involve a complete restructure? Would a parallel decolonised information systems design be preferable?
- To what extent may an understanding of the merits of preserving, collating, recording, interpreting, curating, and representing different forms of data (visual, physical objects, intangible) originating from vernacular systems, mobilise necessary change in our society?
- How might a study of these knowledge systems in GLAM launch alternative information systems design?
- In the context of Australasia, how do the similarities of alternate world views demonstrate an argument to act on what appears to be the majority position within a dominated and entrenched colonial framework?

- How might small subversive projects within GLAM highlight the benefits of thinking and recording cultural heritages differently?
- Alternatively, what is the role of recording and preserving knowledges under this ‘Western world view’ methodology, when oral traditions and the passage of dynamic knowledge forms (e.g. dance, spoken poetry, song, puppetry and performance arts, ceremony, storytelling, and ‘yarnings’) have endured for thousands of years, particularly for First Nations peoples?
- How might ‘unpacking’ Western technologies and apparatus, within GLAM, lead to sites of knowledge and interconnections to rethink our cultural institutions’ ontological frameworks?
- What types of digital system design permit the decentring and disruption of entrenched ways of managing archival processes?

Therefore, the intentions of this group of scholars working within the Australasian region are to provide modes of bridging the divide between the histories of the intangible/oral and the preserved tangible/artefact (text and/or object). Their work seeks to deliberately move away from binary oppositions, while not ruling out any opportunities to consider how we might translate, reconceptualise knowledge (data), and exchange into the formal GLAM sector.

AIMS

The research represented in this book aims to bring together concepts of vernacular knowledge and different forms of cultural heritage (predominantly referred to as ‘data’) in the Australasian information systems design context.

- Its objectives include identifying the imperatives of another way of seeing and knowing cultural knowledge and, most importantly, how to disseminate the cultural knowledge.
- To do this, this book explores an explanation of current systems and the importance of non-binary structures with a focus on co-designed methods to bring about change that are ethically and morally required and overdue.
- Its purpose is to highlight that the GLAM sector utilises a methodology that comes out of a colonial model of power relations, control, and the reductive representation of being in the world.
- The reconceptualisation of that system aspires to recognise complexity inherent in the narratives of the disempowered and brings to the fore the minority, yet within a politically dominant position.
- It seeks to explore oral traditions or intangible modes of transfer of cultural knowledge in the ways they defy fixity in time and space.
- The study’s ambition is to examine dynamic and fluid modes of knowledge transfer in this sense that cannot be ‘captured’ in the same way for perpetuity like the static word lends itself and, in doing so, recognises uneven representations of knowledge and probabilities for these to be redressed and bridged.

- The design professions are fields that may collate a mixed methodology to better understand the inadequacies of representation in these different world views, their absence, gaps, yet also the similarities and differences.

INTERSECTIONS OF KEY THEMATICS/DEFINITIONS

This collection of essays is not unique in its call to action given the state of the climate crisis. [Parsons et al. \(2016\)](#) clearly articulate the need for alternate world views in addressing and building sustainable communities: “Yet, there remains limited recognition that indigenous [*sic.*] knowledge frameworks could (and should) influence the processes and outcomes of climate change mitigation and adaptation” (p. 26). Equally however, it is not the responsibility of First Nations people to save the world that non-Indigenous people have permanently compromised. Tyson Yunkaporta of the Apalech Clan of Western Cape York, and a Wik Mungkan speaker, explains his role as follows: “I am not reporting on Indigenous Knowledge Systems for a global audience’s perspectives. I am examining global systems from an Indigenous Knowledge perspective” ([Yunkaporta, 2019](#), pp. 14–15). GLAM institutions have mirrored and perpetuated these inadequacies of practice as part of a global system. These institutions have solicited their part through their preservation of cultural materials and their prioritisation of a model that does not serve broader community concerns and ways of understanding the world.

An emerging scholar such as Franziska [Mucha \(2022\)](#), in her recently completed dissertation, highlights “digitisation needs to be complemented with socio-affective spaces in which diverse participants can develop relationships, negotiate meanings, and explore uses of cultural heritage” (p. 35). Therefore, the role of co-design in the updating of methodologies for sustaining digital collections in GLAM is central to the core message of our book. [Mucha’s \(2022\)](#) work is only one example of the currency and relevancy of this topic. The internationally recognised ‘socially-just’ need to decolonise cultural institutional processes of collecting, curating, and storing cultural heritage materials pertaining to non-Western world views is continually growing.

Key Themes

The thematics of vernacular knowledges, social justice, and co-design, in relation to data curation and information systems design, and their engagement with alternative world views intertwine and resonate in this book. These relationships seek to promote truth-telling, deep listening, and two-way knowledge sharing as means to decolonise our entrenched information systems’ ontological and epistemological structures ([Asquith & Vellinga, 2006](#), p. xviii). These themes, embedded in a diverse range of different methodologies ranging from literature reviews, opinion pieces, in-the-field experiences, yarnings, making of digital media tools

and artworks, cultural centre design, pedagogical design strategies and contemporary arts practice, promote an ethical and moral underreported call to the GLAM sector to decolonise.

Theme 1: Vernacular Knowledge

This book's focus on exploring alternative world views to reconceptualise data curation and information systems design in the GLAM sector draws upon the field of vernacular studies and knowledges. It investigates tacit ideas and understandings of the world embedded in everyday socio-cultural practices that include First Nations peoples as well as colonial settlers, to find synergies. Somewhat paradoxically, the etymology of the term 'vernacular' has its origins in Latin, and it is relational to societal status, to persons of locality, demonstrating a language of an area. It is believed the term originated in the 17th century, when it defined "native to a country", from Latin *vernaculus* 'domestic, native, indigenous; pertaining to home-born slaves', from *verna* 'home-born slave, native,' a word of Etruscan origin" ([Etymology Online, 2023](#)).

Paul Oliver, anthropologist, and founder of the British programme for vernacular studies from an anthropology of architecture perspective, at Oxford Brookes University, coined a derivative term "vernacular know-how" ([Oliver, 1986](#)).

'Know-how' is the faculty of knowing; cognition ... It has to do with knowledge, with awareness, understanding, even intuition. In practice, within the context of vernacular architecture it embraces what is known and what is inherited about the dwelling, building or settlement; it includes the collective wisdom and experience of the society concerned, and the norms that have become accepted by the group as being appropriate to their built environment. ([Oliver, 2007](#), p. 110)

[Oliver \(2007\)](#) further explains that this knowledge is inherited and intergenerational; it relates to the natural environment, its climatic conditions, and how to live sustainably within this context. It therefore also relates to societal values and cultural practices incorporating belief systems, ritual, and respect for ancestors and deities ([Oliver, 2007](#)). For First Nations people, this knowledge develops over time and is tried and tested, adaptive and resilience-focussed, which, in their case in Australasia, has ensured survival for at least 60,000 years. How does vernacular knowledge relate to the GLAM sector, if these societies have retained/preserved their knowledge for thousands of years? The main reason is because of the destruction of this cultural knowledge in its tangible and intangible forms, due to the 'after-effects' of colonisation, through invasion, persecution, removal from their 'Country' (lands of origin), destruction of their cultural 'living' landscapes and genocide of First Nations peoples. Essentially and ironically, deliberate practices of destruction and at times complete annihilation warranted the need for a counter-proposition – that of 'conservation' of what remains or what can be salvaged. Therefore, the means of preservation, constructed as the GLAM sector, needs a further rethinking in its ontology, to strengthen and facilitate the conduit for transfer of cultural knowledge to the local peoples who have suffered such losses.

That is before the vernacular 'know-how' is permanently eradicated or decontextualised. According to [Aktürk and Fluck \(2022\)](#) "vernacular heritage is undergoing rapid changes caused by the effects of the changing climate, such as loss

of lands, biodiversity, building materials, integrity, traditional knowledge, and maladaptation” (p. 56). By contrast, the Aboriginal concept of ‘Country’, in its tangible and intangible ways of knowing, for Australian Aboriginal peoples is an immediate, contemporary, as well as ancient way of demonstrating a complex vernacular knowledge system that bridges space and time, focussed on custodianship of peoples and place compared to domination and control. Throughout this book, when authors refer to ‘Country’ capitalised, it is the Aboriginal concept distinct from Western terminology, ‘country’.

GLAM institutions are central to preserving, capturing, interpreting, structuring, curating, and disseminating cultural heritage that the cultural institutions, employees, benefactors, and their Boards believe to be important for the sustaining of a ‘civil’ society. Vernacular knowledge for Aboriginal people is predominantly oral and delivered through demonstration of a practice and a way of being in the world that is contextual, timely, and dependent on social relationships and different forms of interpersonal exchange. As a dynamic practice, the content for exchange is related to space and time in a direct dialogue with the audience and their role in the community. The typical GLAM system focussed on knowledge and its preservation in and over time is comparatively static in form and delivery. The rendering of the spoken word to text is also not without issue in its potential to “convey an ill-defined mass of social information” (Baumann, 1986, p. ix).

Therefore, the exploration of the role of the GLAM sector in this book is twofold. The sector’s purpose or perhaps motivations to attempt to ‘record and preserve’ in many cases is based, first, on the pending expiration of vernacular knowledges and culture. This is due to the warming climate impacting on the eradication of material culture. Second, the sector looks to the vernacular as a holistic body of knowledge to halt the abolition of this environmental destruction and ultimately the demise of human culture on earth. [Oliver \(2007\)](#) suggests a realisation, of sorts, for built-environment-focussed scholars, of the need to look to other ‘ways of knowing and doing’, potentially began for the Eurocentric world in the 19th century. Prior to this period, in the 12th and 13th centuries, European medieval ways of creating human environments and their vernacular forms were more intricately connected to natural environmental contexts. It may be argued, medieval villages were closer to Indigenous ways of knowing and living, by comparison, than the post-industrial human environments. This is because these post-industrial environments have exacerbated the distinction between the natural and human environments.

Historically, the GLAM sector had a role in the misappropriation and understandings of the benefits of vernacular building and design. For example, during the Orientalism period (a Western scholarly discipline in the 18th–19th centuries) where the West looked to the East and exoticised their observations of art, architecture, literature, philosophy, history, and languages ([Said, 1977](#)). The reinterpretation of aesthetic forms devoid of their context and cultural meaning was celebrated through the 19th century via dissemination in exhibitions ([Porter, 2015](#)). [Oliver \(2003\)](#) goes on to explain how by the 20th-century, scholarly work focussed on the ‘origins’ rather than ‘abstraction’, meaning that the scholars did not acknowledge the interpretative aspects of vernacular and its borrowings from other cultures. In 1964, Bernard Rudofsky organised an exhibition

called “Architecture Without Architects” at the Museum of Modern Art, New York, which attracted a much wider audience to engage with vernacular buildings (Rudofsky, 1964). Oliver (2006) believes this perpetuated the idea that vernacular was fixed in the past, and it was not until anthropologist, Amos Rapoport’s 1969 publication *House, Form and Culture* indicated a ‘living’ house culture and highly responsive to cultural and environmental change (Oliver, 2006, p. 413; Rapoport, 1969). According to Oliver (2006), the lessons that vernacular knowledge teaches us are that it is responsive, dynamic, and evolving as conditions require. It is inherently contemporary in its approach and appropriate to apply as a model for systems design thinking (Oliver, 2006, p. 420).

GLAM has a responsibility to share ‘truths’ and disseminate them for the greater good. As has been highlighted above, there is a reconnection with vernacular knowledges, and their importance in the contemporary context is necessary (Harris, 2022). These are knowledges that may be currently inaccessible to communities that need them. The reasons range from a loss due to the orality of information and with the passing of community Elders, an inaccessibility brought about by complex storage systems of colonial origin, or the trauma associated with the institution itself and its perceived role in past injustices that detract from timely searches for information (Faulkhead et al., 2010). Therefore, there are broader concerns of a social justice necessity for all people to have access to their vernacular knowledges repatriated to their communities on Country. However, it is also acknowledged that the systems that need to grant access also have their limitations in appropriate and culturally sensitive ways of disseminating and acting as custodians of the materials.

Theme 2: Social Justice

The representation of Indigenous voices and understandings of alternative ways of structuring knowledge in the field of Library and Information Science (LIS) is well understood as a systemic issue beyond the Australasian context (Faulkhead et al., 2010; McKemmish et al., 2020; Thorpe, 2019). There is an inherent disconnect between the legacy of colonially motivated systems and ways of accessing, curating, and preserving Indigenous knowledges. Again, this is well understood in GLAM and LIS sectors, but the implementation of an alternative model or models to provide inclusive archiving strategies for equity of Indigenous peoples is less prevalent in the literature until the early 2000s. Now, there is an increasing recognition of the preference for many Indigenous communities to take ownership and organise their own repositories (Callison et al., 2016; Evans et al., 2020; Thorpe, 2017; Thorpe et al., 2021). Established scholar of LIS, Lorie Roy, a self-identified “Anishinabe woman, enrolled or affiliated with the White Earth Reservation, and a member of the Minnesota Chippewa Tribe”, has published on the notion of what she refers to as,

developing an LIS curricular model based on Indigenous ecologies and suggests methods of integration, such as basing a program on the medicine teachings, which associates knowledge with the cardinal directions, or integrating non-traditional forms of learning, such as ‘dance and games’ and ‘learning from elders’. (Reijerkerk & Nyitray, 2022, p. 13; Roy, 2015, p. 406; Roy et al., 2011)