DIGITAL HUMANITIES IN THE INDIA RIM

CONTEMPORARY SCHOLARSHIP IN AUSTRALIA AND INDIA

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1. Introduction

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Abstract

This chapter introduces the main rationale for developing a collaboration between India and Australia in the Digital Humanities (DH). We argue that the time is right to reflect the expansion of the footprint of the Digital Humanities to the subcontinent and to continue the collaborative ethos of DH in this ongoing exchange between India and Australia. We will provide an overview of the current state of the Digital Humanities in India and Australia and where the scholars from these research contexts fit in the global sphere of Digital Humanities studies.

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The countries of the Indian Rim (Australia, India and South Africa) are relatively new players in the Digital Humanities (DH) space and bring innovative research ideas and methodologies that could potentially influence how DH is conceptualised internationally. While this volume reflects Indian and Australian DH scholarship, and represents only two nations of the India Rim, our collaboration was conceived with the aspiration of including South Africa. We would therefore like to retain this title to reflect this original aim, and to suggest an ongoing interest in furthering this research to include South African scholarship in future work in the Digital Humanities.

This book represents a compilation of scholarship in the field of Digital Humanities by academics who teach and research in India

and Australia. The field of Digital Humanities is still in an early stage of development, and while it appears to be dominated by Western countries to date,[1] this volume would set a departure from this tendency by reflecting a prior and ongoing collaboration between India and Australia. The groundwork for this volume was laid by a Ministry of Education, Government of India-sponsored SPARC (Scheme for the Promotion of Research Collaboration)-funded research project, "Digital Humanities in the India Rim". SPARC encouraged documentation of the best DH practices internationally and how these might be adapted to the Indian and Australian national contexts. This enhanced DH learning and teaching in our respective universities and upskilled DH researchers. The dissemination of the research outcomes from this project, including seminars and workshops over these last four years, are in part absorbed, adapted and reflected in the contents of this volume, which also includes a comprehensive bibliography.

The Australian contributions to the volume are, in the main, from academics in the Western Sydney University Digital Humanities Initiative[2] (with one exception). The proliferation of DH across Australian universities is a feature of its growth in recent years, though WSU is marked, firstly, by both having the inaugural Professorship in Digital Humanities in Australia, and secondly by hosting the Alliance of Digital Humanities Organizations (ADHO) annual conference in 2015. There are other substantial innovations within the Australian context (for example, Australian National Library initiatives such as the massive media database *Trove*, or the innovative initiative of an Indigenous music database, *Paradisec*), that are too numerous to account for in this introduction.

This book showcases a range of perspectives from India and Australia and by Digital Humanities communities of practice found there. In essence, as a collaborative field of research, the Digital Humanities and the various works of scholarship in this volume seek to understand shared challenges, points of similarity and difference, and a robust exploration of problems and practices. The shared and divergent

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1   Notable non-western expansion of Digital Humanities scholarship is found in China as well as parts of the Global South such as Latin America.
2   See Chapter 2, Mapping Digital Humanities at Western Sydney University in this volume by Professor Simon Burrows.

colonial histories of India, Australia and South Africa have influenced their self-definition of Digital Humanities with emphasis on significant people and projects that have 'flavoured' the field in each region.

For example, drawing on Indian classical logic can lead to novel conceptualisations of the digital and of computation. Indigenous Australian traditions of representing and thinking about space can inform new ways of mapping, while traditional Southern African philosophies like Ubuntu can inform our practices of collaboration.[3]

Digital Humanities in India is in its formative stage and still has the potential to compete at the international level. By contrast, the North American and European DH landscapes are now well developed and are taken by many to define what the field comprises. Australia sits between these two extremes. There have been individual DH practitioners in Australia since the beginning of Humanities Computing (e.g., Burrows, 1987). As a field with a national body (the Australian Association for Digital Humanities, AADH), activities and infrastructure, however, it is still very new, and for this reason, still defining itself in the light of, and in some ways in opposition to, the international scene. Australia and India are, therefore, natural allies in learning from each other and disseminating innovative research ideas and methodologies of DH learning and teaching, and in understanding each other's shared challenges, cultivating innovative practices and contributing meaningfully to create new pathways and establishing dialogues in the field of Digital Humanities by moving beyond the more established Eurocentric traditions and practices. It is past time for India to consider forming a national body to represent Indian DH in the ADHO international committee.

The countries of the Indian Rim all have immense potential to make substantial contributions, and in many ways face similar challenges. There is an immediate need to look again at the approaches and methods of Digital Humanities by seeking inspiration in the newly developing research and learning practices of these regions.

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3   Relation-oriented AI: Why Protocols Matter for Indigenous AI. Retrieved from https://dhdebates.gc.cuny.edu/read/debates-in-the-digital-humanities-2023/ section/98dc1c8f-8583-4428-ac84-17ff072bdcad; Indigenous place names and meanings now on Google Street View, retrieved from https://www.abc.net.au/ sydney/indigenous-google/8683718

From post-colonialism to decolonisation

The topics covered in this book have been influenced to some extent by the context of the shared and divergent histories of British colonialism to which both nations, India and Australia, have been subjected and have also responded. In the late 20th century, post-colonialism dominated scholarly inquiries that sought to recalibrate how colonialism was embedded in the uneven relationships between those engaged in knowledge creation in the West and the Global South. Driven in the main by the paradigm of "Orientalism" (Said, 1979), post-colonialism sought to demystify the myths and mystifications of the West in regards the "Orient", or what we would now term the Global South. Post-colonialism emanated from non-Western scholars who like, Said, were educated in elite Western tertiary institutions with a focus on literary studies.

Decolonisation has moved the dial further in recent times by sharpening the post-colonial critique and extending its work to include not only demystification but a kind of co-creation, where the remaking of the idea of a person's ethnicity is a key feature of a decolonising process. For example, Aboriginality can be seen as a "thing in-the-making" where a person's subjectivity and identity is secured on its own terms as a feature of resistance to dominant ideologies. As Rigney (1999) notes:

> [t]o arrive at a rationale for liberation epistemologies and Indigenist methodology we must first understand the colonial history of Australia and its impact on the Indigenous Peoples and their struggles to be free from colonialism... (p. 110)

For the Digital Humanities, this decolonisation paradigm is felt most emphatically in the decolonisation of archives and "de-colonising methodologies" (Smith, 1999). Decolonising archives involves, for example, rethinking the idea of Aboriginality and as a "counter-archive" telling a counter-story about who benefits in the pursuit of knowledge. As Professor Patti Lather states, "[l]ooking through the eyes of the colonised, cautionary tales are told from an indigenous perspective, tales designed not just to voice the voiceless but to prevent the dying— of people, of culture, of ecosystems" (Lather in Smith, 1999).

Overview of the book

The book is divided into three sections Part 1, Digital Humanities: Institutions, ethics, politics; Part 2, Digital Humanities and literature; and Part 3, Digital Humanities and technology: Methods and methodology. The three parts bring together chapters that have points of contact in approach and/or thematic content. The chapters in Part 1 offer general engagements underpinned by problem-exemplars to provide insights in relation to institutions where DH research has made an impact, examples of where ethics are examined in specific DH-related cases and where political concerns have been put into play by DH projects. Part 2 features chapters where DH is applied to literary concerns. It features predominantly (though not exclusively) Indian authors and in this sense suggests a strong focus for DH in current Indian DH scholarship. The chapters in Part 3 are focused on methods in which certain technological affordances, such as databases and other forms of data analytics, are prominent. Examples in this part show an articulation of technology within DH that spans a wide range of research interests. The chapters in each part show a distinctive focus and thematic interest but with an affiliation with the world of Digital Humanities research.

The following chapter breakdown offers a summary of the contents of the three parts and how the authors chose to isolate a problem-exemplar with their specific form of DH scholarship. In Part 1, Chapter 2, "Mapping Digital Humanities at Western Sydney University", Professor Simon Burrows describes and reflects upon the Digital Humanities experiment at Western Sydney University. It explores how the Digital Humanities Research Group (DHRG) has confronted the challenges of innovating a new research group to build capacity within their own unique institutional context. Western Sydney University is a particularly appropriate and mature subject for such a case study because it was home of the first Chair and earliest formally constituted research cluster in its field in Australia. The chapter charts the triumphs and disappointments of the university's Digital Humanities Research Group from formation to maturity, as it has struggled to establish a precarious financial independence whilst nurturing an emerging and diverse group of scholars and their digitally empowered projects.

In Chapter 3, "Netflix and the shaping of global politics", Diane Colman begins by outlining the meaning and importance of soft power in

global politics and briefly detailing the consideration of popular culture in the International Relations (IR) discipline. She then provides a detailed description of the research design of her database project, taking account of positivist conventions in qualitative studies by utilising the hybrid methodologies in a Digital Humanities interdisciplinary approach. Colman's case study is Netflix, which, as a leading entertainment streaming service, has considerable capacity to influence its audiences' ideas about the world, projecting immense soft power worldwide. Examining the ideological basis of this power is important in understanding world politics. The creation of a comprehensive database that categorises all "Netflix Original" films according to a carefully selected set of ontologies provides the epistemological tools necessary to analyse how IR may be influenced by the "soft power" of streaming services.

Chapter 4, "Digital justice: Interactions and rituals in the virtual courtroom" is authored by David Tait and Meredith Rossner. Having completed several projects in relation to digital justice, the authors offer their analysis of how courts have increasingly made use of video technologies to allow witnesses and defendants to take part in cases remotely. The use of video technologies increased dramatically with COVID-19. Not only did individuals appear on screens in physical courtrooms, but courts themselves sometimes became entirely virtual in connection with their cases and those (appellants, witnesses, etc.) related to them. The chapter examines what happens to courtroom-based interactions and rituals when the physical courtroom disappears. For example, it compares the standard format of a video conference where participants are isolated into boxes in a "gallery" with an alternative approach where participants are brought together into a shared space.

In Chapter 5, "Artificial Intelligence ethics and empathy: How empathic AI applications impact humanity", Linda Aulbach argues that Artificial Intelligence (AI) has sparked huge debates about its impacts on individuals, cultures, societies and the world. Through AI, we can now support, manipulate, or even replace humans at a level we have not seen before. One of the core values of happy and thriving relationships between humans is empathy. The ability to understand another person's feelings builds the foundation of human connection. Within the past few years, the field of AI has taken on the challenge of becoming empathic towards humans to create more trust, acceptance and attachment towards its applications. There are now "carebots" with simple empathic chat

features, which seem to be 'nice to have', but there is also a concerning development in the field of "erobotics"—the next (empathic) generation of sex robots, made for humans to fall in love with. The increased emphasis on feelings within AI leads us to focus on how good or bad empathy really is in an AI app or platform. On the one hand, there is a high risk of manipulation of humans on a deep psychological level, yet on the other, there is also reason to believe that empathy is necessary to truly reach an ethical 'gold' standard. This chapter examines empathic AI and its ethical issues with a focus on humanity and the posthuman. It will also touch on the question as to what happens if AI becomes more human than humans themselves ever contemplated.

In Part 2, Chapter 6, "Digital hermeneutics: Interpretation and the interpretational machines", P. Prayer Elmo Raj presents hermeneutics as a philosophical theory of interpretation and communication in the context of challenges to existing and emergent digital communication and information networks. Digital hermeneutics can be understood as the interaction between hermeneutics and digital technology. In a society where communication and information networks are digitally based, Raj asserts that one of the major challenges for hermeneutics is its social relevance and interpretation of knowledge. The pseudo-critical refutation of hermeneutics in the context of digital technology is common. To encounter the challenges offered by digital technology, Raj channels Heidegger's (1966) concept of a "productive logic" in deciphering the dynamics of digital technology and its relationship with human existence.

Chapter 7 features the work of Gopa Nayak and Navreet Kaur Rana, of O.P. Jindal Global University. Their chapter is titled "'Aboutness' and semantic knowledge: A corpus-driven analysis of *Yajnavalkya Smriti* on the status and rights of women". In this chapter, Nayak and Navreet utilise corpus linguistics, under the broad umbrella of Digital Humanities, with a focus on the computational analysis of text to derive semantic knowledge. They draw on Martin Phillips' concept of knowledge-free analysis and the proposition of 'Aboutness' (1985), to analyse a historical corpus developed from *Yajnavalkya Smriti*, the literary text originally written in Sanskrit and translated into English. The text is about the general code of conduct prevalent in ancient Indian society and is the basis of many modern Indian laws. The analysis focuses on semantic knowledge, free from any bias or prior information, and aims to help us understand the validity of laws, especially those pertaining to women's status and rights

in modern India. The study consists of an (approximately) 36,000-word corpus, but it has the potential to become a prototype for large-scale studies using concordance, collocation, and semantic prosody.

In Chapter 8, "Building a book history database: A novice voice", Rebekah Ward tells the story of how she began a doctorate in book history and then, with minimal training, came to build a bespoke relational database to enable and complement her written thesis. This research was to be based on the Angus & Robertson Archive, held by the State Library of New South Wales (SLNSW), now containing over a million documents across hundreds of boxes. While finding a way to manage the sheer volume of records, Ward gravitated towards DH tools. In particular, she saw the value in linking two sub-series of archival materials (scrapbooks of reviews, and distribution ledgers). These collections were clearly related but remained distinct from each other in the physical archive. The solution to Ward's challenge was Heurist, an open-source data management application designed specifically for Humanities researchers. The platform can handle long, plain-text fields and interlinked heterogenous data; it is mutable; and it offers inbuilt searching, filtering, analysis and visualisation capacities.

Chapter 9 brings us to the work of Ritam Dutta with his humorous title, "Are we ready to 'screw around' together? Barriers to the institutionalisation of DH pedagogy in literature departments." This chapter focuses on the challenges of the learning environment in traditional teacher-centric classrooms and on teachers' beliefs about how students learn or should learn in the context of the limitations of Digital Humanities pedagogy in India. Dutta argues that DH is generally understood as an exploration of the "intersection between information technology and humanities," and has grown as an interdisciplinary field of research in Humanities over the last couple of decades. Nevertheless, studies on DH reflect on the difficulties with defining and locating the subject within discipline-specific boundaries. Because Digital Humanities research spans topics as diverse as archives and social media, it poses substantial questions about where it should sit in the curriculum in contemporary learning contexts. The question that Dutta asks is: can we conceptualise a role for DH pedagogy in India beyond skill-building to that of helping students to critically engage with socio-political concerns?

In Chapter 10, "Literary masterpiece as a literary bank: A digital representation of intertextual references in T.S. Eliot's *The Waste Land*",

Aditya Ghosh creates a repository where all the intertextual references of Eliot's poem *The Waste Land* could be stored. The chapter models a digital representation of all the intertextual references to which T.S. Eliot's *The Waste Land* alludes. It encompasses the references Eliot incorporated into his masterpiece from Classical and Biblical texts to those from contemporary literary texts, followed by an inventory of post-*The-Waste-Land* texts that borrowed from it in turn. There is an intellectual argument to be had about the changing paradigm of critical research work that is undertaken within the framework of digital technology. But with the prerequisite of an archival repository and the capability to quickly access multiple texts from various resources, this technology can facilitate the creation and dissemination of knowledge in the field of the Humanities.

In Chapter 11 "Hypertext as a 'palimpsestuous' construct: Analysing Shelley Jackson's *Patchwork Girl*", Lopamudra Saha analyses how the hypertext fiction, *Patchwork Girl* (1995), functions as a palimpsest in its postmodern multimodal rewriting of the myth of *Frankenstein; or, The Modern Prometheus* (1818). The traditional idea of the 'palimpsest' as a parchment is revised when it is newly introduced within a multimedia context. This enquiry also evokes the changing dynamics of readership emergent within this new media context, highlighting how hypertextual reworking promotes ideas of multivocality, fragmentariness, non-linearity and interactivity through the application of an intersemiotic paradigm.

Chapter 12 concludes Part 2 with "Narratives of the self: Comments and confessions on Facebook" by Rimi Nandy. Nandy argues that narratives are often structured around events, which are used to tell a story. The self is perpetually being constructed through these narratives of experience. Beginning with the anonymous messages sent using applications like Stulish, Sarahah and the earliest version of confession pages, Nandy identifies how commenting on the virtual self has undergone layers of transformation. The move from anonymity to identification indicates a change in the way identity is conceived. The chapter tries to situate the identity of a person in the context of the perceptions and responses of their online contacts or 'friends'. In contrast, the comments posted on Stulish are written by nameless, faceless authors in a striking similarity to confession pages. This research proposes to understand the reasons behind sharing such posts on Facebook, even if comments are negative in tone. The chapter references Anthony Giddens' concept of time-space 'distanciation' to

show how, through their narratives, multiple tellers are building the complex networked identity of the end user.

Part 3: Digital Humanities and technology: methods and methodology is begun by Chapter 13, "Code against code: Creative coding as research methodology" by Cameron Edmond and Tomasz Bednarz. This chapter details the authors' process of iterations of exchange between themselves and a text. This 'hacking' of the text becomes a critical practice as an engagement with the coded artefact. The chapter presents creative coding as a research methodology and interrogates its benefits and challenges via the so-called "*Irritant*" case study. Machine writing such as Chat GPT has risen in popularity recently, with machine writing seen as a subset of the creative coding discipline. Emblematic of the contemporary turn in machine writing is Darby Larson's *Irritant*. Impenetrable by traditional reading standards, the text is governed by code. The reader of *Irritant* faces similar challenges to the Digital Humanities scholar attempting to analyse large textual corpora. As such, *Irritant* becomes a useful case study for experimenting with reading methodologies. The authors approach *Irritant* from a computational criticism perspective, informed by the same creative coding methods that spawned it. Their objective is to reverse-engineer *Irritant*: scraping its repetitions and variables using Python within a live coding environment. In this way, the authors position creative coding as a research methodology itself, especially suited for analysing machine-written texts. The analysis opens more questions around how the exploration of *Irritant* fails to unravel the novel's code, but instead reveals even greater thematic depth.

In Chapter 14, "Digital Humanities for a different purpose", Miyuki Hughes, Madeleine Leehy, Julian Walker and Peter Mauch explore the recent application of DH methods to an Australia-Japan Research and Industrial Collaboration (DAJRIC) database, and assess their potential utility to a project that sits outside of traditional scholarly work. The primary objective of the chapter is twofold: (i) to evaluate the effectiveness of this approach, and (ii) to consider the scalability of the pilot database to accommodate numerous yet-unfunded Japanese-Australian research projects. By developing a Heurist database, the project harnesses the intuitive design principles that make DH methods so effective and appealing for scholarly purposes to users unfamiliar with these research fields as represented by the Australia-Japan research and industrial database. Throughout this process, the project team has discovered

the challenges of raw data, ontology development, and bilingual functionality that face a project of this scale, whilst also realising the potential of Digital Humanities' techniques to provide improved user interactivity and search functionality through identifying record types and their connections with each other, as well as data visualisation. These techniques, when applied alongside knowledge-organisation techniques, enable a scalable database that can organically grow thanks to hundreds of projects that will be entered in the future. As such, this project provides a valid example of how scholarly techniques within the Digital Humanities field can be applied successfully to projects that act as a gateway between academia and other sectors.

Asha Chand presents her work in Chapter 15, "Online dating: Transformations of marriage arrangements through digital media technologies in Australia's Indian community". Chand's research is focused on marriage and migration as twin global forces that have reshaped Australia's identity from a White nation to a multicultural melting pot. India has become Australia's largest contributor to immigration, with 673,352 permanent migrants, second only after England (Australian Bureau of Statistics, 2021 census). This study, a networked, mobile and global account, examines the use of new media technologies in finding potential partners for marriage, known to the Indian diaspora as a way of life. The research attempts to gauge an understanding of the sociological impacts of hyper-communication, especially the use of dating sites and social media such as Facebook, in forming intimate relationships online. The significance of the study emerges as it attempts to understand the issues of cultural negotiations specific to the Indian community, which is becoming visible through statistical data as well as through its social spaces in Australia. Bollywood, which has wowed Western societies, coupled with India's resurgence as a superpower, adds value and importance to this research.

Chapter 16 concludes Part 3 with "The digital mediation of film archives from the Strehlow Collection" by Hart Cohen. This chapter is concerned with the history of the Strehlow Research Centre (SRC), with a special emphasis on how the film collection has been handled at various points in the institution's history. As an archive and research centre, the SRC has evolved from an earlier series of controversies around cultural ownership to being a leading innovator in the digitisation of parts of its collection. The digitisation of the films of T. G. H. Strehlow has led the

collecting institution sector, not only in technological innovation but also in outreach and engagement with its Aboriginal constituency. The example of the Strehlow Film Collection and its evolution as a database and focus for community engagement resonate with the issues that have recently emerged around archive/counter-archive projects and participatory archives, which have revived the role of archives in recovering spaces of cultural memory and cultural practice. The chapter will test the proposition that "… the archive as a site for creative intervention, enables new possibilities for preserving and representing individual memory within a larger historical consciousness" (Kashmere, 2021).

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