

Practices of Digital Humanities in India

This book represents examples of innovations in digital humanities (DH) efforts across India while theorizing the disparate challenges and its negotiations. It examines DH projects that have spanned private and public efforts, institutionally sanctioned lab-work, and crowd-sourced programmes of public significance and shows how collectively they demonstrate the potential paths of DH in India.

The essays in the volume highlight the two fundamental challenges for the DH – acts of curation of new scales and the creation of platforms that can assist in the collation and analysis of these digital archives – and changes in learning behaviour. They examine the transformation of the university, and the opening up of new relationships between knowledge and audience in concomitant spaces of scholarship such as libraries, archives, and museums. The volume brings to the fore citizen efforts across the globe to document, record, and preserve as well as create new avenues of study and forge networks of scholarship that look very different from those of traditional academia. It also foregrounds the challenges of location and addresses the questions of how DH should be taught in India and of building digital infrastructures.

A go-to guide for DH efforts in India, this book will be an essential text for courses on digital humanities, library and information sciences, and the future of experiential learning.

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Practices of Digital Humanities in India

Learning by Doing

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and Nirmala Menon**

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Introduction

Maya Dodd and Nirmala Menon

Tools, Texts, and Theory

In 2016, IIT Indore did a two-week Digital Humanities (DH) course titled “Digital Humanities: Tools, Texts and Theory.” These were, in our minds, very clear and neatly classifiable categories and we taught them as such for the researchers who joined us from different institutions around the country. Today, after many lectures, workshops, and projects that the two of us, as well as our fellow researchers in DH, have navigated, the affordances of DH are not as neatly differentiated as they were in our minds back then. What this means is that knowledge infrastructures intersect in real and meaningful ways with all three: Tools, Theory, and Texts. It is even more pertinent that a text is often as much of infrastructure as a tool, and both come embedded with theoretical assumptions. And all of that in effect means that knowledge infrastructures for us are a porous, unstable package of multiple situatedness of geography, institutional affiliation, and other unique circumstances.

Edwards et al. in 2010 defined *knowledge infrastructures* as “robust networks of people, artifacts, and institutions that generate, share, and maintain specific knowledge about the human and natural worlds.” By this definition, knowledge infrastructures include the networks of hardware and software and span education, intellectual property, sustainability, the academic publishing industry, multilingualism, access, equity, and yet more. For this introduction, we will limit ourselves to digital humanities and its interactions with the theory and praxis of the word *infrastructures*.

In considering what constitute knowledge infrastructures in India, the questions that engaged us may be listed as:

- Are the ‘tools’ used for humanities research only ‘infrastructure’? What about the languages, locations, and leverage of access to and development of these ‘tools’?
- Are the ‘texts’ available for pedagogy and research just texts or are they equally a part of a knowledge infrastructure?

- How do we “do” theory in India, if the contexts of the theoretical vocabulary are far removed from the affordances of DH in India – the realities of infrastructure, funding, and research ecosystems of the global south?

For us, therefore this book is part of a palimpsest of building a knowledge infrastructure for Digital Humanities in India and the accompanying scholarship and scholarly literature on it. *Knowledge infrastructures* means a lot of things in the higher education ecosystem – it includes, apart from the physical infrastructures, curriculum development, pedagogy and the slow, gradual and often frustrating pace of evolution of projects that span new inter and transdisciplinary areas of research and work. Digital Humanities in India, it seems to us, is at that inflection point when we see a convergence of conversations, projects, and problems that together weave a tapestry of DH in India. It is perhaps time to bring different strands together and understand, untangle and forge those disparate experiences and conversations to examine whether there is an emerging language, vocabulary, and terminology that has begun to define the contours of DH/dh research, challenges, and outcomes within academic and non-academic spaces in India. We say, India, deliberately, not with a view to separating ourselves from the global South but to assume solidarity while also recognizing that each of the geographical spaces has individual costs and challenges. Building on the earlier milestones, *Exploring Digital Humanities in India* edited by Maya Dodd and Nidhi Kalra, followed by Nishat Zaidi and Sean Pue’s *Literary Cultures and Digital Humanities in India*, and Souvik Mukherjee’s *Videogames and postcolonialism: Empire Plays Back*, we thought it is the right time to delve deeper into the practice of Digital Humanities in the Indian context by studying the thoughts and processes that guide several excellent projects that populate this volume.

Making Digital Infrastructures

Digital infrastructures have to be part of the “making” and “imagining” of DH in India. As we were working on this volume and learning from the different projects that energize these pages, the development and the ways in which these efforts were compiled, collated, or funded make clear that even these terms have to factor in issues of language, lack of standardized tools, and the ever-prevalent paywalls that make even the access to academic infrastructures uneven and exclusionary. How then can digital projects, by the people and for their audiences, ever come into the world at all? What are some of the ways in which we configure the innovation inherent in the implementation of these projects and what can we learn from the practices that worked or did not work for these projects? And importantly, how do these varied and complex ways of navigating these unstable infrastructures impact the way we theorize Digital Humanities in the larger global south and learn from these examples from diverse situations in India? We will come to theorizing these concerns in this volume, but it is only by vocalizing the journeys

of these works has our understanding of what it means to “do DH” in India made clear the fact that academic ceilings cannot define the imaginations that abound in the field. The journey of DH in India is one made possible by a diversity of actors with different stakes for their communities, made possible by sheer audacity.

It is when these collective efforts come together that we can draw from a rich theoretical vocabulary that serves as a knowledge infrastructure to address an Indian classroom and context. Before we have the elaborated theoretical frames for DH in India, we have the practice. While early public history efforts such as Project Madurai (dedicated to Tamil writing since 1998) and the Panjab Digital Library (initiated in 2003) were ground-breaking in their linguistic achievements, what makes them truly noteworthy is that they were voluntary efforts. Today as knowledge production becomes crowdsourced and more democratised, we are moving further away from the big lens of the nation-state as embodied in large-scale heritage projects like Google Arts and Culture or Sahapedia to also be able to hear the smaller voices of lesser visible communities. Often, traditional memory keeping for the Indian nation has happened through official archives and are the results of colonial administrative selection. In contrast to this stands what is honoured by popular memory, and these digital creations are often made by popular need that has found an affordance in the digital. Elisions and absences from archives of the state and of the powerful are now being narrated by private actors, often with digital tools. While private efforts like the Partition Museum and the Remember Bhopal Museum commemorate uncomfortable historical events, with digital tools we are now also able to hear voices from yet more remote margins. The newer forms of access and relay have enabled a proliferation of archives and witnesses that amplify other voices in the telling of history. It is now possible to embed voices from varying languages and sites of dispossession. From the margins, we behold the making of a larger public sphere through the profusion of digital and community archives. Consequently, digital storytelling is also changing which narratives are voiced, and often involve techniques of oral history and living persons.

Memory Making and Digital Amplification Across Media and Languages

In acknowledging similar impulses in the subcontinent, just as Nepal Picture Library’s aim to create a visually dense version of Nepali history for and with public audiences, in India efforts like the Indian Memory Project have also sought to display a public record of crowd sourced memories. We live in a time where newspapers are increasingly placing their collections behind expensive paywalls and the public’s right to remember is under risk. To increase public engagement with the past and to also better preserve what is at risk, it is imperative that the display of memory prioritize digitization for access while also attending to the conservation of archival materials. It is

interesting that the South Asian American Digital Archive, begun in 2008, is now 15 years old, and even the South Asian Canadian Digital Archive established in 2017 to chronicle over a century of South Asian presence in Canada is at the foreground of keeping living memory of South Asian diaspora in the digital commons. Within India, certain collections like Khuda Bakhsh Oriental Public Library, Himalayan Digital Library, and the Rare Book Society of India have amplified paper archives by receiving digital display.

AuQ2

Beyond living memory is also the question of digitally rendering archival material. In a time of information overload and generative AI, it seems odd to mention archival scarcity. It would seem that since the digital also affords endless replication, nudging questions of the generative already assumes a dataset. As we know this is far from a given. Apart from state initiatives, there have been several small efforts made possible by various grants. For example, through the Endangered Archives programme at the British Library, persons such as Professor Sukanta Chaudhuri, who has received 4 grants and digitized 11 Bengali ‘Popular Market’ chap books, 467 Popular Market Bengali Books dating from 1870 to 2005 and 385 volumes of early 19th- and some 20th-century Bengal Drama (held by the private collector Dr. Devajit Bandyopadhyay), have been preserved. Similarly, Dr. Rahi Soren has received a grant from this programme that helped locate and digitize early Santali periodicals published between 1890 and 1975 in Eastern India and provide new insights into the print cultures of Santali heritage. These examples though are all instances of archiving by triage. The fact is that anecdotal and personal networks have formed the basis of the prioritization of these archives and there has not yet been an exhaustive survey of the kinds of materials in need of urgent preservation through digitization. In this regard, the goal of this project is different from that of the state-initiated National Manuscript Mission, where digital display and recording were secondary to the act of material preservation of fragile paper manuscript materials.

AuQ3

When it comes to accessing newspapers, there are collections of news archives held by the Library of Congress, Centre for Research Libraries, or the University of Chicago or UCSB, but again these are not accessible to those outside of these institutions. The case of *Ideas of India*, a digitized index of over 400 journals published in English during colonial India, went extinct since 1947. On his site, Rahul Sagar, curator and website creator, writes, “As the century progressed . . . by founding local counterparts to these British periodicals [,] [a] vibrant public sphere now took shape as legions of newly minted graduates contributed and subscribed to these English-language periodicals. The most notable of these periodicals included *Bengal Magazine*, *Haris Chandra’s Magazine*, *Mookerjee’s Magazine*, “*The Indian Magazine*.”

Meanwhile, in another view of the multilingual nation in the 21st century, that collapses print and sonic cultures, in a digital public sphere, Spotify India is available in 12 languages, including Hindi, Punjabi, Telugu, Tamil, Malayalam, Kannada, Marathi, and Bhojpuri. “We are curating music in multiple languages and working with independent artistes and the film

industries from each of these regions. The goal is to have a presence in every language in the market.” Its representative, Batra, reckons, “In India, the focus has primarily been on film, and not artiste-centric music. Our mission with Spotify India is to drive consumption and popularity of artiste-driven music.” Even on Anchor, a podcast creation tool, there are podcasts being created across 12 to 13 languages. “We realised this is a segment that has seen a lot of interest. To encourage this further, we launched a mentorship programme, where we take creators through scripting, editing, sound design, marketing and finally publishing,” adds Vaidya. This programme is across Tamil, Telugu, Malayalam, Bengali, and Hindi. Through this, Spotify saw a lot of first-time creators across professions such as doctors and bankers, talking about a diversity of topics and mostly from tier 2 cities. Similarly, indigenous answers to multilingual publics places Koo, the Indian answer to Twitter, in a new light. In December 2022, about 60% of Koo’s users were Hindi speakers, with a 20–20 split in people who used it in English and other regional languages. ChatGPT, though, works most effectively in internationally spoken languages like English, and Koo is counting on its own platform to help ChatGPT bridge the gap for local languages.

The Present Volume

The book is divided into three broad sections: Digital Pedagogy, Tools: Design and Development, Community Projects. Each of the sections however has the overarching theme of building and/or practice. The first section on Pedagogy begins with the inspiring and novel, yet simple idea of building a people’s archive with PARI (People’s Archive of Rural India). Pratishtha Pandya in her chapter *The Material in the Digital* discusses the way in which PARI reconfigures the public face by positioning itself at the interface of the digital and the human, building a platform for marginalised sections of society to tell their stories. In so doing, PARI shows a way of building archives that recognizes the agency of the storyteller and retains her ownership of that narrative.

Chapter 2 cites Mayurakshi Chaudhari and Chiranjoy Chattopadhyay’s experience of building a Digital Humanities Curriculum and programme at IIT Jodhpur. In their own words, the curriculum they develop “includes contextual calibration and triangulation patterns while dealing with data, knowledge structures, and technology to reflect on and solve DH problems.” Chaudhari and Chattopadhyay underline the need for a DH curriculum across the country to be evolutionary and contextual – in other words, DH curriculum need not be uniform or homogenizing across institutions and each institution can develop its own trajectory. This is especially important in an education ecosystem like India’s where students have to appear for common exams conducted by the UGC (University Grants Commission, CSIR, etc.) and therefore face a fairly overlapping/standard syllabi across institutions.

If PARI is public pedagogy and IIT Jodhpur an example of a DH programme in a research institute, Farah Yameen and Bhanu Prakash, in their chapter “Digital Archiving on the Intersections of Academia and Activism,” explore that in-between space between an institutional set-up and activism. The chapter examines the process of acquiring and cataloguing this collection for an online presence. The authors through a reading of the Omeka platform and its scale and the democracy archives give us an insight to what it means to building an archive consciously that is ethical, accessible, and affordable for a non-archival researcher and the data mining expert. Venkat Srinivasan looks at the archive as a pedagogical tool through the NCBS archive, which is a collecting centre for a history of science in contemporary India. Built as an archive of the institutional history, the NCBS archives focus on building capacity and public awareness through education, training, and programming. The project has the embedded objective of reimaging archives as a space of public commons through engagement, inquiry, and dynamic interactions. In the chapter, Srinivasan dwells on “education” as an essential element to not just preserve the archives but to continually keep it relevant for coming generations that will in turn become the incentive for preservation and evolution.

The final chapter in the Pedagogy section is a delightful project by Arjun Ghosh that traces the migration patterns of important personalities using their birth and death data to visualize these patterns. Ghosh defines personalities as figures in various fields like theatre artists, movie stars, and writers. His analysis reveals, for example, that the colonial capital of Kolkata started losing its importance as a cultural hub when artists from western Punjab settled in Bombay. Similarly, the southern cities of Chennai and Bengaluru have increasingly become the hub for artists from southern India in recent times. Cities like Pune have also (in spite of Bombay being in the neighbourhood) carved a cultural space for themselves that attract artists and academicians in substantial numbers.

The second section of the book “Tools: Design and Development” begins with Saniya Irfan’s experience with the Sketch *Engine* tool and its application through a reading of Shibli Noman’s investigation of Urdu *Marsiya*. The Urdu *Marsiya* or elegy has been regarded by critics to be a space of cultural and intellectual expression. The author finds that the interpretation of the computational analysis of the corpus fits more or less with the more traditional analysis using literary criticism. The example therefore means that distant reading for a collection of texts can be done on scale to examine patterns across texts in a similar genre.

Sayan Sanyal’s chapter “Open Database Research Platform for Archaeology, Anthropology, Cultural Studies and Digital Humanities” is a linguistic work that attempts to build a comprehensive archival database of local phonologies to get a sociolinguistic abstraction of a defined region. The project further aims to link anecdotes with annotations to create an open access digital dictionary of colloquial terms used in selected anthropological

and cultural research datasets. The Dictionary of Colloquial terms or DCT includes a dictionary metadata and word-region mapping; a user can also suggest new terms or give extended uses or feedback for existing terms.

In yet another linguistic project, Shivakumar Jolad and Aayush Agarwal's chapter "Mapping India's Linguistic Diversity and Exclusion in the Indian Census" maps and computes the linguistic diversity of India (LDI) at the national and state levels. Using LDI-language and LDI-mother tongue, the authors demonstrate that census classification of the mother tongue and its homogenization under dominant languages undermine linguistic diversity. Through various datasets and visualizations, the authors argue that exclusion of languages and mother tongues based on numerical thresholds disregards the languages of close to 19 million speakers in India. While there is scholarly consensus that states in India are hardly monolingual, the chapter offers dataset visualizations that present to the reader the cultural repercussions of language policies of the state.

The last two chapters of this section focus on a much-needed study of Heritage and historical data. Neha Gupta, G. S. Abhayan, et al. in their chapter "Digital Methods in the Collection, Management, Reuse, Sharing, and Circulation of Indian Heritage Data" open a conversation about how the large volumes of archaeological documentation such as field notes, maps, and drawings are preserved and/or disseminated or used as research paratexts. The chapter gives us an eye view of methodological changes in the ways in which archaeologists manage this data after a project. How is it stored, shared, and added to a palimpsest of digital information for corpus creation or data archiving and mining? The authors discuss unique challenges especially for sites that are destroyed and therefore these data are not reproducible and are a very valuable resource for future research and study, the infrastructural training and cost of setting up GIS systems which in turn leads to intellectual ruminations of issues such as data governance, access, and gatekeeping by the state or private organizations. Furthermore, with respect to field notes and community data, the owners of the data (the community members) often do not have access or say on how the information is used.

If scrutiny of archaeological data and information throws up dilemmas, Srijan Sandip Mandal's chapter looks critically at the practice of doing public history in the final chapter of this section "The Promise and Perils of Public History." As co-creator of a historical video chatbot named "Hukam Singh" for RadBots project, Mandal argues that bot-based history is a contradiction in terms. He argues that responses generated by a historical bot are incapable of drawing on a critical examination of the sources relevant to that figure or period. However, Mandal is careful in cautioning against a dismissal of chatbots as he argues that they can be a promising pedagogical tool for learning and teaching of historical thinking. He shows that these bots can be very useful for introducing techniques where a learner can quickly and reliably verify information by the responses generated by the bots.

Creating Digital Community

From the generated to the embodied, the final section, “Community Projects,” reflects the ground reality of digital humanities from below. Can academics converse with the public in ways that are engaging, not simplistic, and insightful not pedantic, while being detailed and relevant? Can collaborations across communities produce writings that offer critical support to publics and collectives engaged with political questions of the present? These are some vital questions posed by the Khidki collective, a group of academics engaged with the area of the Deccan (Chapter 11). This collective is concerned with some fundamental questions around the structures and practices of knowledge production. How can academics do collaborative, collective work outside the known intellectual confines of the university at this specific historical conjecture in India? Their chapter kicks off reflections on the challenges of translating research and academic insights into public-facing work. Similarly, the work of the heritage sector showcased in Chapter 12 demonstrates how the evolution of digital media has changed how we share knowledge, engage, and interact with information and the effect this exchange has on popular culture. In education, as well as the GLAM (galleries, libraries, archives, and museums) sector, digital approaches to knowledge creation offer a unique possibility of breaking through the long-existing silos. Medhavi Gandhi writes that “digital Humanities projects thus offer a scope for meaningful contribution to preserving cultural heritage and navigating information in a digital world while bridging the gap between the education and cultural sector.”

The understanding of Gandhi’s illustrations of popularly conducted DH works points to an understanding of how digital technologies are shaping humanity today while giving rise to a creator culture. The chapter explores how different digital tools, platforms, and modes of engagement are being used to facilitate participatory practices. Some of the formats she describes entails the use of Hackathons, Wikipedia Editathons, Transcribathons, and Mapping Projects; digital tools like StoryMaps and practices such as GIF and Meme making, social media, which offer ways for citizen participation and collaboration with GLAMs.

An example of an embodied use of the digital is served up in Chapter 13 by the creators of a digital journal *On Eating* (www.oneating.in/) that hosts across many Indian languages various cultures of eating that characterize the Indian subcontinent. In this multilingual genre-agnostic journal, they feature stories about various eating cultures in India to create a journal of contemporary writing about eating, food memories, and the day-to-day functioning amongst other aspects that keep it alive.

In a similar vein, where personal struggles become public memory, Chapter 14, on the *QAMRA Archival Project* at NLSIU, enables introspection upon the role of digital technologies in archiving contemporary queer histories in India. As the archive today is emerging as a site for experiments

with ideas of access and counter-hegemonic public history, technological interventions in these archives are being challenged by their diverse materialities, sensitive content, and contentions between the private and public spheres. This chapter throws light on the unequal power relations between the archive, the archived, and the user-researcher to ask, Can an informed use of digital processes make the archive an agent of equitable knowledge preservation and dissemination?

Invoking marginality of a different sort in Chapter 15, Vinayak Das Gupta brings to view an early example of a digital public memory project that houses artefacts pertaining to the history and memory of the Jewish community in the city of Calcutta. A small and almost forgotten community, the development of the digital project *Recalling Jewish Calcutta* saw the active participation of independent researchers, academics with institutional affiliations, students, and the wider public. In the building of this project, this chapter details several lessons learnt in the public capture of private memory. The making of this site illustrates the value of digital collections and the need for openness in scholarship to preserve our collective memory across communities.

The final chapter in the collection extends the scale of questions posed on representation by exploring the reasons for Adivasi women's lack of visibility in political, social, and leadership spaces by identifying the gaps in historical documentation and the manner in which these gaps are being addressed by indigenous women of Jharkhand in digital spaces such as social media and publication of journalistic and creative works in contemporary times. Through a theoretical discussion of the 'Rajni Murmu Controversy' and the poems and interview of Jacinta Kerketta, Chapter 16 highlights the growing importance of understanding Adivasi women's resistance and complex power relations in the production and interpretation of online texts and published texts. This chapter provides a nuanced analysis of the challenges faced by Adivasi women in terms of visibility and representation, as well as the ways in which they are utilizing digital media to challenge existing power structures.

With the explosion of the multilingual and the digital, the time has come to assess a changed public sphere and set of agents and effects in this brave new world. Just as Medhavi Gandhi's contribution maps, the evolution of how digital media has changed the ways in which we share knowledge, engage, and interact with information, PARI's reconfiguration of the public space lies at the interface of the digital and the human and has reworked our understanding of knowledge and agency in the context of archives. In both cases, DH projects can learn from their scope for meaningfully navigating information in a digital world while bridging the gap between the education and cultural sector.

An understanding of Digital Humanities also points to an understanding of how digital technologies are shaping humanity today while giving rise to a creator culture. Just as *On Eating* aspires to create an archive of various

cultures of eating that characterize the Indian subcontinent, several digital interventions are serving the cause of public history by offering a new intervention in spaces of memory and writing. From PARI to Khidki, from questions of language to science, bots to history, and collaborative creations such as the QAMRA Archival Project at NLSIU, the Democracy Archives hosted by the University of Gottingen, Recalling Jewish Calcutta, and many many more such instances offer up a range of examples of what digital humanities in India is and can still be.

Part I

Digital Pedagogy

1 People's Archive of Rural India

The Material in the Digital

Pratishtha Pandya

* * *

“Our services are needed more than before,” says Deepika. “We have to wipe the virus off these streets.” On March 22, when almost the entire country stayed at home under the ‘Janata Curfew’ Deepika and other sanitation workers in central and South Chennai worked throughout the day, sweeping and cleaning the metro, many of them covering for their friends who could not reach their worksite (Figure 1.1). Those who did had to come clambering on to vehicles meant to transport garbage or walking several kilometres.

“They have been told that they will lose their jobs if they make themselves absent now,” said B. Srinivasulu, general secretary of the Chennai Corporation Red Flag Union. They were essential workers. “People of course say they are grateful now, that we are keeping the streets clean and saving them from infections. We have had television channels interview us. But that is what we have *always* done,” says one of the women (Figure 1.2). “We have at all times worked to keep the city clean and risked our lives doing that.”

Some of those who enter sewers to clean them die of asphyxiation. In just the month of February in Tamil Nadu, at least five workers had died in the sewers. The sudden rise of the sanitation workers to the status of front-line worriers did not ensure either their living conditions or their immediate safety. They worked more than before and in more unsafe situations, while their voices remained, largely unheard. People's Archive of Rural India (PARI) covered their stories.

“Sarkar, tui jabab de, jabab de
Sarkar Jabad de, jabab de . . .
Government, answer this!
Oh government! Answer this! Answer this!
Why is the pregnant woman.
returning home alone,
walking thousands of kilometres,
step by step, barefoot,
with a baby in her womb?”

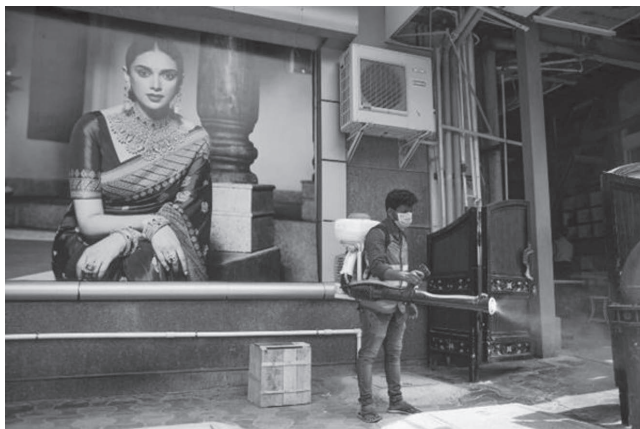


Figure 1.1 Sanitation workers during COVID-19. The photo from the story wages of ingratitude, published on People's Archive of Rural India on March 29, 2020. Photo by Palani Kumar.



Figure 1.2 Sanitation workers in Koyambedu, Tamil Nadu, say that they have struggled to keep the city clean even when it meant risking their lives. The photograph is from the story – wages of ingratitude, published on People's Archive of Rural India on March 29, 2020. Photo by Palani Kumar.

A video plays, showing a young boy inside the little room of his mud and brick house (Figure 1.3), swaying rhythmically and singing in Kosli, Sambalpuri language. Powerful words emerge from him and string themselves into an effortless narrative, a rap song; 27-year-old Duleshwar, known as Rapper Dule Rocker, in his village is from a scheduled caste community in Borda village in Kalahandi. “I expressed my anguish and anger through my



Figure 1.3 Rapper Duleshwar Tandi outside his home in Kalahandi with his mother, taken from the story *With rhyme and reason – rap song for migrants*, published on PARI on July 4, 2020.

rap,” he says. “When the lockdown was imposed in India, the poor of the country began suffering,” he explains. “Labourers lost their jobs, became homeless, and were starving for days. Thousands were forced to walk to their villages barefoot under a scorching sun. It’s not as if the government is not capable of stopping all this and providing help to the people – instead, they abandoned the poor of India. I am saddened and shocked to see all these. And I think we must question the government.” The voices of the people, the migrants stranded in the cities, walking many miles to return home, barred from entering in their own village, were recorded by PARI, a live journal, a digital archive.

In March 2020, when the people of the country were asked to shut down their lives at a few hours’ notice, except for essential service providers; when perhaps for the first time the ‘print, electronic media, telecommunications, Internet services, broadcasting services’ were included in the list of essentials; when major media houses, mainly corporate owned or controlled, were plotting and executing sacking of more than 1,500 journalists, extinguishing the chance of covering the utter distress across the country, PARI was doing what it knew best and what it had been doing for the past six years – archiving the ordinary people, the distress in rural India, its contemporary state.

At a time the country was gripped by the pandemic and the corporate media houses failed to speak the truth about the COVID numbers, and failing public infrastructure, PARI was bringing us the stories of stranded migrant workers, sugarcane cutters, farmers, farm labourers, Adivasis, Dalits, sanitation workers, ASHA workers, pastoralists, folk artists, crafts people, domestic

workers, barbers, vegetable vendors, brick kiln workers, fisher folks, construction labourers, cancer patients staying on city pavements, and others.

But this was not for the first time that PARI was covering ordinary people in such depth. Nor was ‘the digital’ a sudden turn inspired by the COVID-19 pandemic. The motivation for this live journal and digital archive since inception in 2014 has been to address the gap left by the coverage of the mainstream media that excludes the stories of more than 65% of Indians living in rural areas, to focus on labour, especially women’s labour in agriculture and otherwise, and lives of people in the countryside, in all its beauty and barbarity. To capture through documentation and archiving, the great processes of our times, the brutal transformation of the rural, the crisis in agriculture, the rise and stronghold of the regressive forces of our culture, the beauty of the fast disappearing, endangered schools of weaving, art, pottery, craft, folk performances, and more.

The mandate for PARI has been to make ways for rural Indians, the people who populate the archive, to access the site, to build it by facilitating them in recording their lives, testimonials, and stories of their skills, labour, livelihoods, fears, hopes, and to have a say in the making of this archive, their own history. It is in this well-thought-out process of archival creation that PARI seems to be situated within the space of Digital Humanities, a field or practice that continues to remain dispersed and loosely demarcated within the Indian academic context and practice.

There is little consensus on the meanings, the institutional stature, or present form of this entity called ‘Digital Humanities’ in India. One of the early definitions of this emerging field “refers to new modes of scholarship and institutional units for collaborative, transdisciplinary, and computationally engaged research, teaching and publication. Digital Humanities is less a unified field than an array of convergent practices that explore a universe in which print is no longer the primary medium in which knowledge is produced and disseminated” (Burdick et al., 2012).

The influx of the new digital and multimedia technologies along with the new forms and methods of curation on online archives and social media has led to a questioning of traditional archiving methods, the future of many text-based disciplines, as well as their modes of inquiry and practice. For example, a large number of scholars from various disciplines like philosophy, history, sociology, anthropology, etc., who see archives as central to humanistic scholarship as well as the existence of a democratic society, have begun to wrestle with the changing meanings and scope of the archive.

Jacques Derrida highlights that the process of archivization, governed as it may be by our primordial impulses of death and preservation, is also shaping our sense of past. The archive, when understood as more than a collection of historical records, as a metaphor for collective memory and remembrance, brings with it several challenges. Derrida and Michel Foucault are among the philosophers to have offered the most elaborate formulations on the concept of an archive. Rejecting its appeal to ultimate truth, objectivity, or an

unfiltered understanding of the past, Derrida explains how the structure of the archive is shaped by social, political, and technological forces that in turn shape our history and memory. “There is no political power without control of the archive, if not memory,” he argues (Derrida, 1996).

Michel Foucault with his understanding of the relationship between knowledge and power defines archives as a space not just of preservation of knowledge but of production, of knowledge creation and therefore not to be seen as self-contained linear spaces of objective historical records. The history of knowledge making has always been mediated by power and the way it operates in the world. And histories thus preserved and retold to become part of collective memories go through a process of careful selection. The information, or scholarship that remains outside this selection, thus remains excluded from the historical records. The shift to the digital has only led more urgency to the existing questions of selection, access, sharing, and collaboration. It is no longer enough to ensure that information is easily available online. But questions about what is being made available, how much of it is available, to whom and for what purpose are equally crucial in the process of creating a digital archive (Foucault, 1972).

PARI's move into the digital space is a self-reflexive undertaking, with a keen understanding of the questions involved in the process, the dangers inherent in such a practice, and an awareness of its intrinsic bias. It posits itself as a unique project in a media space in India, increasingly digitized and largely catering to the consumerist middle class. Sainath, the former long-time Rural Affairs editor of *The Hindu* has been keenly aware of the situation years before he came to be the founder, editor of PARI.

“Over the last decade,” Sainath says in a piece written in 2001,

the Indian press has been obsessed with the most trivial topics. Journalists are more interested in telling the world that India's burgeoning new middle class finally has access to McDonald's burgers and the latest inter-national designer labels. Or writing about the proliferation of weight-loss clinics and beauty contests. These are the topics that generate advertising revenue, not un-pleasant stories about starvation deaths and the lack of clean drinking water, even in the heart of large cities. India's contradictions are well-reflected in the press. On the one hand, you have overweight urbanites paying thousands of rupees to shed weight at clinics, while on the other, thousands starve to death. The media got the first story. They missed the second.

(Sainath, 2001, p. 44)

In the mass media obsessed with covering events, the processes that shape the country and fray at its democratic fabric were rarely covered. PARI's is a conscious effort to redress the gap created by the so-called national media that rarely covers much of the nation living in its villages. A study conducted by Vipul Mudgal of Centre for the Study of Developing Societies, Delhi,

claimed that the rural news in major Hindi and English dailies amounted to a miniscule proportion of 2% of their total coverage (Mudgal, 2011).

The 65% of India needed representation in the media, their distinct voice, and a free space to articulate their stories. PARI took the challenge of making this happen and began to focus on the most diverse part of the planet, Rural India. A site, with a free access to all, hosting stories, reports, videos, audios, photographs, creative work from and about more than 909 million people, living in distinct societies, speaking in well over 700 languages, engaged in diverse occupations, practicing their own arts and crafts, in communities with many cultures, literatures, legends, with their own means of transportation – it was beginning to sound insane and wonderful at the same time. Nine years later it is still the same, but much more important as violent hegemonic discourses of the state are tearing down the peaceful, democratic fabric of this nation in the name of religion, caste hierarchy, or other social exclusions.

Historians widely accept that the archive reveals the ways in which power is articulated, negotiated and even contested so that the collective memories and amnesia of nations and communities are shaped by the archive. The contemporary literature on archives has deconstructed the notion of archives as an unbiased holding of objective facts to be dug up by scholars of history. PARI comes with an awareness of its biases towards the constitution, the idea of a country that it encapsulated, and the poor labourers, women, Adivasis, Dalits, and all those on the margins, who still struggle for the equal and just treatment it promised them all.

And so, when in the 75th independence anniversary of our nation when the Government of India puts up a website under the banner of Azadi ka Amrit Mahotsav and does not include a single illustration or quote from a living freedom fighter, PARI celebrates, the cooks and couriers, farmers and landless labourers, domestic helpers, and homemakers. In its own archival section on the foot soldiers of freedom, PARI includes the stories of these ordinary freedom fighters that one has never encountered in history books – Adivasis, Dalits, OBCs, Brahmins, Muslims, Hindus, and Sikhs. The stories of less-known men and women, whose contribution got unnoticed, undocumented, and sacrifice remained unrewarded stand in a striking contrast to a selective, distorted, and almost mythical version of the history of our independence put forward by the State.

When the government and the corporate-controlled mass media, steadily and relentlessly, demonize the farmers at Tikri in west Delhi, Singhu on the Haryana border, Shahajahanpur on the Rajasthan border – as well as in Maharashtra and uses the harshest measures to crush down the largest, peaceful, democratic protest in the history of independent India, against the three new farm laws passed in Parliament in September 2020, PARI carries the stories of the farmer's fears, hopes, their collective demands and their sacrifices under one of most comprehensive coverage of the protests, where over 700 farmers lost their lives in the course of their historic struggle.

PARI, in other words, brings to us the stories of ordinary people, told in their own voices as multiple counter narratives, multiple little stories of real people playing against an overarching, oppressive, legitimizing, homogenizing singular narrative of the State. “I’ve always felt that it is impossible to engage properly with a place or a person,” as the Nigerian writer Chimamanda Ngozi Adichie says in one of her open essays,

without engaging with all of the stories of that place and that person. The consequence of the single story is this: It robs people of dignity . . . Stories matter. Many stories matter. Stories have been used to dispossess and to malign, but stories can also be used to empower and to humanize. Stories can break the dignity of a people, but stories can also repair that broken dignity.

PARI does not try to tell a single story. The multiplicity of the stories is a celebration of the diverse people and place that is rural India speaking in multiple tongues.

There is no place here for a postmodern suspicion of historical records, the objective desire for representation, or nostalgia for a direct and unmediated access towards the past. PARI is already attending to the gaps, silences, and studied omissions in the existing archives of the state and the media. With its claim to report the everyday stories of rural India, as well as to document the cultural, historical, and social process of our times, PARI is engaged in the threefold processes of documentation, dissemination, and the political act of knowledge production in the context of rural India.

The process of knowledge creation happens in 14 languages on this multilingual site. The linguistic diversity of India is something that PARI has responded to from the time of its inception. As Marlene Manoff notes in her essay titled “Theories of the Archive from Across the Disciplines,” that the archive is not simply a storage space for historical documents and artefacts. Archives have been known to form national consciousness and be used as a weapon in ethnic struggle, as well as many other political and scholarly realms (2004, p. 11). PARI’s massive translations programme certainly aims to bring, within its limits and levels, the nation together in terms of respect for, and equal treatment of, its languages. Every article on the PARI site is available in up to 14 languages – including English. The People’s Linguistic Survey of India tells us that this country has close to 800 living languages. But also that 225 Indian tongues went extinct in the past 50 years. Languages are at the heart of India’s multiple and diverse cultures and that it isn’t just the English-speaking classes who have a right to information and knowledge of a valuable kind. Democratization of knowledge is the chief force that drives PARI’s practice.

But then why digital? Why when the aim in the end is to reach out to the millions of ordinary Indians in rural India, where the digital divide is quite wide and prominent? PARI is certainly not oblivious to the fact that

the din around transformation in public access to knowledge in India in the post-pandemic era fades away quickly when one looks at the data around digital India. Who owns, who knows how to use, and who eventually gets to use digital devices and for how long often determines the form that our stories, documentaries, histories, and cultures take. It has studied the gigantic exclusion of the marginalized enforced by society, caste, class, gender, and region, getting further legitimized by the pandemic. It has carried stories of children suffering in education because they do not have smartphones to download PDFs sent by schools.

“The Indian elites can’t stop bragging about their prowess on the internet, our ascendancy as a software superpower, their foresight and brilliance in creating the world’s second super Silicon Valley in Bengaluru, Karnataka,” says Sainath, exposing the reality behind Digital India in one of his articles. But if one were to “step outside Bengaluru into rural Karnataka and see the realities recorded by the National Sample Survey: Just 2% of households in rural Karnataka had computers in 2018. (In the much-derided state of Uttar Pradesh, that figure was 4%.) A mere 8.3% of rural Karnataka households had any Internet facility. And rural [Karnataka] is home to 37.4 million human beings, or 61% of the state’s population. Bengaluru, Silicon Valley 2, accounts for about 14 per cent” (Sainath, 2020).

The digital divides are severe in India and run deep into other existing social divides. We have seen its worst wounds during the COVID-19 pandemic. But at the same time the number of people gaining some kind of access to it is far greater than 10 years ago. PARI needs to exist for the rural people in India. For the many who cannot access online education because they do not have network packages that demanded so much money to download documents all through the year.

During the pandemic, a large number of migrant labourers were buying expensive phones to transfer money back home to people. Many of them are buying phone with loans and borrowed money and the same people have also used their phones to send us their stories. At a time when a lot of work shifted on mobiles, and we were covering a lot of COVID-19 stories many people sent us information using their mobile phones – short video clips and photographs showing how things were at their end.

And finally, PARI is a free website with the interest of everyday people of rural India at its heart. This non-revenue, non-profit, journal and archive cannot afford to have a print version. But it is finding a very fast-growing traction with young rural people. Seeing that they are coming much more to PARI on phone/mobile than on any other device, it is organizing itself as a resource for a mobile-first world. Entertainment in rural India for the younger generation is also increasingly accessed over the phone. Today the population may be small, but it is an important part and will undoubtedly be bigger in time.

PARI is just about the launch the first ever archive of Adivasi children’s paintings from 57 schools in Odisha’s Jajapur and Keonjhar districts. The

archive designed with mobile as the first preference works better in this context since that is the surest, perhaps the only, way the children, parents, families, and schools can view the archive that also carries the videos of young artists explaining their painting. If this were hosted in print or in publication, the cost would run to crores of rupees. Digital gives them access their work and to others.

Colourful pictures, young Adivasi contributors, middle-aged women at the grind mill singing *ovi*, rural farmers bursting into poetry at a protest site, women farmers fighting climate change, transgender artists performing on stage – scrolling through the pages of PARI's digital archive is a multisensory experience, sometimes exhilarating, sometimes heart breaking. PARI is changing the idea of an archive in more than one way. Archives for long have invoked images of poorly frequented, imposing buildings, with dank interiors, dilapidated corners and broken windows. Precious old books, collections, non-classified data files, government reports, artefacts sit, uninvitingly, on dusty maze of racks spreading across multiple floors. A place that smells of the dry, yellowing time, some unknown apathy, where words lie waiting, lost in thoughts of a lone scholar or a lost animal to come visit.

While in recent years a new activism may have gained momentum around the national archives, they continue to suffer from political controversies. Every modest initiative like PARI seems to matter at this time when we are losing the precious historical records to State apathy and fresh histories are being rewritten and invented anew each day. If archives were to provide the foundation of a thriving democracy, and a critical, reflective public; if they must uphold the belief that truth matters and resides amidst the plurality of narratives and histories, and if they have to remain public in spirit and in practice, we need more and more people's archives of India.

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2 Building Digital Humanities Curricula in Technology-Emphasized Indian Classrooms

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and Chiranjoy Chattopadhyay*

Introduction: Imagining Digital Humanities Pedagogy

The digital revolution of the 20th and 21st centuries has created new methodologies of knowledge production and exploratory spaces for humankind to evolve culturally with the construction of techniques and technologies. As a corollary, a new field of organized research emerged at the beginning of the 2000s examining the use and application of digital technologies in humanities, the liberal arts, social science scholarship, and beyond. Popularly nested under an umbrella term “Digital Humanities” (henceforth DH), this area of scholarship takes a critical stance to examine the role, use, application, and impact of digital tools in our everyday life, our societies, economies, cultures, and governments. While the use of computational tools in social science and humanities work is nothing new, the availability of a large body of cultural artefacts after the digital turn, as well as the emergence of new kinds of digital objects and embodiments, has opened up several possibilities for social science and humanities research, practice, and pedagogy using computational approaches.

To be sure, while the boundaries of what constitutes DH are still somewhat amorphous and expanding, it needs to be stated that, in common parlance, simply using digital tools for the purpose of relevant research does not typically qualify as DH. Along similar lines, research solely concentrating on digital artefacts instead of tangible (physical) artefacts also often does not qualify as DH. The field (of DH) instead, in an active sense, is imagined to focus on and contribute to a composite of hermeneutical approaches (ideas and methods), rather than distinct technical epistemologies, that lay emphasis on preserving, reconstructing, transmitting, and interpreting human experience, representation, and signification both historically and contemporaneously. In other words, the field is envisioned to grow on principles of interdisciplinarity rather than specific multidisciplinary approaches (we discuss this further). This difference, in major ways, relates to epistemological questions on knowledge production about generating digital data from material objects, and rethinking of existing processes of knowledge production.

Given this context, it is inevitably a challenging task to discuss pedagogy, and even more challenging to conceptualize and implement a curriculum,

within an area of inquiry that may have a longer past but a relatively much shorter history. DH as an organized area of inquiry has been around for less than two decades globally (Hirsch 2012; Kirschenbaum 2010), and only just emerging in India/South Asia (Sneha 2016; Dodd and Kalra 2021). Not surprisingly, we are yet to arrive at a definitional consensus of DH, let alone arriving at a theoretical framework for the purpose and a matured understanding of its pedagogic foundations. Even more limited is the investment to understand, develop, and implement pedagogic avenues and tools for DH in an Indian classroom.

Below we bring in scholarly reflections on the status of DH pedagogy in India to segue into our discussions and analyses of two DH curricula (post-graduate and doctoral) – arguably a first of their kind in the country – that we (authors) have co-founded with a team of scholars and faculty members at Indian Institute of Technology Jodhpur (IIT Jodhpur) in 2019:

Five universities now offer various programmes in DH in India – ranging from a Master’s degree to certificate courses, and there have been several workshops, winter schools, seminars and one national level consultation over the last five years. Academic and applied practices focus on building of digital archives, film studies, game studies, textual studies, cultural heritage and critical making to name just a few. *While these efforts have managed to create a growing interest in DH, there is still a lack of consensus on what exactly constitutes the field in India. Thus, questions around definition, ontology, and method remain pertinent, as does the need for recognition by the national academic bureaucracy*

(Sneha, 2016, p. 3, emphasis by authors)

Given the lack of a definitional consensus of DH in India, if we assume that DH has evolved into an interdisciplinary area of inquiry in which the scientific production of knowledge is systematically arranged, then our aim in this chapter is to delineate the form of that scientific knowledge that informs pedagogic practices and innovates curricula for the next generations. This is a conceptual and methodological challenge that we encountered as we developed and cofounded the DH curricula at IIT Jodhpur.

Conceptualizing DH Curricula at IIT Jodhpur

In early 2019, IIT Jodhpur launched a novel idea of an Interdisciplinary Research Platform (or, IDRP). As the preamble to the IDRP discussed, and in order to create a platform for interdisciplinary research, we may start by revisiting the sequential steps typically involved in the evolutionary path for emergence of the interdisciplinary areas, bottom up (Figure 2.1).

According to IIT Jodhpur’s IDRP preamble, an interdisciplinary programme comes into existence when a multidisciplinary attempt to solve a

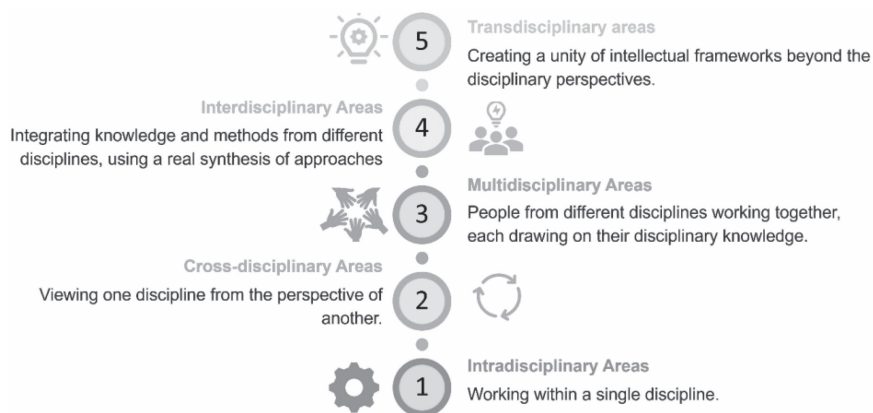


Figure 2.1 The evolution to disciplinary boundaries.

problem calls for an integrated strategy that is achieved via the fusing of knowledge from numerous domains. It was anticipated that the IDRP that was envisioned would make it easier to combine many academic fields, which would ultimately result in the development of transdisciplinary academic schools or centres. Developing ecosystems for competitive and cutting-edge research, encouraging innovation and technology development in interdisciplinary fields, initiating doctoral and postdoctoral research programmes in interdisciplinary areas, and establishing partnerships with relevant industries and research organizations in a variety of fields were some of the goals of the IDRP. Other goals included creating a supportive environment to pursue interdisciplinary research in the contemporary areas of innovation and research.

With this preamble in 2019, IIT Jodhpur launched seven IDRP-platforms, Digital Humanities being one such platform. The six other platforms were Cognitive Science (which later became subsumed under the newly formed School of Artificial Intelligence and Data Science), Internet of Things and Applications, Robotics and Mobility Systems, Smart Healthcare, Space-Science Technology, and Quantum Information and Computation. The preamble to the IDRP guidelines explicitly maintained the larger goal of the IDRP platforms:

[An] interdisciplinary programme emerges when multidisciplinary initiative for a problem requires an integrated approach through fusion of knowledge from multiple fields. The proposed platform is expected to facilitate multidisciplinary fusion. The platform may lead to establishment of transdisciplinary academic Schools/Centres.

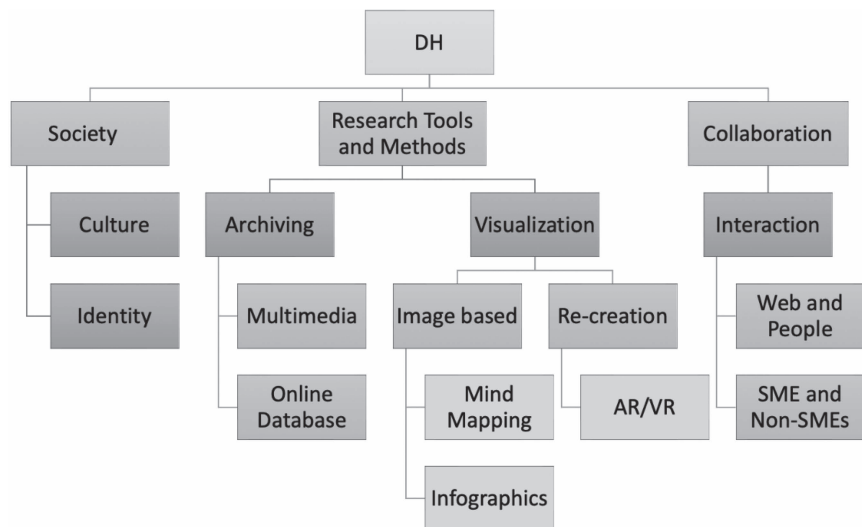


Figure 2.2 Dendrogram of representative scholarship within Digital Humanities as conceptualized by IDRP-DH at IIT Jodhpur.

The goal of such growth in programs is to transform the broader educational system's paradigm from knowledge transmission (inductive learning from teacher to student) to knowledge construction (deductive learning where teacher facilitates student's using of new techniques and digital tools to establish their own field of knowledge).

In the preamble, a supportive environment for conducting interdisciplinary research in contemporary areas of innovation and research was envisioned. The preamble also encouraged the development of innovative technologies in interdisciplinary fields and facilitated the beginning of postgraduate and doctoral academic programmes in the areas that were identified as being of interest by the IDRP.

Evidently, one immediate departure from global trends of academic growth of DH is that, at IIT Jodhpur, DH was not conceptualized as an "arm" of the existing Humanities and Social Science Department. Rather, the DH platform was conceptualized as an independent, interdisciplinary platform that encouraged and attracted faculty members, research scholars, and students across departments, centres, and schools, and extramurally too (Figure 2.2). At the time of inception of the DH-IDRP in mid-2019, there were disciplinary representations in DH across at least seven departments/schools: Computer Science and Engineering, Cultural Studies, Film Studies, Literature, Management Studies, Mathematics, and Sociology. In late 2019, Digital Humanities at IIT Jodhpur conducted its first series of brainstorming sessions with external experts invited across fields of technology, management, humanities, social sciences, and the Ministry of Culture (Government

of India), and produced what is arguably the first approach to formalize interdisciplinary DH degree programmes at the institutional level in the country, and definitely among the IITs: that is, a master's degree in Digital Humanities and a PhD degree in Digital Humanities. While discussing individually about the scope and nature of each of these academic programmes may be beyond the scope of this chapter, our challenge in the brainstorming session as well as in the classroom that we discuss in this chapter includes: how do we plan, build, and implement a DH curriculum?

Where Is the Curriculum?

In the hallmark edited work *Debates in the Digital Humanities* edited by Mathew Gold (2012), Stephen Brier poses a now decade-old question that still remains central to the establishment of the discipline (of DH) via his title “Where Is the Pedagogy? The Role of Teaching and Learning in the Digital Humanities.” In his chapter, Brier (2012) discussed the growth of DH, and a focus, perhaps even an over-emphasis on scholarly research, peer review, and publications. The question of how we teach in universities and colleges and prepare the next generation of graduate students for careers inside and beyond academia is still quite underexplored. To contextualize, we refer to Brier's research on the flagship journal DHQ where he notes that full-text searches of the contents of the 90 articles published to date in the DHQ reveal a marked disparity between research and teaching and pedagogy:

while the word “research” garners eighty-one hits in total (nine of every ten articles that DHQ has published), “teaching” and “learning” each total at least forty hits (and twenty-six when paired), while “pedagogy” appears a mere nine times (averaging about one of every ten articles). This quick and somewhat unnuanced survey of DHQ suggests that, while research is the dominant focus of much of what scholars choose to publish in the journal, there is some interest in and focus on (albeit a limited one) the broader implications of DH work for teaching and learning. (Brier 2012, p. 391)

Since the last decade, the numbers have risen to 609 hits for *research*, and about 300 hits for *teaching* and *learning*, interestingly marking that the rise in the numbers have not really lessened the gap between levels of engagement with DH *research* and DH *teaching* and *learning* (search conducted on: November 21, 2022).

In spite of the “gap,” in the Indian context, there have been significant efforts at research publications and also to bring in conversations about DH in the classroom. Yet we see a distinct scarcity of well-rounded DH courses – let alone full curricula at institutional levels – at least in India. While the clarion call for developing holistic pedagogy for and in DH was presumably

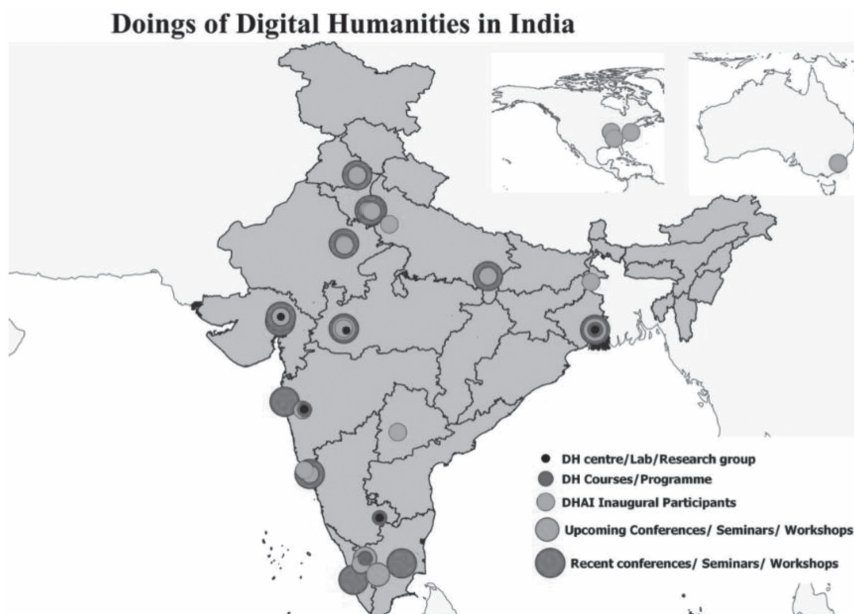


Figure 2.3 Footprint of DH in India.

Source: Shanmugapriya and Menon 2020. Infrastructure and Social Interaction: Situated Research Practices in Digital Humanities in India. DHQ vol 14, number 3.

well heard, the theoretical premise to ground such a venture needs a careful adoption, as P.P. Sneha (2016) notes. The public conversations around pedagogy and curricula on DH in India have started only very recently (since around 2019), and prompting the question: what must a DH curriculum look like (see Figure 2.3)?

Imagining a DH Curriculum

An ecological approach to curriculum examines and addresses the social, economic, and political environment in which the curriculum is articulated more clearly. Catherine Cornbleth (1990) defines curriculum in this perspective as “an ongoing social process constituted of the interactions of learners, instructors, knowledge, and environment.”

Typically, globally, an academic curriculum has four broad functional goals:

- 1 knowledge that is to be transmitted,
- 2 an attempt to achieve ends in/for students,
- 3 curriculum as a process, and
- 4 contextualizing curriculum design

It is helpful to consider these ways of approaching curriculum theory and practice in the light of an Aristotelian categorization of knowledge into three disciplines: the theoretical, the productive, and the practical/kinesthetic. In other words, the pillars may be envisioned as the **canon** (the body of knowledge to be transmitted), the **techne** (and the technical concerns of the outcome or product model), and the **phronesis** (the process and praxis models come close to practical deliberation). We discuss the concept of the canon below, and take up discussions around techne and phronesis in our next section, on the role of technology in a DH curriculum.

AuQ5

The Canon: Both curricula under discussion were carefully designed to address developments, implications, and inflections of digital technologies on historical and contemporary culture, and society. To contextualize, disciplinary evolutions of the natural sciences, social sciences, the arts and humanities and allied technologies have converged and diverged over the centuries depending on the exigencies of education. Relatively speaking, the digital scholarship in the social sciences, the arts and humanities are only emerging.

Given this context, the primary objective of both programs is to orient students in the ways in which the study of the humanities, social sciences, and similar areas has been transformed by the influence of digital technologies and economic compulsions. This confluence of disciplines has redefined the contours of the subject of “humanities.” In the present context, a critical interrogation into the history of digital approaches to the humanities, modes of implementation of digital tools and platforms, issues related to the utilization of big data (through database construction, text markup, informatics, statistical analysis to name a few) are imperatives in contemporary research in Humanities. These interdisciplinary programs have been tailored to provide such critical insights into the key parameters that are continually influencing and impacting the amalgamation of diverse disciplines, especially digital technologies with humanities that will re-engineer emerging societal structures and behaviour. The programs offer unique opportunities to redraw conventional disciplinary boundaries among the humanities, the social sciences, the arts, technology and engineering, and the natural sciences. Students are trained to explore contested definitions of the digital humanities, debates about the digital humanities within the emerging field, and are especially encouraged to consider why the digital humanities matter beyond the academic field itself. En route, students learn through hands-on experimentation, practising using various types of digital humanities analysis using heterogeneous datasets, tools, and methods. The learning outcome that was envisaged by a steering committee represented by scholars from the areas of Computer Science, History, Literature, Sociology, Film Studies, etc., assume that a student, after successfully completing this program, will have the ability to (1) demonstrate knowledge and understanding of the main field of study and significant in-depth knowledge

in some subcategories of the digital humanities; (2) analyze, assess, and manage complex phenomena, questions, and situations related to the digital humanities as a field of study and work; and lastly, (3) describe the prospects and limitations of science and technology in digital humanities, their role in society, and the individual's responsibility for how they are used.

It needs to be emphasized here that the curricula were essentially designed as process-based, interactions are prioritized, which shifts the focus from teaching to learning. A curriculum therefore extends beyond a written text and improves student-teacher interaction. In this concept, curriculum encompasses what happens in the classroom as well as what individuals do to prepare and assess. Learners have a say in content selection, teaching and learning activities, and evaluation. The method itself is constantly assessed in order to build a dynamic, living curriculum that is sensitive to changing environments and learner demands.

This, of course, takes us back to a pertinent question around reasons for the growth of digitization in the social sciences, the arts and humanities – was it an emulation of the natural sciences? Or, was it beyond a narrow conceptualization of emulation, and sought to examine and discover meaning in the application of information technology as an aid to fulfil the disciplines' basic tasks of preserving, reconstructing, transmitting, and interpreting the human record historically and contemporaneously? While an uncritical answer would be misleading here, it is important to acknowledge how the various disciplinary evolutions have taken place over the decades, and the conceptual and cultural journeys that have inflected them.

Are the 'Digital'/'Technology' and the 'Humanities' Different and Contradictory? Role of Technology in a DH Curriculum

More knowledge and data are being produced by society today than ever before. The changing nature of (socio-cultural) data brings into question (re)examining big data, ethnographic thick data and learning to do social and humanistic research in the digital age, including concepts of datafication, actor-networks, historical/archival methods, and retrospective versus prospective research designs. To understand such big and thick data, students are expected to master skills like coding, data visualization, pattern identification, and storytelling. In light of this, a curriculum of the kind being discussed here must be technology driven and open to new pedagogical approaches, a trend often signified as the “computational turn” in humanities and social sciences. We examine the importance of the computational turn, computational thinking (techne and phronesis), and digital approaches (including tools, applications, and platforms) in building and implementing such curricula by drawing inspiration from the Digital Humanities “stack” (Berry and Fagerjord 2017).

Students can only find value in a course if it is applicable to their lives, and the curriculum lays the groundwork for students to achieve a more

comprehensive educational goal. It assists students in achieving their goals and objectives while also assisting teachers in selecting an appropriate instructional strategy. The benefits that technology may bring to the classroom should be taken into consideration by teachers as they work to design the best possible curriculum for their pupils. The courses designed for a particular curriculum have to include both fundamental and advanced levels of technical education in order to provide students with a more well-rounded education.

The role of technology in a given curriculum has two aspects:

- 1 Technology As Platform (TAP): Within the context of this specific paradigm, the integration of the learning and teaching processes is emphasized through the use of technology as a platform. For instance, teachers are able to instruct their students with the use of interactive multimedia and digital learning systems. The primary goal is to increase participation in classroom learning as well as the overall learning results. Students are provided with an engaging, collaborative learning environment through the incorporation of TAP throughout the curriculum. Students in contemporary classrooms in most of the world benefit from technology not only because it enables them to have access to a vast store of information quickly but also because it makes learning pleasant through hands-on activities. Interactive learning tools such as simulations, quizzes, and gamification have the ability to raise students' levels of academic accomplishment, as well as their levels of performance and motivation.
- 2 Technology As Subject (TAS): There has been a major shift in the way research is conducted as a direct result of the introduction of digital technology, in particular software. There are certain industries that depend more heavily on digital technology than others, but in this day and age, it is virtually hard to find someone who does not utilize some form of digital technology. As a result, it is essential that the course of study incorporates a number of essential topics that provide students with the skills necessary to carry out their research effectively. On the other hand, not everyone may be enthusiastic about performing the study, and some people may choose to pursue alternative career paths, such as work in the sector. Students who have such a technological foundation are able to investigate a broad variety of employment opportunities, including those in academia and industry, as well as those in start-up companies.

In this context, next we present the importance of having a set of courses in a DH curriculum that makes a student capable enough to have a sustainable career in DH.

1 Topic Clouds and their mapping with Technology Courses

A topic cloud is a collection of tags that briefly summarize the themes that will be covered in a course. A quick glance at this list reveals which

Table 2.1 Topic cloud to course(s) mapping for technology driven courses in a DH curriculum.

<i>Serial Number</i>	<i>Topics</i>	<i>Course(s) on</i>
1	Introduction to logic, computer-based representation, basic programming construct, writing-compiling-debugging a program, applications	Programming techniques
2	Organizing data, linear and non-linear arrangements, writing algorithms to traverse, insert, delete and modify the data, query, performance analysis of algorithms	Data structures and algorithms, databases
3	Data collection, qualitative and quantitative analysis, data visualization	Digital tools
4	Fundamentals of pattern identification, algorithms to extract meaning from data, various approaches for building automatic data analysis models, application to DH specific data	Statistics, pattern recognition
5	Mobile application platform, application development, web/cloud services, sensors, user interface design, cross platform application development	Mobile application development
6	Augmented reality, virtual reality, mixed reality, software tools, building mobile-based applications	Fundamentals of XR
7	Graph, interconnection, software tools, data collection, data analytics, application development and deployment	Social media analysis
8	Multimodal interfaces, qualitative and quantitative evaluation, HCI, HMI.	Human machine interaction

concepts are covered and which course they correspond to. The table here illustrates topics or skills that a DH student must be aware of, or, in other words, important to include in the curriculum and the corresponding courses. The list is not exhaustive and the readers may envisage more based on their requirement (Table 2.1).

2 Importance and Objectives of Individual Courses

Based on the discussion in the previous section, here we present some key characteristics the technology-based courses should pose to ensure proper learning. Since the students are conceptualized to be from various backgrounds (such as humanities, social sciences, or basic sciences), the courses should be non-exclusive in nature and must be able to bring all the students to a common learning platform that encourages heterogeneity among the cohort. The following table illustrates the same.

Table 2.2 Course Objectives and Learning Outcomes of various courses.

Serial Number	Course	Objective(s)	Learning Outcome
1.	Programming Technique	1. Introduce logic and computer representation of the same 2. Introduce a programming language to implement that logic 3. Explain various programming paradigm and programming contexts	1. Translate a problem statement into a series of logical steps 2. Write program in a given language 3. Identify errors and debug them using software tools
	Data Structures and Algorithm	1. To introduce various ways to arrange data in computers 2. Introduce ways to access data efficiently 3. Describe various algorithms and techniques for algorithm analysis and design.	1. Write code using appropriate data structures DH related problems. 2. Develop efficient algorithms or improve performance of existing algorithm.
	Mobile Application Development	4. Learning about the mobile application development framework 5. Mobile application development for prominent mobile operating systems and other modern platforms.	3. Experience developing cross-platform mobile applications
	Machine Learning	1. Describe and investigate a wide range of viewpoints on machine learning 2. Learn a variety of algorithms that may be used in digital humanities. 3. Learn about the software tools used to develop ML algorithms.	1. Determine the appropriate methods for DH research questions and data. 2. Capability to create, test, and evaluate machine learning models

(Continued)

Table 2.2 (Continued)

Serial Number	Course	Objective(s)	Learning Outcome
	Social Network Analysis	1. Introduction to social network and its analysis techniques, 2. Analytical foundations, and analysing tools 3. Case studies involving DH questions	1. Automatically capture social media data from the web 2. Formulate a research question and design appropriate algorithm 3. Apply appropriate analysis tools to answer DH-related queries.
	Human Machine Interaction	1. Introduce the field of user interface design and the research of human-computer interaction. 2. Bring in both practical UI design skills and theoretical understanding of the subject.	1. Design and Develop prototypes 2. Test user interfaces based on design principles
	Foundations of XR	1. Introduce evolution of immersive technologies 2. Various techniques (AR/VR/MR) and the applications 3. Introductions to digital tools to build applications	1. Explain various theoretical concepts 2. Build applications involving XR technologies

Arriving at a Model Curriculum

The DH-IDRP at IIT Jodhpur was launched premised on project-oriented knowledge production on the practical application of methods and involving interdisciplinary collaboration workflows. To enhance collaborative workflows, the programs actively involve academics and resource people extramurally and internationally.

Examples of research emphases include (but are not limited to)

- Digital Cultures – Historical and Contemporary
- Digital Societies
- Digital Heritage (Preservation, Conservation, Restoration, Recreation)
- Thematic Computation Reading
- Digital Economy/Internet Economy
- Multimodal Data Analytics
- Digital Epistemologies and Methods

The model curriculum was designed around three “course-families”: Foundational, Conceptual, and Methodological. Additionally, the curriculum was designed around imagining a DH laboratory that would provide students hands-on experience with various software, tools, and other practical dimensions.

Foundational Courses were designed to explain the broad spectrum and perspectives of DH, and to introduce the necessary tools and techniques to understand various DH research projects. Some core components of these courses include an introduction and history of DH, intersections of digital technology and humanities disciplines, history of humanities computing, digitization of the Humanities, nature of data in DH, images, and other visual cultures archiving and databases; role of place and space in cultural visibility, and digital heritage (preserving, reconstructing, transmitting, and interpreting human record historically and contemporaneously). Courses in the Foundational course-family also included modules on the nature of data (structured/unstructured data), data collection tools and techniques particularly on/from new media and other digital platforms, meta data, social media data, and data curation. A fundamental component of this course-family included modules on ethics in digital environments – on Copyright, Digital Rights, Open Access and Digital Knowledge Spaces. This course-family also invested on analysing and interpreting (cultural) objects through pattern recognitions, and an epistemological emphasis on how and why the digital is not an addendum to the humanities, rather, a consolidated whole.

Conceptual Courses were designed to introduce students to important historical and sociocultural processes that have crafted technologies over time and across civilizations, recognize how technological developments are related to socio-cultural values and practices, and understand the roots of current technological society(ies), such that students are able to appreciate

that technology is not an isolated, literate enterprise; it rather produces structures, machines, processes, and systems that impact and inflect societies and civilizations. Some core components included industry and innovation; the culture of invention; social construction of technology including colonial technologies of race, gender and science, diffusion of technologies and transfer of technology globally, rise of the Internet and digital society; and the future of Science and Technology in the society and their changing relationship. Also included was developing an understanding of the archive and its evolution in historical time till the days of the digital revolution, exploring digital cinema and media, audio-visual essay, media collectives, and digital film archives, tracing the trajectory of older information systems until the advent of the database with select case studies of the latter.

Digital Embodiment: the digital and its relation to the human subject, how human bodies/subjects are perceived and acted upon in digitally aided/enhanced environments.

Methodological courses invested in demonstrating in depth knowledge of selected methodologies related to DH, introducing and exploring avenues of new and emerging societal and cultural entities in DH through several qualitative and quantitative tools for DH projects. The larger goal of this course-family has been to understand DH as a convergent array of practices, debate what DH means in different contexts, and capture, collect, and analyse a variety of data types related to DH projects. Through these courses, students are typically engaged in simple computational tasks and how they evolve as DH methods (for instance, Locke 2017; Petersen-Frey et al. 2023). The functional element of these courses involves developing vocabulary and research tools such as NLP and data visualizations across Liberal Arts, Social Sciences, and Technology; building a digital repository of information, answering historical questions; analysing geography (GIS); establishing a relational database; visualizing data in order to build computational tools to understand cultural changes, interpreting text as a digitally mediated object, contextualizing the digital object, asking questions in terms of material aspects. Epistemologically, the methodology courses are geared towards knowledge building about generating digital data from material objects, and rethinking of existing processes of knowledge production (Figure 2.4).

Students who enrol in the DH programmes that are provided by the IDRP are expected to acquire a methodical understanding of digital humanities as well as the knowledge and skills necessary to independently formulate and solve problems in the field of digital humanities, which has large-scale applications in both academic and professional settings. Students are expected to be able to tackle problems in multidisciplinary domains of humanities, social sciences, computer sciences, mathematics, and other related fields once they have gained an in-depth understanding of the fundamental concepts of broad areas in humanities and social sciences as well as application areas of basic computational tools. They also develop the abilities necessary to show fundamental concepts from the humanities and social sciences within the context

Foundations of Digital Humanities	Programming Techniques	Place and Identity in the Digital Age
Archiving and Databases	Machine Learning for Digital Humanities	Seminar in Digital Humanities
Foundations in Intellectual Property Rights	Social Media Application Development	Civilizations, Cultures, and Technologies
Principles of Digital Economics	Methods and Methodologies in Digital Humanities	Perspectives in Language and Literary Studies
Data Structures and Algorithms		
FOUNDATIONAL COURSES	METHODOLOGICAL SKILLSET	CONCEPT BUILDING

Figure 2.4 Categories of courses in the MSc DH program at IIT Jodhpur.

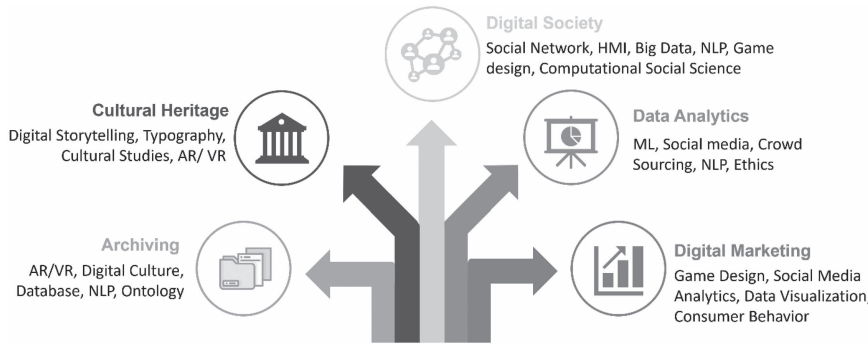


Figure 2.5 Various verticals and some representative courses.

of digital domains by way of a variety of application areas and analytical methods.

Students would be expected to have gained the knowledge necessary for advanced employment in occupations and organizations involved in digitalization and the sharing of information, documents, and culture by the time the programme has been completed. Students who have graduated with a Master of Science degree in Digital Humanities from the Indian Institute of Technology Jodhpur have, according to our records, been successful in finding employment as archivists, data scientists and data engineers, product analysts, and business analysts, to name a few positions, and have been paid in significant salary brackets.

Figure 2.5 provides a visual representation of the multiple verticals that are incorporated into the model curriculum. Additionally, this figure provides a list of common course titles that are integrated into each of these verticals. There are a number of different classes that, contrary to what the name would imply, are eligible for filing under more than one of these categories. During the process of developing a specific curriculum for a programme, the review committee may determine that additional relevant classes should be incorporated into these categories in order to better align the curriculum with the overarching educational goal of the programme as well as the primary objective of the programme itself.

In sum, the curricula discussed so far have acknowledged the need for digital tools that have augmented both the scale and the tenor of research in the Humanities and the Social Sciences. Various techniques of digitization have been included in the course structures that would make available archival records and artefacts to a larger audience, and enlarge the set of pedagogic tools available. Critical studies of literature, art, and society would include in their course structure the study of now established digital genres, aesthetics and cultural practices, and digital anthropology. Digital scholarship extends to studying the impact of digital technologies in the aesthetic forms and social relationships. Digital tools for research – which include 3D mapping, algorithmic literary analysis, spatial and network analysis – allow scholars to pose questions of material at a scale that was never possible earlier. Newer techniques of expression and publication of research through visualizations, animation, podcasts, and interactive web tools are making avenues for a much greater dissemination of research results and for greater social impact.

To enable digital and computational research in the humanities and social sciences, fully equipped laboratory workspaces were envisioned that will provide a space for experimentation with digital technologies make possible digitization of texts, manuscripts, oral histories and artefacts, house high power computational tools that allow working with data in the humanities and social sciences, prepare audio and video output for research, as well as facilitate workshops and tools to build computational and digital media skills among graduate students. In this effort to imagine a DH lab for academic purposes, not surprisingly, it was observed that the growth of digital research tools has tipped the scales in favour of academic institutions in Western countries when it comes to the production and diffusion of information. Digitized documents, which are commonly obtained from archives in the global south, are increasingly being put behind paywalls. This improves access for academics in the West, but it decreases access for the countries of origin of those academics, in particular the global south. In recent years, a number of ‘non-Western’ countries and institutions, including those in Mexico, Japan, China, and South Africa, have made efforts to challenge the hegemony of Western nations by developing DH institutions and fostering skill development. However, the Indian scenario is bleak. To ensure that pedagogic and intellectual works continue to be accessible to the public, a DH lab is imagined as complementing the curricula discussed here, as elaborated in the next section.

Imagining a Digital Humanities Lab (in Technology-Emphasized Academic Institutions)

In order to make digital and computational research in the humanities and social sciences a possibility, lab workspaces need to be set up with all of the necessary equipment. Such a facility should house powerful computer tools that provide anyone working in the humanities and social sciences with

the ability to interact with data, digitize artefacts, oral histories, texts, and manuscripts. This will also assist graduate students to learn how to utilize computers and digital media by holding brief workshops and classes on various tools, as well as preparing audio and video output for use in research. The design of a model DH laboratory is shown in Table 2.2, and it revolves around four key areas of emphasis for technology-enabled DH: digitization, audio-visual, immersive experiences, and high performance computing. The components are envisioned as an organic flow that enables researchers to create digital artefacts (the Digitization component), create a two-dimensional (2D) audio-visual representation of the data (the Audio-visual component), extend the 2D experience to a more immersive one (the Immersive Experience component), and support all of these activities with a highly efficient and robust computing facility (high performance computing). See Table 2.3.

In addition to conventional equipment and facilities, human capital and physical space are essential to the success of any DH laboratory. Both of these components are necessary to execute the task from the ground up. Human resource departments may have many roles in this exercise. Some of these roles include (i) a knowledgeable technical assistant to oversee the equipment and ensure its proper operation, (ii) a cameraperson and sound recordist, (iii) a programmer who can assist students and researchers in developing and testing code for research projects, and (iv) a consulting legal expert who can provide guidance on the ethical use and dissemination of data-driven research. Depending on its size, a well-equipped laboratory will need a certain amount of dedicated floor space in order to handle both big group meetings and breakout sessions for smaller groups. In addition to depending on institutional help, extramural funding is expected to ensure the lab's continuity and operations.

Conclusion

In this chapter, we have proposed that a DH curriculum should contain a variety of research designs, such as an in-depth investigation of the production and consumption of data. This would provide students the opportunity to reflect on the power struggles that are regularly generated by big data (e.g. examination of the most powerful and most or least accessible information), which frequently results in the erasure of social reality. To illustrate, we have provided a model framework for a DH curriculum that combines what we view to be improved calibration and triangulation patterns with the ability to engage with data, knowledge structures, and technology in order to think critically and address DH challenges. We urge educators and practitioners of DH to think along and beyond disciplinary orientations – what looks like a change in a field caused by digital technology might actually be a long-term trend that has become more obvious because of new tools. Also, some fields of study that make sense can include different, even contradictory scientific findings and hypotheses.

Table 2.3 Indicative list of hardware and software requirements for several DH-based laboratory activities.

Serial Number	Focus Area	Description	Equipment (Hardware/Software)
1	Digitization	Digitization is propelled by this focus area to archive to make cultural and historical materials available for education and research, and generates cultural data for computer analysis. This lab helps in creating high-definition 2D and 3D scans of manuscripts, photographs, documents, maps, everyday objects, craft objects, jewelleryes, and so on, restoration of digital photographs, and 3D prints artefacts for research, teaching, and display.	Hardware: • Workstations, Laptops • Scanners (Flatbed 2D, 3D, Portable, Book Scanner) • DSLR cameras, • Display units, • 3D printer, • Tripods, • Appropriate Lighting system Software: • 3D imaging software, • Image editing software, • Data curation software.
2	Audio-visual	This lab would be the hub of all audio and video recording. This studio would also be an excellent location for recording podcasts and creating films to share findings with the globe. The Recording Studio must have complete soundproofing in order to facilitate recording sessions in natural environments.	Hardware: • Workstations, Laptops • HD video cameras (for indoor and outdoor) and accessories • Audio recorders and accessories • Appropriate Lighting system • Microphones • Tripods Software: • Advanced video and Audio editing software

(Continued)

Table 2.3 (Continued)

Serial Number	Focus Area	Description	Equipment (Hardware/Software)
3	Immersive Experience	This lab is envisioned as a location for discovering immersive and interactive VR techniques to further our knowledge in digital humanities. Using contemporary virtual-reality and augmented-reality technology, the lab may be utilized to generate training and teaching material. This may also be provided with immersive interactive learning experiences that may be repeated to enhance operational effectiveness and skill transfer.	Hardware: • Workstations, Laptops • VR headsets • Joysticks and other accessories • Handheld devices (e.g. tablet, mobile phones) Software: • Game design software • 3D Interactive Graphics software • Mobile Application Development software
4	High-Performance Computing	This section of the lab is intended to meet the needs of students and academics engaged in data analytics and rich media-related projects. Due to the fact that the datasets are orders of magnitude larger than typical humanities research, this lab will allow scholars to identify and aggregate important material from the numerous Internet archives, as well as uncover noteworthy patterns within the gathered datasets. Researchers interested in the quantitative and creative capabilities of multimedia will additionally require a high-performance computer system that allows academics from many disciplines to do study in hitherto unexplored regions.	Hardware: • High powered desktops • GPU enabled laptops • Data centre Software Requirements • Advanced programming environment • Distributed database systems • Data Visualization

The model curriculum's changes to improve discipline are not yet done. They, however, might show the different ways of thinking in a certain academic field. We also strongly encourage educators to build collaborative design approaches which have the potential to influence teachers' knowledge, beliefs, and practices in the classroom. Participants can exchange information since the development process is dialogic and collaborative. This shared information may be used to challenge instructors' perspectives, leading in the creation of new knowledge and improved practice, which leads to improved student results. Material creation or adaptation provides a means for aligning the reality of instructors' personal surroundings with the aims of the reforms, allowing for a higher degree of change implementation.

Finally, we strongly push for broadening the academic discourse in DH: The emphasis should be placed on increasing awareness among people who are interested in a variety of fields so that they may develop their professional aspirations in relation to the topical areas that are associated with the developing field of digital humanities. This highlights the fact that DH scholars, which include both the faculty members and the students, typically come from diverse academic backgrounds. A DH curriculum, therefore, needs to adopt an evolutionary model in order to ensure that the curriculum is praxis-oriented, boundary transgressing academically, and non-exclusive.

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3 Digital Archiving on the Intersections of Academia and Activism

Farah Yameen and Bhanu Prakash

* * *

The Democracy Archives contain three collections of over 20,000 digital objects hosted by the Centre for Modern Indian Studies at the University of Göttingen. The collections were created under the ICAS:MP Indo-German collaboration research into critiques of Democracy under the lead of Dr. Srirupa Roy, Dr. Rupa Vishwanath, and Dr. Ravi Vasudevan. The Democracy Archives were one of several research documentations that the project undertook as part of its many modules. As with many documentation projects the archive followed the documentation with the intention of making the research available for further use.

Each of the three collections on the Democracy Archives was acquired through a different process. The Long Emergency was conceived as a collection of oral histories of journalists active during the years of Press Censorship in India and immediately after. The collection aimed to collect material that would unfold the actual experience of being a journalist in this time. The collection also includes two sub-collections of series: The Sanjay Files and the Ram Dutt Tripathi Collection, together numbering about 200 items. There are 48 interviews. The Documenting Domination collection contains digitized publications that are witness to the history of Communist and Dalit politics in the states now called Andhra Pradesh and Telangana between 1900 and 1970. The literature in this collection has been acquired for digital preservation from the private collections of activists and intellectuals. This collection is small, containing fewer than 200 items of which 5 are videos. The largest collection in the archives is Campus Uprising containing nearly 20,000 objects. Unlike the other two collections which have a maximum of three file types, the Democracy Archives contain audio, video, images, and digitized and born-digital documents and ephemera.

Acquiring Data for the Collections

Each of the three collections acquired data through a range of different activities. These depend on the objectives of the collections. Some collections were

also found serendipitously and added to the archives in recognition of their value to the collection. The Long Emergency Collection's primary focus was oral histories of the period of the Emergency in India (1976–1977). This was the time at which the then Prime Minister Indira Gandhi and her government issued rules for the censorship of the press citing a threat to security. The oral histories in this collection interview journalists who were known to be active during this period and the two decades that followed it. The journalists were identified and interviewed by a team of oral historians advised by the Principal Investigator Srirupa Roy and journalist Kai Friese. Journalist Kai Friese also donated newspaper clippings and cartoon clippings from the private collection of his father Jan Friese. These are included under Sanjay Files (the principal subject of these clippings) and Cartoons. The Ram Dutt Tripathi collections were donated by journalist Ram Dutt Tripathi from Lucknow. These include letters from the time he served in jail during the Emergency, notes from court proceedings and copies of the *Swarajya* magazine. These were acquired only as digital copies. Mr. Tripathi kept custody of the originals. The Documenting Domination collection digitized copies of publications such as Manorama, Manaseva, and Dharmasadhini besides other literature from the Andhra–Telangana region. The Campus Uprising Collections primarily contain visual documentation of the protests in Jawaharlal Nehru University, Hyderabad Central University, and Benares Hindu University between 2016 and 2018. These collections took shape as the events of the protests unfolded emerging from the private documentations of students at these universities. These include videos and of marches, sloganeering, assemblies, police violence, posters from student political parties, correspondences, and meeting minutes. The documentation was produced by students on phones, cameras, recorders as a concurrent protest practice that carried the protest over to social media through this documentation.

It is useful to imagine these collections in the context of the 'assemblages' of a 'living archive' produced in a specific political and research context as argued by Chidgey. These archives are instigated by academics pursuing the specific goals of encouraging further research in democratic movements and nurturing counter-narratives suppressed by the state. The 'assemblages' of the living archive are curated in this context and their inclusions and representations reveal the academic and political discourse by which they are formed. The disposition towards specific goals makes these collections distinct from archives that are imagined to refer specifically to a past. The collections engage with temporality in divergent ways. The Documenting Domination collection and the Long Emergency Collections document events and movements in the past with a foot in their present political contexts giving them their particular forms. The Campus Uprising Collections were generated spontaneously as student protests erupted in universities in India. The documentation of the events was mediated heavily by the physical and virtual public spaces between which supporters, detractor, spectators, and commentators switched seamlessly. It was heavily circulated over social

media channels and served to develop narrative and counter narratives in favour of different political standpoints. The archiving of this documentation responded to a present political moment. It also acknowledged the fragility of its place in social media circulation. The archive sought to preserve it as collective memory contributing to the formation of a discourse of democratic publics in the present political moment in India.

The Democracy Archives represents a particular kind of archiving practice, like the Arab Spring and the Occupy protests cited in Chidgey's article and the Umbrella Movement Visual Archive that archives pro-democracy movements in Hong Kong. These archival movements emerge from specific interests. They curate the archives in the context of this interest and preserve the archival collection to respond to a present political discourse (often to counter a state sponsored discourse) and chooses its form and the technology for its preservation to serve these interests. The practice of archival activism and rising interest in understanding archives as capaciously occupying several temporalities contemporaneously is outside the scope of this chapter. However, literature on the subject is gaining traction. The 15th Volume of *Archival Science* (issue 4) introduced by Andrew Flinn and Ben Alexander laid important definitions for active archiving and activist archiving. The volume dedicates itself to archiving as a form of activism. Many scholars have discussed archival activism, social justice, and active archiving since the issue was published (Wallace 2020; Caswell 2021; Cifor et al. 2018; Carter 2017; Currie and Paris 2018; (Vukliš & Gilliland, 2016).

The collections in the Democracy Archives fall squarely under Flinn and Alexander's definition of archiving activism where the archiving institution (in this case the Centre for Modern Indian Studies at the University of Göttingen) collects and documents democratic movements (Flinn and Alexander 2015). In the case Campus Uprising collection, however, this act of archiving activism is preceded by activist archiving where students invested in the movement documented the movement without the initial mediation of the archive. The digitized images and documents in the Documenting Domination and Long Emergency collections on the other hand were acts of archiving personal engagement with these movements as either activist or spectator. The mediation of the archive curates these collections to produce a rhetorical virtual public in which these divergent collections critique the state in the past and in the present.

Why an Online Archive?

In the case study of the Umbrella Movement Visual Archive (UMVA) in Hong Kong, Tong describes the frustration and fatigue among the volunteers as the movement folded up. The challenge of preserving the artefacts that the archive had set out to preserve and collect became financially and emotionally unviable. Affective and physical fatigue in a movement is common, as is the frustration with movements failing to live up to the initial vision and energy.

The fatigue affects archives of the movement as the active stakeholders in the archives shrink. Once movements lose momentum, public interest in preserving its memory wanes until it becomes relevant again. This often corresponds with a decline in funding that sustains the archives as the UMVA found out. Many items in the Campus Uprising Collection had already been circulated extensively over news and social media generating copious amounts of disaggregated data around individual items. The movement already had a hold on a collective discourse on protests. But the persistence of this documented evidence in public space was uncertain. Social media platforms have no incentive to preserve this documentation for a future especially when it affects business interest. The material that students generated for a protest that was staged conjunctively on the university campus and in the virtual public sphere was predominantly digital. These included images and videos of the movement itself but also digital originals, and digitized copies of cartoons, posters, and correspondences produced during the movement. The archival commitment was to ensure continued access to these collections to researchers. An online archive would allow continued access to the archival material, the bulk of which was born-digital.

This idea was reinforced by the collections on the Long Emergency and Documenting Domination, where collections owners chose to keep custody of the material under their care while sharing its content for research use. It is also useful to remember at this point that the collections were planned as documentations of democratic events. It did not, as with many archives of activism, start out with an archival strategy that encompasses the custodial and intellectual accession of a material. The archive, in this case, followed the activism. Decisions on the technology used, preservation, and the form of access were informed by the nature of the documentation. The Activist's Guide to Archiving Video, for instance, has excellent advice on standardizing processes of capturing moving images including the kind of embedded metadata, exporting full resolution videos and naming files. When organizing documentation with the intent of archiving, these are excellent conventions to follow. In truth, however, protests are often documented without planning, often uncoordinated, on various nodes that are then clustered for archival collections. The archive often arrives belatedly to the scene even though the archival material is being actively generated. This was the case with Campus Uprising. Documenting Domination and the Long Emergency, on the other hand, was controlled documentation undertaken several years after the events they archived. This documentation was standardized to specific formats, resolutions, and bit rates.

The bulk of the archival material was either born-digital or digitized. This allowed us to imagine the archive online. This choice would raise ethical questions, which we discuss at the end. These were questions specific to the digitality of the archive and its availability online such as those around the archive-user interaction, the limitation of the archives' control over the circulation of the digital object, and the exacerbated risk to subjects posed by the

indiscriminate digital documentation enabled by phone cameras and recorders. These affected how some parts of the collections were made available, as elaborated at the end of the chapter. The next section describes experiments with the archival collections and collection management systems that made them available online.

Preparing Data for the Archive

When preparing to build an archive, we were confronted with documentation that hadn't been collected for archiving. The data would have to be primed for ingestion into a digital collections management system. The Long Emergency was our pilot collection. The team at Janastu in Bangalore (Bhanu Prakash, T. B. Dinesh, and A. Shalini) had previously used Omeka to host collections from the archives at NCBS (National Centre for Biological Sciences) for the 13 ways digital exhibit. The Long Emergency collection was small and Omeka was built especially for oral history collections which were the anchor of the Long Emergency documentation. Omeka is an open-source content management and web-publishing platform that many humanities projects use to organize, describe, and publish their data online. Choosing Omeka Classic – there are different versions – determined the ways in which we prepared our data. It supported specific file formats for different file types, and it had excellent support for Dublin Core metadata. Some files were converted to ensure that they were supported by Omeka and that all file types of a specific media type were uniform. In addition, files were batch renamed on Adobe Bridge using a convention specific to collection. Oral history recordings, for instance, were named using the Interviewerinitials_Intervieweefirst-nameinitialLastname_yymmdd convention. Video, images and documents were named by yymmddCollectionInitialFileType0000. A digitized manuscript file created on 15 December 2017 for the Documenting Domination collection would therefore be named 171215DDMS0001. "DD" stands for Documenting Domination and MS for Manuscript. The serial number at the end is progressive.

The project used Microsoft Excel as an effective tool to document metadata across collections. This will raise some eyebrows. Excel, however, is an amazing tool with a range of functionalities that both beginners and advanced users can utilize. Its reach also facilitates easier learning curves. As a database tool Excel is a powerhouse. What one must consider when using Excel for archiving is to not fall into the trap of treating Excel as a content management system. Excel is a useful tool in our toolbox. Instead of looking for alternatives we used Excel to build a stack of tools, like the knives in a Chef's kit. What is that stack? A stack is simply a set of tools that can simplify workflow and processes, especially when working in an interdisciplinary team.

With Excel as our tool for documenting metadata we set out to describe the collections. The metadata used Dublin Core Metadata fields and

documentation team set to fill them in after being orientated to the metadata standard. This was especially useful for descriptions where details that an outsider archivist would have been unaware of were supplied by those who were intimately familiar with the content of the archived item. The metadata supplied information on provenance, dates, data type, and rights. It also manually assigned an identifier to each file although this task should have ideally been undertaken by a software generating checksums that would have allowed these identifiers to track any alterations to the files. The metadata sheets also added tags using a semi-controlled vocabulary that was generated for the Campus Uprising Collection. The other collections should also have used controlled tags, but this was an oversight that we failed to address. Authority files would have been an excellent tool to reduce erratic naming and tagging. But, as it were, we failed to produce these. The semi-controlled vocabularies were produced with the researcher in mind. Terms were generated to names objects and events both specifically and as categories. A march to the parliament would, for example, be tagged as ‘March to Parliament,’ ‘march,’ ‘protest march.’ This simplified browsing through the published collections in the absence of a built-in-search option.

AuQ9

Before one could browse the archive, our pilot collection – the Long Emergency – had to be imported to Omeka along with its corresponding data. Janastu was responsible for a range of actions on the digital archive: data management, deploying a collections management system, publishing the collections to the web, offering server space for the collections, maintaining data backups on hard drive, on a local cloud device and on a server on the Internet. The team also provided developing and design services to the project. The team had experience with content management systems (CMS) and there were a few to choose from. Having already worked with Omeka Classic the collections at NCBS the open-source platform was an easy first choice for the pilot. This also capitalized on the skills of the server administration team, which was familiar with deploying and maintaining collections on Omeka Classic.

Traditional content management systems like Wordpress, Drupal, Django, and Omeka are monolithic in design and architecture. They connect the database back-end and front-end into a neat application code base, that the developers can extend or modify to provide custom features with the help of the documentation. This allows authoring on the web to publish content on the Internet. What one sees on the screen is a designed layout of data for human consumption. A more recent practice is the ‘headless CMS,’ which decouples the design (the ‘head’) from the data or content (the ‘body’). In such cases the backend is separated from where the data is presented. Many software professionals argue that using a headless CMS reduces dependencies in their workflows and processes imposed by the coupling. For the team the incentive to go headless was primarily the freedom from being limited by a platform. The CMS was customized to the needs and preferences of the project. At the time of building the archive front-end frameworks like Angularjs and ReactJS

were emerging. They transformed the way web development was done. They allow the front-end to fetch data from the backend in JSON format through a RESTful API, which is then processed into html layouts to paint the screen. Using Omeka as headless CMS enabled us to customize what we did with the collection and its web interface. The web interface or front-end was designed as a single page application that consumed data from Omeka server in the JSON data format through the RESTful API to create the user interface for accessing the archive.

With that decision made the next step was to import the data to Omeka. All items were imported to Omeka using the CSV plugins. Other plugins were available but were not required for what we were trying to achieve. Omeka offers several useful visualization tools which were not required to the project. The Long Emergency collections had three different types of files: Images (jpeg), Audio (in wav), and Documents (PDF). In addition, the web platform hyperlinked to published material elsewhere, primarily films from the Films Division produces in the 1970s and reportage from archives of news publications. In cases where we need to host files on the server the file path to the file and the CSV import plugin used to upload files into Omeka Classic. Although this was a small volume of files the import sessions would time out frequently forcing us to begin again. That became a frustrating impediment in the workflow. They also led us to broken connections between files and metadata and threw up duplicates that had been missed.

Omeka Classic also created a barrier between the archivist and the software team. Omeka Classic's content manager wasn't the most intuitive, and any changes to the published collections had to be mediated through the software development team. This was a second reason for the heavy use of Excel on the pilot. Nonetheless the pilot collection went ahead with Omeka Classic. The team also decided to find smoother ways to for allowing parallel processing and batch edits that could be used both by the archivist and the team at Janastu with equal ease. Since 2017, when this collection was under the works, Omeka has transformed. The new iteration, Omeka-S, is loaded with features. It utilizes language and vocabularies that permit customizations without coding such as configuring metadata fields, adding localizations, importing custom vocabularies, and creating multiple sites. A new development that allows different roles permissions and access to users would have solved many of our issues with Omeka Classic at the time. In 2016, however, Omeka S was new with limited support. The evolution from Omeka Classic and Omeka-S evolution is an excellent study in how software develops from crude prototypes to usable betas and goes into production only to begin again to build it better.

The collection was published to the web with a custom design. It allowed users to browse through the items, play them, and look at partial metadata. It does not reveal the item's place in the collection or fonds that they belong to. This was a choice made in consonance with the decision to implement the collections' user interface as an easy-to-navigate website. This decision did

not impair searching through the collections, as their volume made it easy for their arrangement to be made evident through drop down menus. The website intends to provide access to the contents of the collection, not their containers or original files. Having been curated for the express purpose of the project the context is articulated on the website. The website is designed to allow easy navigation between different collections and hyperlinked items elsewhere on the web related to the collections as a separate thumbnailed list.

The same design and code were deployed for the Campus Uprising and the Documenting Domination collections. This was 100× the size of the Long Emergency collection in terms of number of items. It was 500GB of media content of which the heaviest were digital images and videos. The rest was audio files and PDF documents. Unlike the Long Emergency collection, the files on Campus Uprisings had been recorded by multiple actors on different recording devices. A significant part of archiving this collection was cleaning up the data, removing duplicates, and standardizing formats. It was also evident that Omeka Classic would not support imports of this volume.

In the time that the data was prepared for ingest, one of the authors (Bhanu Prakash) experimented with static site generators and headless content management systems. He discovered a light, highly customizable CMS, Cockpit. The user interface was clean and was easy to use. He also tested it for heavy parallel processing, and it delivered well. Cockpit did not have multiple features like Omeka. But it allowed collections and items to be modelled into using any vocabulary terms we chose.

Cockpit also enabled RESTful API endpoints (as we had done with Omeka) for the web interface or front-end to consume data from a server. Although Cockpit was not developed in a Digital Humanities context like Omeka, designers and developers have used it successfully to create distinct digital experiences. Given the requirements of the project: a backend collections management system with a web publishing platform with simple navigation facilities Cockpit was ideal. It fulfilled all the requirements without any additional baggage.

The files on the Campus Uprising Collections had to have different iterations on the web and on the server. A Python script compressed and created thumbnails for all the images, videos, and PDFs so that they could be published to the web for easy playback. The files were hosted on the NGINX web server, which creates an http URL for each file. The URLs were fed into the metadata sheet and a code was written to fetch these URLs to the web browser. This removed the dependency of importing files into the CMS and instead used battle-tested File Transfer Protocol guaranteeing higher success and eliminating the import time-outs that Omeka posed frequently. The method was consistent and successful. Tasks like eliminating duplicates and formatting link texts into html-clickable-links were managed with Google Sheets and add-ons. After cleaning the metadata sheets and making them machine readable, the data was exported to comma separate values that was supported by the content management system so it could be published to the browser.

Learning From the Collections

Once published all three collections were hosted under the umbrella webpage <https://demx.in> by the name Democracy Archives. They use the same design and provide the same degrees of navigation on the web. An additional feature that the project was unable to implement was full searchability. Instead, the archives are searchable through tags and browsing. The design has allowed further research into the collections. The Long Emergency has elicited strong interest among scholars and has already been used in two different exhibitions besides being cited in research on the emergency.

Moving the collections online was a series of linear decisions where we adapted as we learnt. Many items on the collection themselves, however, were sensitive. Making them public and determining access was more complicated. The Long Emergency oral histories spoke of persons both living and dead. The interviews were made available without censoring except where interviewers expressed their desire to redact information. Newspaper clips and cartoons are available for viewing in full resolution for research but redirect anyone wanting to reproduce them to the publishers. The Campus Uprisings presented more complicated decisions. The videos show hundreds of students protesting and marching against the university and to government putting them in a place of risk. Many of the students were targeted for their participation in the protest. There are cartoons caricaturing and criticizing the administration where the cartoonist is easily identifiable. The Campus Uprising Collection went live after several months of deliberation. Were we making protestors vulnerable? Were people at risk? What about people who happen to be in the frame but were not aware that a photograph was being taken? Despite more than 20,000 items in the collections, fewer than 200 are available for public viewing. These are images and videos that have been circulated in the public and have multiple copies. Putting them up on the page of the collections did not pose an additional risk to the documented. Access to the collection is mediated through the Centre for Modern Indian Studies (CeMIS) at the University of Göttingen. The mediation is not fool-proof but aims to safeguard the interest of the protestors against malicious targeting.

What does it mean for CeMIS to close off access to items that have been previously circulated in media? One could argue that it is a form of gate-keeping. It may also be argued that it is unethical for the centre to close off access to that which has already been made public. This is the dilemma of the digital archive that seeks to be open to public access. We approached these arguments from the position of studies on social media and networked public-ness, where being public does not necessarily mean consent to being in the public eye. We argue that as long as the public-ness of information makes its subjects vulnerable, access to the information should be mediated in the interest of the safety of the subjects. This is not in support of patriarchal closing off of archives and fails to resolve questions around how the access is mediated and who gets to mediate access. We do not claim to have

answered these questions. By raising them here we seek to bring attention to the ethical questions in making archives public. Public access to archives is a valuable goal, but radical openness in archives affects a range of communities and individuals. There are no easy answers to how open or closed an archive should be and how creatively we interpret fair-use. It is important for archives to articulate these aporetic decisions and allow them to change in response to new learning.

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4 The Archive as a Crucible

Experiments With Pedagogy Through an Archive

Venkat Srinivasan¹

Introduction

Archives matter. Archives are also matter, of course. It's the world that scholars who navigate the archive are most familiar with – the idyllic yet frustrating, mysterious cavernous sites of treasure, all available for the scholar to step in to and make sense of the past.

I do take issue with it myself; it is a provocation. But let's stick with the first provocation, that archives matter, that archives are valuable. It is perhaps worth turning it on its head and ask whether archives matter. Because in asking such a question, we must ask a few others: matter to whom? What do we mean by an archive? And to what end? Who knows of this enterprise called an archive?

Recently, in an introductory session for a course, I asked the question that I normally do of a room full of new students. How many of you have visited a library, I asked? Dozens upon dozens of hands went up. How about a museum, I then asked. Surprisingly – to me, anyway, more hands went up. A gallery? How about a gallery? Many hands came down, but a significant chunk stayed up. And then, for the predictable moment. Archives? How many have visited an archive?

About four hands stayed up. That was actually three more than I expected. So, I guess there is something to cheer about.

I am yet to try this exercise on the streets of Bangalore. But my hunch is that I would be more disappointed, even if I were to stand right outside the Karnataka State Archives and run this poll. I am not sure what the word is on the streets of Kolkata or Delhi or Chennai or Mumbai. Or, for that matter, on the streets of New York, London, Paris, Prague or Tel Aviv or any of the cities across Europe and the United States, where there is perhaps a broader awareness of the word, archive. After all, as we are taught often, its origins are in the *archeion*, the home of the archons – 'chief magistrates' – in ancient Greece.²

I will try and refrain from bringing in too much of Derrida to this conversation, to see if the archive is about commandment – from *archeion* – or commencement, from *archaeia*,³ because what I am concerned about at this

stage is what we started with: do we know what an archive is, and does it matter? And what I am naively convinced about is that our straw polls in any city in the world will reveal similar results. They will tell us, of course, that we know the word, archive. We use it regularly as a verb. We archive – or think about it – our digital data, from Instagram to WhatsApp, e-mail to Google Photos. But when confronted with the archive as a noun, a space that is a knowledge site, we are likely to be clutching at the straws of our poll, pun intended. Where is this archive? What do we make of this knowledge site if an extraordinary cross section of our population rolls its eyes?

And yet – and this is key – and yet, we have all seen something like an archive, even in its noun form. There is no dearth of famous-institution-archive, less-famous-community-archive, widely unknown person-archive. Scroll the web and you are likely to find an archive for your historical gap of choice. And when we don't find it, we quickly fill that gap with something like an archive.

Archives often emerge from process. Of course, a lot is set into motion once that process gets solidified as an archive. That solidification usually starts as an act of governance and control, but it ends generations down the line as something that resembles a treasure chest. Once leaders decided it made imminent sense to build edifices called archives to control their subjects, once religious bodies thought it fairly normal to keep track of every birth and death in their community; in other words, once every powerful body realized it was important to keep their house in order to govern, to keep their power in order, it was only a matter of time – decades, centuries, generations down the line – for us to realize that here now lay a treasure trove that was waiting to be mined and made sense of. The rise of the professional historian in the 19th century is perhaps but a predictable outcome of the tedium of power.⁴

The innocent archive – the site where our day-to-day processes dutifully found a home without us being aware of a future looking back at us – becomes a site that conceals and reveals, and gives birth to an entire industry, down to the security officer at the National Archives of India who might ask for a bonafide certificate duly signed from the 20-something student hoping to just check this cavern out.

I will bring in Derrida's Archive Fever for just another moment to highlight one sentence, where he says, "There is no archive without a place of consignment, without a technique of repetition, and without a certain exteriority."⁵

Embedded within that assertion – the consignment, the repetition, the exteriority – is an argument that the archive does have a proto-life, if you will, before it becomes visible to us.

The archive begins in one's imagination. It is in this process of moving from the private – one's mind – to the public – the folder in a box on a rack in a building – that one also sees the shaping of an archive, the shaping of a knowledge site with all its politics. The archive as a noun – from the National Archives of India to the Dalit Archives website – is, of course, constructed from the archive as a verb, a series of acts governed by luck, process, and circumstance.⁶

‘What is an archive’ is a question worthy of a street straw poll, and it is likely to bring in responses about the brick and mortar structures around us, and the 0s and 1s spinning on a hard disk in a server farm in Nevada or Sweden. But as archivists, we need to pull the public closer to the archive as an idea, not its manifestations. To see the archive as a knowledge site, we need to also build a society where we know the archive first, where we see it, unsee it, and then see it again in new light.

But how can we do this if we don’t rethink the role of an archive in the public, as not just a knowledge site, but as a site that teaches us how to know, as a site of education in the broadest sense of the word?

This is not a new problem, as is evident from a 1986 article titled ‘Archives in the classroom’ by Ken Osborne.

The publication of George Bolotenko’s paper, “Archivists and Historians: Keepers of the Well,” in 1983 sparked a considerable debate on the role and identity of archivists. In this debate two positions have been staked out – the archivist as historian versus the archivist as records manager – to the neglect of a third: the archivist as educator, a role which receives surprisingly little discussion in archivists’ journals.⁷

Osborne’s 37-year-old article is aging well. The archivist as he observed then was seen to be an objective worker, a server of goods for the academic or the government bureaucrat, nothing more. Today, perhaps we can extend that to serving the citizen, if we take into account various forms of rights to public information. Meaning making happened elsewhere, we stressed, not at the hands of the archivist, and surely not at the time of deciding, filtering, receiving, arranging, and describing records.

It is true that there has been some course correction from this misconception today. And there have been various efforts in repositioning archives in education, which I shall discuss in a moment.

But let me go back to the beginning, and my survey of students asking who’s been to a gallery, a library, an archive, and a museum, this quartet of public spaces that we call GLAM. And let’s think again about education in each of these spaces. The library is the unquestioned champion – every university builds its vision around its library. Since one thing that galleries and museums both do is to offer exhibitions to the public, I will club them for this argument around education. The idea of what education means has varied between museums and archives, and this, too, is not a new phenomenon. Here is a quote from a 1977 article titled ‘Wider Use of Historical Records’ in *The American Archivist*:

To the museum educator, the term museum education means the education of the public. To the archivist, archival education means the education of other archivists. In fact, . . . the archivist does not ordinarily perceive the education of the public to be his job.⁸

This quote from the article by Howard Applegate, Richard Brown, and Elsie Freivogel has also aged well. We as archivists are at best engaged in training others to take over after us. The past two centuries have created a curious situation with streams of academics trickling into the archives to conduct their research. It's a knowledge site, but perhaps in a more literal sense, a site of extraction of knowledge from rarely seen records of human endeavour. We borrow words from other disciplines. Archives are mined, dug up, waded through to find the thing that few others have seen. We run the risk of getting to a point where the mere act of revealing the glitter below the archival morass becomes 'new' knowledge, and not our questioning of the inadequacies and politics of the archive that led to the presence of the glitter. That is partly because the glitter is so hard to find in archives in India, blocked by generations of fort-like walls built around the archive. And even if we as archivists in India are pleased with the trickle of historians and other researchers who might be willing to engage with the archive, we should not overlook the glaring fact that the historian may themselves not be familiar with the methods of the archivist. The archivist Terry Cook talked about how the archive is a foreign country even to some historians.⁹ "The archive(s) is a foreign country to many historians. Of course, it is one that they visit frequently – but perhaps mainly as tourists passing through, focusing on their guide books, intent on capturing appealing views."

There is a tremendous risk if this situation did not change. Who is the archive for, after all? Where will it find its sustenance and meaning, to ensure a re-imagination of the very idea of an archive? Applegate, Brown, and Freivogel had a similar concern in their 1977 article 'Wider Use of Historical Records': "If a public institution does not build constituencies larger than those of the academic researcher, the institution is doomed."¹⁰

As archivists, we serve both the donor and the researcher/public by preserving, arranging and making visible archival documents. But the archive needs to constantly figure out other constituencies.

And if we probe the nature of the future user, and the need for the archive to be more inclusive and relevant, we have to listen to and speak to those who will be custodians in the next generation: current students. This is all the more pressing in our local context in India, where training in the form, content and politics of archives – an archival sensibility – is not commonly accessible. Students are unlikely to ever experience entering an archive. Engaging with students is vital for the viability of the idea of an archive.

Within the etymological origins of the word *document* – *documentum*, *docere* in Latin – is a lesson,¹¹ and therefore, an intent to teach. And at our centre, an archive in India, we feel compelled to drop anchor in such an objective.

Experiments

The Archives at NCBS is a public collecting centre for the history of science in contemporary India (<https://archives.ncbs.res.in/>).¹²

It has developed four objectives for the archives: strengthening research collections and access, pushing the frontiers of research in archival sciences, reimagining the archives as part of the commons through public engagement and inquiry. And what has become central to our efforts now: building capacity and public awareness through education, training, and programming. We believe these verticals are centrally needed for cementing the idea of an archive in the public imagination, and we have extended these to the work of Milli, a not-for-profit collective of individuals and communities interested in the nurturing of archives, especially in south Asia.¹³

In Osborne's 1986 article, he discussed eight modes of engagement in the classroom¹⁴:

- Teacher-education projects and activities
- Classroom instruction on the work and role of archives
- Exhibitions and visits
- Projects involving students in archival research
- Production of archives-based teaching kits
- Use of students to identify and collect material of interest to archives
- Formation of school-based archives
- Establishment of organizational linkages between teachers and archivists

We are nowhere close to this ideal. But we have been inspired by some of these modes and I'll discuss our small efforts in getting students to think about archives in every sphere of their life. I'll share experiences from two case studies. One is an internship programme, and the other is an introductory course on archives.

Starting in 2017, we have run an internship programme and worked with over 55 students from across the country, across age groups (17 to 35), across education levels – school to post-doctoral, and across more than a dozen disciplines, including the sciences, engineering, education, history, art, design, anthropology, communication, sociology, and law.¹⁵ The intent for these internships is not to train them to be archivists, but to build a sensibility of the archive in their practice, and to try and align their interests with the intent of an archive. That is, to see the archive as a knowledge site, but to also learn how to know, discriminate between memory, database and narrative, and be comfortable in navigating ignorance. Students work independently or with each other, and develop projects around specific interests.

The second case study is a semester-long structured course for post-graduate students with no experience in the archives. This course's intention has been to get to the heart of the lives and politics of archives: what is an archive, and to what end? It gives an overview of the various forms and content of an archive, theory and practice of archives, and the distinctions and similarities between different scales and potentials of archives, from family almirahs to the National Archives of India. One aim is for students to realize the circular links between past events and objects, current archives, and future stories. As I state in the student's course overview, it's a provocation in the age of

Instagram, and a small way to position the archive as a waypoint in one's educational journey, where one becomes conscious of the possibilities and politics of an archive.

It's also about making us conscious of the politics of an archive, by making us think about whose material enters the archive, and who builds or uses the archive. Every inclusion of a record, and its entry into an 'archive' also brings with it questions of inclusivity, ethics and privacy. Who is being made visible, who is being erased, and what do we do with this new thing – by archival standards – called the Internet? Our hope is that students see the archive as a living, breathing idea that can strengthen both civic and digital commons. Above all, the intention for the course is to see the archive in everything, and everything's archive.

Yes, archives are sites of knowledge. Students learn this at the outset, and hopefully get a sense of the sheer privilege of working with a donation from someone's private papers for public use. Privileges come with responsibilities at every stage of the archival process – from sourcing to appraisal, from arrangement to description and preservation and access. And in both our cases, our intent is to emphasize agency, and how it also translates to authority.

Archivists are agents in this process of creating knowledge sites, as are the proto-archivists, the original creators of the material. The archivist, as Terry Cook said, takes on the role of not just responding to others possessions, but also actively gate-keeping for the future: "As archivists appraise records, they are doing nothing less than determining what the future will know about its past: who will have a continuing voice and who will be silenced. Archivists thereby co-create the archive."¹⁶

Our hope is that students appreciate this conundrum of the archivist, who is also often seen as a memory-keeper today. What we try and do with our students is to problematize keeping (or extracting, depending on our point of view) and memory. We aspire to sensitize them around how a piece of knowledge is created and made almost sacred in the process of it entering the archive. At our archive, we often like to say that archives enable a diversity of stories, and that archival objects are in between stories. It is up to us to ensure students engage with the archive, examine the archival object, trace its historical origins and stories before it became an 'object' of knowledge. Archivists describe archival objects in a sufficiently detailed way for future users to find these objects and make sense of them. Archival objects are vessels for stories. But without the catalogue and the description, the archival object can resemble an unmoored vessel, a space that exists but not easy to get to or navigate. This description is as much part of the co-creation of the archive that Terry Cook speaks of since it is the description that helps us find ways to re-imagine the object. To take Cook's idea further, archivists and the public then have a responsibility to see how archival descriptions and regulations dictate the object's ability to be catapulted into future stories. In other words, archives could perhaps be better seen not from the lens of

commandment or commencement, but as part of a continuum of stories. And central to all these deliberations is power, as illustrated in a 2002 article by Cook and Joan Schwartz:

Archives – as records – wield power over the shape and direction of historical scholarship, collective memory, and national identity, over how we know ourselves as individuals, groups, and societies. And ultimately, in the pursuit of their professional responsibilities, archivists – as keepers of archives – wield power over those very records central to memory and identity formation through active management of records before they come to archives, their appraisal and selection as archives, and afterwards their constantly evolving description, preservation, and use. . . . When power is denied, overlooked, or unchallenged, it is misleading at best, and dangerous at worst. Power recognized becomes power that can be questioned, made accountable, and opened to transparent dialogue and enriched understanding.¹⁷

Outtakes From Experiments

Internship Process and Outcomes

As mentioned earlier, the Archives at NCBS has an open call for internships. It is open to people from across disciplines – sciences, engineering, history, sociology, art, design, law, archival/library/museum studies, theatre – who want to get a feel of a relatively new archive, in both the physical and digital spaces.

Between 2017 and 2022, the Archives at NCBS advertised the internship a couple of times through social media. However, the public call is readily available on the Internet. The Archives at NCBS has relied on students finding out about the archive and reaching out on their own. If an applicant seems like they are actually interested in the archive (and not in one of the science labs on campus!), they are sent an email explaining the internship process and they are sent a questionnaire to fill up. The questionnaire is a way for us to see how students respond to situations and descriptions of a few different archival objects.¹⁸ We don't give detailed instructions to students on what they should do. But we do look closely at how they respond. We notice that the questionnaire elicits very varied responses. The ones who get selected often show curiosity and a willingness to dig into details. One of the things we ask in this questionnaire is for them to describe an archival object. The better responses would usually scrutinize tiny details of the handwritten archival letters, and do a little bit of archival detective work to find their histories. When we receive a slightly varied response (even if it is lacking in other parameters like attention to grammar), we sense a student who is interested both in fulfilling a task and in understanding the context of the object.

The questionnaire is structured such that there are no clear right or wrong answers, and this can sometimes be unsettling for a student. But we have been pleased to hear that it still mostly worked well for the students. Here is one evaluation of the questionnaire from a student who did her internship when she was in college in the sciences:

The questionnaire itself was very interesting and I loved filling it out, though I was a bit worried about my answers being “right” enough. The kind reminder that there are no right or wrong answers didn’t go a long way in reassuring me unfortunately. Nevertheless, I had fun filling it out and felt like I had written the most enjoyable “exam” of my life when I submitted it.

We set up a lengthy conversation with selected students where we learn about their background, and motivation to apply to an archive. This is also a critical process to understand what drives them and how we might wrap an archive around their specific interests. After further selections, and speaking to two referees (especially to understand how best to work with a potential student in a short period of time), we identify a student to join the Archives at NCBS.

As we state in the email we send to interested students, depending on their background, the range of work will change. For instance, a young college student specializing in law researched and put together material that explored what happens when archival material becomes more accessible to the public and how something that was always legal also changes simply due to wider access (as was the case when Albert Einstein’s diaries, which have been at an archive for a long time, were made more visible to the world when they were published in the form of a book with the material translated into English). A graduate student in education worked on brainstorming projects that could be used to train teachers around archival objects. Students with a design background might develop a solo exhibition using archival material, but they will also likely spend time immersed in an archive and letting the creation of an archive influence their work as users of an archive. One such artist developed an exhibition starting from the objects that were discarded in the archival appraisal process for a scientific lab. Another artist worked on a set of paintings of the campus just before and during the early COVID-19 lockdowns, trying to capture a sense of space in a way that will only become increasingly valuable in the decades ahead. Archives carry process, and what this body of work has done is to freeze the lack of process on an otherwise humming campus.

One young artist with a keen sense of the archive showed a strong interest in ideas of note-taking. Her project was to be an exhibition based on ideas of ‘repetition’ and ‘note taking’ from material in the Archives at NCBS. Her exhibition, titled ‘Mother, take good care of me,’ questioned the spirit of play. She made her fabric/textile workshop “visible to the public to allow a deeper look into the practice of making.” Her installation on campus was in the height of the COVID-19 lockdowns, at a time when people were yearning

proximity/intimacy. Her exhibition was in a box that she carried out from site to site. Her commitment to building an intimate space to display both method and memory was received with much acclaim.

Another young communications professional worked on two projects, including processing the papers of a scientist, and on developing a COVID-19 archive for how a campus responded to a global pandemic. This was an experiment in thinking about how one might archive from such a recent event, and what shape such an archive might take when one doesn't put enough time between the event and the creation of the archive. Her work, driven by interviews, brought up another interesting factor. Her interviewees displayed a deep affinity and pride for their campus and how it came together, but they were rarely interested in going deeper to reflect on specific incidents. While some of this could be attributed to interview techniques, there is also something valuable to think about the place of reflection. Archives respond to people and institution's ability to curate. Curation, and the ability to reflect, needs some distance, and it is likely that when one is so close to an event, the tone of the interview is likely to miss that reflective character. We have not given enough time to even select the things that might eventually be seared into one's mind.

There were other kinds of hands-on projects. A student in the sciences worked on a project to deconstruct archival scientific equipment and bring in parts to make it work again. Another set of students from the sciences developed a narrative using archival objects from a variety of archives around the history of the fruit fly in research. A handful of students have done remote internships and these have primarily focused on making sense of and conducting oral history interviews. We find it relevant to specially train in listening to oral histories and summarizing them since it builds a skill of actually listening to a unique archival object: one that is created in the present, about the past, and for the future. It forces students to think about the politics of archival records, about the unique place for histories and communities that don't hold 'paper' records.¹⁹ Of course, a majority of the students apply for and get trained in core archival methods from sourcing to appraisal, arrangement to description and conservation, and public access and afterlife of the object. These are undervalued skills, and we think they are transferable skills since what we ask the students to effectively do is to build an ability to select based on a set of parameters, grasp the essence of an object, then linger and contextualize what they see, connect the dots, and finally describe with diverse lenses.

Archive Course: Us and the World – Archives, Stories, and the Lives of Others

In 2022, I offered a course titled "Us and the World: Archives, Stories and the Lives of Others." This is a course on the form, place, content, and politics of archive to a set of about 30 graduate students at Azim Premji University (their specialization is in education, development, public policy, and

governance). They usually have no experience with an archive. In the course overview, I state that

it would seem like the word, archive, is everywhere and commonplace. And yet, there is little understanding for its role in the public sphere today. The opening line of the International Council on Archives' Universal Declaration captures the intent well: "Archives record decisions, actions and memories." Archives, then, are a record of our collective lived experience. They can be sites of accountability or dissent or both. They have always been crucial sites of record-keeping at institutions and local, state and national government bodies. But there are many that arise because someone saw a gap in the record of experience. The array of archives is dazzling: From community and neighbourhood archives to those of the United Nations, school and college archives, disciplinary archives from biology to banking, archives of crises including the many around COVID-19, around the farmers' movement, and around the Partition. Archives can record what the state wouldn't, as in the case of the queer archive in Bangalore, and the oral history repository around the Narmada Valley.²⁰

While it has the broader intent for a student to see the archive in everything, and everything's archive, the course has four stated objectives:

- Seeing the role of the archive in governance and education, and its capacity as a site of commons for the public.
- Learning how to both create and navigate an archival source and use it in one's work or research.
- Ability to develop a small concept for a fictitious archive, whether that be for one's family history, a personal hobby, a corporate house, or a public institution.
- Through example, the ability to understand the connection (and distinction) between an archive and the diverse stories that emerge from these spaces.

Students were led through a broad orientation about archives, and then through specific sessions on seeing how narratives emerge from archives, building archives, conducting and listening to oral history interviews, seeing the impact of the digital in archives, and examining ethics and privacy in the increasingly visible archive. They make a field visit to the Archives at NCBS, where they experience archival objects for the first time, but also reflect on their own approach and response to the principles that decide what enters an archive. They put together individual assignments around a current issue and how they see the archive in it, and developing or analysing oral history interviews. And they develop a group project on a new fictitious archive, around a

real-life or imaginary person or organization. The intent is to not look at the content of the archive, but to see how closely they can apply the principles of archiving, and how they can measure the quality of the archive they put out. These projects varied widely, reflecting a cross section of interests including archives of social movements impacting legislative changes in independent India, of queer movements after independence, of witch trials in Assam, of the Janpath Market in New Delhi, of the politician and film star J. Jayalalitha, and an archive for the school from the popular Archies comic series.

Student feedback for the most part was positive, though most did feel the assignments were fairly intense and that they should be lowered substantially in future offerings of the course. Some understandably felt the course had too much to read and absorb in the given semester schedule, like this student in their feedback: “The time period was too short to understand the broad aspect of Archives provided. Can be more interesting and clearer. Sometimes it gets highly theoretical.” At the same time, there were others who seem to be inspired by the course and how it shaped their thinking: “The course acted like therapy for the academic load I experienced this semester. It helped me to get closer to the work I wish to take up in future. During the lectures, there was this constant motivating feeling for exploring the process of archiving more.” Most students did not come in with specific demands of the course since they had not encountered an archive before. Their openness helped, as is evident from this feedback:

I did not have specific expectations from the course but I was really curious to know what archiving means beyond personal curating. The process of discovering this has been both learning and fun. Greatly enjoyed the astonishing stories shared and conversations in class.

More than anything, what has really delighted us and made us anchor learning and doing as a central function of the archive has been the diverse set of students. The fact that development and governance-oriented students can get together to try and come up with the parameters of a fictitious archive shall hopefully help them in their future careers. The fact that students of physics, anthropology, biotechnology, and history could work together on an archiving project, while having lunch with a student of art working on her own exhibition, is in itself a unique feature, and something we thrive on. It only underscores the point for us that the archive is a discipline-agnostic space. Our specific mission as an archive is to be a collecting centre for history of science in contemporary India. We recognize the material we receive and process may come from a world of sciences, however broad that may be. But how we describe and make sense of it will allow for it to be seen from the perspective of so many other disciplines. This only reinforces our belief that archives should be seen as a site that holds and strengthens the commons.

Futures

To reach Osborne's ideal of the archivist as educator or archives as crucible for education in India, we will require a fundamental rethink and commitment to seeing the archive as an idea, and as a place where one learns how to see better, and examine – in the process of pulling archival objects from their stories.

Our intent through the course and the internships has been to build an archival sensibility in the students' lives. But we had not anticipated another outcome from these experiments. For the students we work with, the archives ends up being on their first professional work sites, or the first course that is not a theoretical component of their curriculum. It ends up being a bridge to the professional world, and this is something we heard informally in student feedback. So, recently, we reached out to alumni of the internship programme to see if they had any reflections of their time. Some looked back at a time from five years ago, and some from a year ago. The comments shared below helped validate our little experiment, but they also surprised us in terms of what the student experienced.

"I was probably in the first small set of interns set to digging into old papers and files to find anything that had archival value. . . . The work could be dull at times but the company around me and the occasional fun fact I'd dig up more than made up for it. . . ."

"I think the archival group created an atmosphere that was really stimulating for young clueless students like myself. I remember being excited about describing what I was doing – sifting through dust covered layers and understand biology through history. Of course, this is from way back. . . . I can't quite explain how but I think my short stint at the NCBS really helped me understand how to conduct myself in the adult world."

"I doubt a lot of people would be thrilled with the kind of work which I did during my stint at the NCBS archive: sorting through Obaid Siddiqi's papers, being involved in the more bricks-and-mortar stage of the archives facility rather than its eventual intellectual stage of thematic planning and discussions. Most people see an archive only in its fully-formed state: objects carefully curated for their importance, placed in protected conditions safe from dust, moisture, heat and not-so-careful hands. . . . Archives are suspended moments of time, so it goes without saying that time moves somewhat differently in an archive. You are going through a plethora of materials that were important and functional even before you were born, so it takes a lot of patience to know the importance and place of all that jumbled mass of "junk" and make sense of it again. It requires a lot of information, and imagination. It takes 'connect the dots' to a whole new level. . . . There

were times when that enigmatic nature of what a particular document or piece of equipment might mean in posterity, got to me. But then again, that is a lesson for the long-term: you need to be okay with knowing that you might never understand something completely, that a particular meaning of an archival object will always elude you. . . . I owe to the NCBS archives fundamental insights into my personality, my capabilities, my career goals and my work ethic.”

“I undertook the internship in the archives at a crucial interim in my career [crucial now in hindsight]. I arrived in the archives as a disillusioned high school science teacher, training my aim at a career in the history of science and technology where pesky teenagers loomed less large. . . . It soon became apparent through my work on the Obaid Siddiqui papers that the archive’s value rested on unsexy, humdrum tasks that nonetheless felt significant. It is this dual character of archive-building that struck me most as an intern – feeding the insatiable machine with metadata distilled in excel sheets while simultaneously taking pleasure in the significant, intriguing, even funny, experiences underlying the story of institutional building contained in the documents.

. . . An archive, we were constantly reminded, was a perpetual work in progress. . . . All this made a marked impression on me as an intern, and in hindsight, was a significant learning for a novice historian preparing for a life in the archives.”

“It was my first experience at an archive and the conversations we had at the time have proved to be very formative in the way I think about archives and the particularly the ethical dilemmas involved in the process of archiving.”

“It was the internship with the Archives that has today inspired me to work in the field of archival theory and practice. I came in as a naive student of history, unaware of its nuances but the time I spent there helped me evolve my practice into one that is shaped by critique and question.”

We should stress that while we are very pleased that the students found their experience stimulating, we don’t intend for this to sound like an endorsement of our space. We share these students’ insights because we were surprised at how deeply the students thought about the place of the archive in society and in one’s personal life. As an aspiring ‘archivist as educator,’ I can ask for little more from a student.

The Commons

Archives should be seen as being part of the commons, just as much as our neighbourhood parks, libraries, gardens, lakes, and bus stops. Much as it sounds laughable today, there is no reason why a family shouldn’t be able to

wake up one weekend and instead of saying ‘Let’s go to the park, or go to the cinema hall’ they say ‘let’s go to the archive.’

But to get to this stage in our society, the idea of the archive will have to be led by students. And for that, it will have to engage more with students. They will, of course, learn a little through the archive and hopefully learn to be comfortable with messy interconnected archival objects and know how to see various stories from these, as opposed to digesting convenient, linear narratives. If the archive can help a student know how to know, it will have done its job. But it is the students who will ultimately challenge the norms of the archive, point out the blinders that we have on today, act as amplifiers of an idea, and sustain and reimagine the idea of an archive in the future.

Archives give form to knowledge. But being educated in the idea of the archive also puts us at ease with the unknown.

I want to close this chapter with a quote from Rebecca Solnit’s book, *A Field Guide to Getting Lost*, where she compares artists and scientists.

It is the job of artists to open doors and invite in prophesies, the unknown, the unfamiliar; it’s where their work comes from, although its arrival signals the beginning of the long disciplined process of making it their own. Scientists too, as J. Robert Oppenheimer once remarked, ‘live always at the ‘edge of mystery’ – the boundary of the unknown.’ But they transform the unknown into the known, haul it in like fishermen; artists get you out into that dark sea.²¹

Solnit’s intent is to contextualize the roles of artists and scientists and how we respond to their work. Within this frame, I find a similarity between archives and artists. With due apologies to Solnit, do replace artists with archives, and I think it still works. Archives open doors; and they get you out into that dark sea.

Notes

- 1 “The Archive as a Crucible: Experiments with Pedagogy Through an Archive” by Venkat Srinivasan is licensed under CC BY-NC-ND 4.0. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>. A version of this chapter was delivered as a lecture at an international workshop titled “The archive as a knowledge site: the experience of Europe and India” co-organized by the School for Cultural Texts and Records at the Jadavpur University, Kolkata and the International Research Network (IRN) AITIA on February 3, 2023. This was also presented in an oral and recorded presentation with accompanying slides at the annual conference of the International Council on Archives-Section on University and Research Institution Archives (ICA-SUV) held in Dublin, Ireland between May 29–31, 2023
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- 3 Jacques Derrida and Eric Prenowitz, “Archive Fever: A Freudian Impression,” *Diacritics* 25, no. 2 (1995): 9–63, <https://doi.org/10.2307/465144>.

- 4 Theodore S. Hamerow, "The Professionalization of Historical Learning," *Reviews in American History* 14, no. 3 (1986): 319–333, <https://doi.org/10.2307/2702604>.
- 5 Derrida and Prenowitz, "Archive Fever: A Freudian Impression."
- 6 Venkat Srinivasan, "An Individual's Imagination Is the Origin of an Archive," *Lila Interactions*, April 2020, <https://lilainteractions.in/imagination-the-origin-of-an-archive/>, accessed February 15, 2023.
- 7 Ken Osborne, "Archives in the Classroom," *Archivaria* 23 (January 1986): 16–40, <https://archivaria.ca/index.php/archivaria/article/view/11364>.
- 8 Howard L. Applegate, Richard H. Brown, and Elsie F. Freivogel, "Wider Use of Historical Records," *The American Archivist* 40, no. 3 (1977): 331–335, www.jstor.org/stable/40292010.
- 9 Terry Cook, "The Archive(s) Is a Foreign Country: Historians, Archivists, and the Changing Archival Landscape," *The American Archivist* 74, no. 2 (2011): 600–632, www.jstor.org/stable/23079052.
- 10 Applegate et al., "Wider Use of Historical Records."
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- 14 Osborne, "Archives in the Classroom."
- 15 "Archives at the National Centre for Biological Sciences – Internship Programme," <https://archives.ncbs.res.in/internships>, accessed February 17, 2023.
- 16 Cook, "The Archive(s) Is a Foreign Country."
- 17 J.M. Schwartz and Terry Cook, "Archives, Records, and Power: The Making of Modern Memory," *Archival Science* 2 (2002): 1–19, <https://doi.org/10.1007/BF02435628>.
- 18 "Archives at NCBS: Student Internships – Questionnaire," <http://bit.ly/NCBSArchivesStudentInternQuestionnaire>, accessed February 17, 2023.
- 19 Alessandro Portelli, "What Makes Oral History Different," *The Oral History Reader*, 2nd Edition, edited by Robert Perks and Alistair Thomson (London: Routledge, 2006), 32–42.
- 20 "Oral History Narmada," <https://oralhistorynarmada.in/>, accessed February 17, 2023.
- 21 Rebecca Solnit, *A Field Guide to Getting Lost* (New York: Viking, 2005).

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5 Visualizing the Cultural History of South Asia

Arjun Ghosh

In their landmark work in 2014, Schich et al.¹ visualized migrations of notable personalities across several centuries by tracing their birth and death data. The data consisted of date of birth, place of birth, death of date, and place of death. The place of death was used as a proxy for identifying the place where a person spent a substantial part of their professional life, assuming that a majority of professionals choose to spend their last days in the same urban locale where they lived and worked. In the visualizations they sought to identify the urban areas that attracted the greater pool of talent from diverse areas thus seeking to develop a narrative about the changing landscape of centres of cultural importance. The crucial innovation of this work is in arriving at a set of “notable personalities” the data about whom were used to map the historical trends of the shifting importance of centres of cultural and professional activity (Schich et al., 2014). I primarily relied on Freebase.com for the birth and death data. Freebase.com was a database that collected data on multiple sets of items from a variety of sources, including the Wikipedia and through crowdsourcing. While macro-analysis of migration statistics does allow for a quantitative approach to the study of general migration patterns, when it comes to the study of culture it is difficult to differentiate between data subjects who influence ideas and cultural norms. While statistical records from census or emigration data might be able to give us a picture of how many graduates migrated from one state of India to another, it is difficult to look for which of these graduates may have had a larger role in, say, the movie industry. One can, of course, gather some statistics by surveying such institutions that mark particular professional sectors, such data is difficult to come by and its acquisition is resource intensive. In the absence of credible and ready datasets cultural historians have hitherto resorted to tracing cultural patterns through micro narratives and biographies. While close studies of micro narratives are able to present an immersive understanding, such studies are always dependent on a canonical process where certain biographies are chosen as representative without a clear reference to any statistical macro-analysis. The advent of digital sources, however, makes it possible to supplement microanalysis with data driven macro-analysis. Crowdsourced data acquired through credible platforms allows us to arrive at a metric of

determining “notability” and “influence” through a measure of engagement with that item or personality. I will be elaborating on the measure of notability later in the chapter.

While the data acquired from freebase.com did include in its fold spacio-temporal birth and death information about persons from across the globe, Schich et al. in their work chose to focus on birth-to-death migration for Europe and North America. This work undertook a similar data-driven study of migration of “notable” individuals for the South Asian region. Undertaking this project has two corresponding motivations – on the one hand it seeks to adapt computational tools to specific conditions of South Asian cultural history; on the other hand it is through the familiar stories of South Asian pasts and realities that this project makes available to scholars in South Asia the tools of macroscopic analysis to compliment an already rich set of micro-analytic resources. Additionally, this work studies the differing migration trends for different professions – do particular urban areas or regions become centres in particular fields or do some centres provide opportunities for a variety or professional fields.

Wikidata as a Source

The objective of the freebase.com project was to develop a linked database which can reference between items across categories. Freebase.com was eventually acquired by Google and went on to power the Google Knowledge Graph. For the current project we have used data available from Wikidata – the open data backend for various Wikimedia projects like Wikipedia. Wikipedia and Wikidata are platforms that allow users to seamlessly create and maintain content. The platforms are distributed under a Creative Commons Attribution-ShareAlike license which means that the working of the site can be monitored by all users. Further, the MediaWiki API allows the community to create and moderate content on the site, which means that content that is viewed frequently also gets moderated more frequently adding to the credibility of the content. A series of studies on Wikipedia entries on various subject areas has concluded that Wikipedia is a largely reliable source of information. While this measure of reliability might vary from article to article with accuracy being greater for articles above a certain threshold of page views, specific articles or specific information in particular articles at any point of time may be wanting editing or correction from the community.² In fact, Wikipedia has consistently been one of the most trusted sources of information on the Internet. Similarweb.com, a website-ranking service, lists Wikipedia as the 7th most visited website worldwide and 16th most visited website in India, at the time of writing. The corresponding ranks for another website ranking service – semrush.com are 5th and 11th. Among websites in the category of references and media it ranks at the top, I should note here that given that Wikipedia started functioning in 2001 and its resources have been populated by the current generation of users there is likelihood of

over-representation of figures from the recent decades. However, instead of treating this as a drawback, I decided to allow increased presence of records of contemporary figures in the dataset by extracting data about people who are still alive and for whom Wikipedia records a “place of residence.” Since one of the objectives of the project is to study the relative importance of each centre among other centres as “life attractors,” absolute numbers are not a hindrance.

In my dataset I collect limited metadata related to the spatial and temporal birth and death information and the occupation of particular individuals. Since these data points are non-subjective the expected accuracy levels of these data points are likely to be much higher than the Wikipedia biographies on the same individuals. Wikidata being a linked database built upon the Resource Description Framework (RDF), it is possible to derive further data about specific metadata objects. For instance, once we derive the place of birth for an individual entry, we can derive the geographical coordinates of the place, as well as the political and administrative territories it belongs to. Wikidata being an open-linked data resource offers a powerful query service that can run SPARQL queries to derive datasets according to parameters specified by the user.

Why South Asia?

While located in Asia the South Asian landmass is often referred to as a “subcontinent” as it is geographically separated from the rest of Asia by oceans to the south and mountain ranges in the north. These geographical barriers have allowed for a relatively greater degree of cultural interaction among peoples within the subcontinent across millennia, than neighbouring Asian regions like Central Asia, China, and South-East Asia. Further, due the historical intervention of colonialism, this region has seen periods of shared political trajectory and disintegration thereafter. At its height the British Empire included in its fold the territories of present-day Bangladesh, Myanmar, India, the Maldives, Pakistan, and Sri Lanka. Sri Lanka was administered separately from the rest of the British Indian territory and became an independent nation in 1948. Burma was separated as an administrative territory leading to a partition from British India and a large-scale migration of people in 1937 before the country gained independence in 1948. The remaining territory of British India was cleaved in 1947 giving birth to independent Pakistan and the horrors of displacement, murder, and arson. Bangladesh split away from Pakistan in 1972 after a war of liberation. The Maldives gained independence from the British in 1965. In recent years, attempts have been made to encourage greater cultural and trade ties among countries in the region through the South Asian Association for Regional Cooperation (SAARC) which has among its members Afghanistan, and Nepal. For these historical reasons this region has seen a great degree of historical movement of people who have sought to move to seek education and livelihood.

Hence, I mark for this study all areas that fall within the geographical extents of South Asia. Wikidata defines “countries” historically – assigning dates “inception” and “dissolution” to specific historical states. For instance, according to Wikidata the date of inception for the “Mughal Empire” was 1526 and it was “dissolved, abolished or demolished” in 1857. Further, the territorial extents of many of these “historical countries” included regions beyond present day South Asia. I identified a set of 132 countries – both “historical” and contemporary – for whom the capital city fell within the geographical extent of South Asia as defined by the latitudes 38.433333 in the South and 5.921611 in the North, and the longitudes 101.1695 in the East and 60.8746 in the West. Thereafter, details of individual entries were extracted on the basis of the following parameters: (1) all who were born or died or are resident of in any of these 132 countries or (2) all who are defined as “citizens” of any of these 132 countries. Thus, the Bhakti-poet Namdev (1270–1350), who was died in Pandharpur, is listed as a citizen of the Hoysala Empire. However, given that India is the largest entity in terms of territory and population in contemporary South Asia I undertook further analysis of inter-state migration within India to enhance the granularity of the data. For the rest of the territories the analysis was restricted to their important urban areas.

Preparing the Data

The dataset thus extracted we arrived at a set of 12,953 unique persons for whom spatiotemporal data for birth and spatiotemporal data for residence or death were available. Thereafter, I extracted the occupation listed on Wikidata for each person. Of the extracted dataset I found occupation information for 12,796 unique persons. To arrive at the dataset that had all the necessary datapoints – that is spatio-temporal birth and life information, as well information about occupation of the individuals concerned – I had to discard a much larger dataset for which one or the other datapoint was not recorded on Wikidata at the time of preparation of the dataset. For individuals for whom neither death nor residence information was available, year of death was assigned as 75 years from the year of birth. For the purpose of this chapter, we shall refer to the spatio-temporal information on death or residence as “Life information.”

Table 5.1 Data acquisition from Wikidata

Unique data rows	84,635
Unique individuals with birth information	49,553
Unique places	10,161
Rows without information about place of death or place of residence	51,083
Rows with information about place of death or place of residence	33,552
Unique persons with spatio-temporal data about death and life	12,953
Unique persons with all data points including occupation data	12,796

Wikidata typically may list multiple occupations for each person. For instance, Avabai Bomanji Wadia (1913–2005), who was born in Colombo, is listed as being a judge, a barrister, a writer, and a social worker. In this way, a set of 1,674 unique professions were extracted. Since working with such a large set of occupations would be unable provide any significant trend, I manually assigned the occupations to 18 “Fields.” Thus, 115 different “occupations” – like “street protestor,” “suffragist,” “emperor,” “politician” – were assigned to the field of politics. As shown in Table 5.2, we find that the largest number of entries pertain to the field of the “Entertainment and Arts,” followed by “Politics,” “Academics,” and “Sports.” What needs to be noted here is that since multiple “Fields” may be noted for particular individuals the total count of the “Field” distribution exceeds the number of unique persons.

Table 5.3 shows that the bulk of the Births and Life records that reference South Asia pertain to births and lives in India.

As noted earlier information on Wikipedia and Wikidata tend to be predominantly about more contemporary subjects at the cost of historical subjects. As Figures 5.1 and 5.2 show for the current dataset the inclusion of persons picks up for persons born around the 1850s and peaks for those born around the 1920s (Figure 5.1).

Given that Wikipedia and Wikidata are resources that allow editing and content creation by all users, there exists a possibility that certain entries of otherwise “non-notable” persons being created in the database. In order to provide a degree of depth in the I used the MediaWiki API to extract the AuQ10

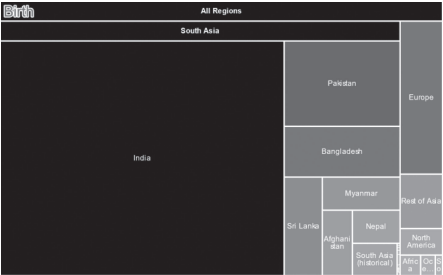
Table 5.2 Distribution of “occupations” into “fields”

<i>Field</i>	<i>Count</i>
Academics	1,587
Administration	167
Agriculture	26
Armed forces and Law enforcement	749
Business	458
Crime	31
Diplomat	275
Engineering	225
Entertainment and Arts	5,881
Journalism	630
Legal	458
Medical	271
Miscellaneous professions	463
Others	74
Politics	2,940
Religious	557
Scientist	683
Sports	1,287
Total	16,762

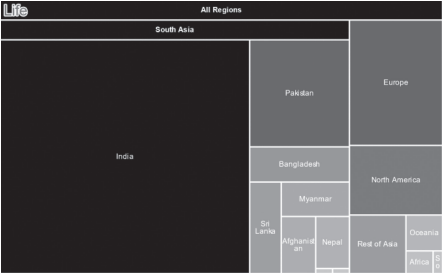
Table 5.3 Geographical distribution of birth and life data

Country	Birth	Life
India	10575	9517
Bangladesh	929	566
Pakistan	1562	1729
Afghanistan	306	316
Nepal	246	273
Myanmar	406	374
Sri Lanka	588	471
Bhutan	6	10
South Asia (historical)	223	9
Rest of Asia	325	494
Africa	58	87
Oceania	41	189
Europe	922	1743
North America	161	958
South America	16	26
All Regions	16364*	16762

Birth



Life



* Country and continents were derived for each place of birth from the Wikidata RDF. Place names were mapped to countries – historical and contemporary – by the administrative hierarchy on Wikidata. On Wikipedia the assignment of a place is made predominantly on the basis of present-day administrative units even when dealing with a person from an earlier era if the place name is still operational.

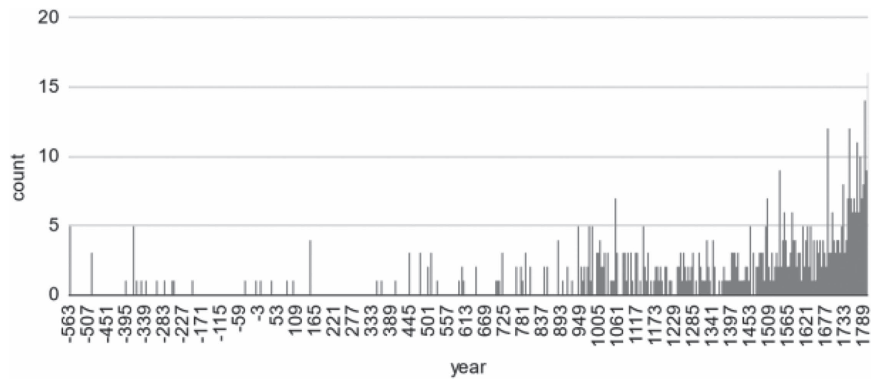


Figure 5.1 Chronological distribution of persons by year of birth (till 1800) (see Figure 5.2).

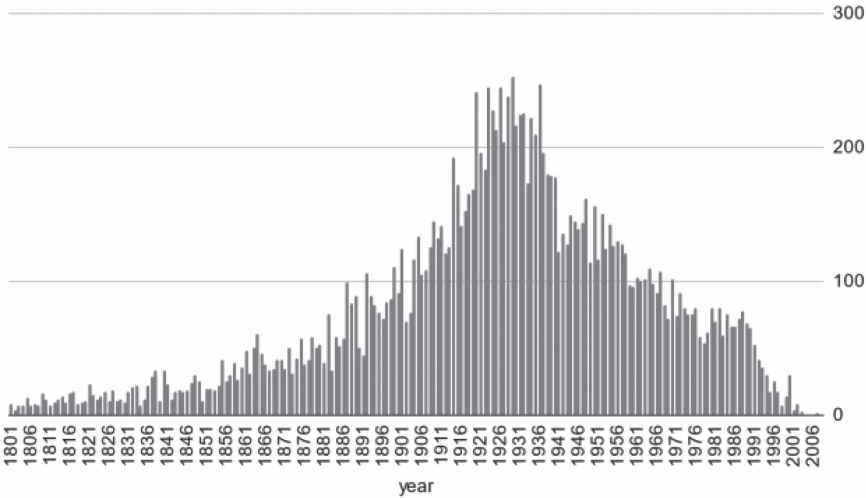


Figure 5.2 Chronological distribution of persons by year of birth (since 1801).

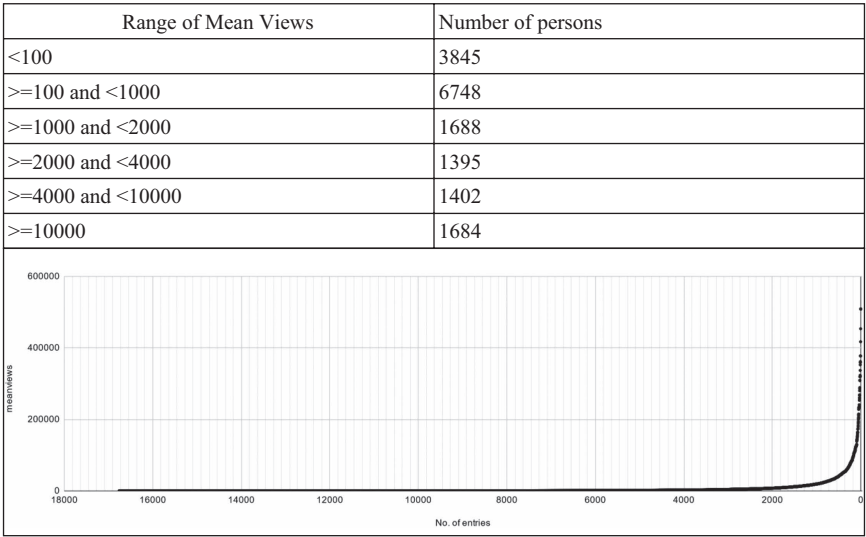


Figure 5.3 Distribution of average monthly page views for each biography (in the dataset) on English Wikipedia.

average monthly page views for the English Wikipedia pages for each person. The resulting set of mean views (Figure 5.3) shows a large skew with 10,593 persons having mean views fewer than 1,000 and only 1,684 persons having mean monthly views of 10,000 or more. One of the choices before me was to

drop the all entries where the mean view was below a certain threshold. But that action has the danger of judging all sectors with the same parameter and can affect the inclusion of figures from smaller communities where a particular figure may enjoy relatively greater relevance. Hence, I chose to include only those figures where at least some mean views were available – that is these are pages which were at least visited once a month during the year 2022. When we work with large dataset to ascertain high level patterns, aggregate accuracy outweighs specific inaccuracies – this being an important consideration when the risk is of leaving out of the picture smaller and marginal communities.

Analysis

For discovering the migration trends across the centuries I used Palladio – a set of data-driven tools for analyzing historical data – hosted by the Humanities + Design Laboratory at Stanford University.³ The Map tool on Palladio allows users to trace a connection between two points on the world map – from source to target. It can also size the target points according to the weights – number of occurrences – of the points. Further, it includes a set of tools that allow the user to facet the data on the basis of time and various other categories that may be included in the dataset. Additionally, I used other charts like Sankey Diagrams and bubblelines primarily through R.

As was clear from the chronological distribution of the dataset a large fraction (89.4%) of the persons included were born after the 1850. We are aware that this was the time period that roughly coincided with the consolidation of colonial rule in India. Hence, we try to look at migration records prior to 1850. The data available from Wikidata only specifies the date of death and not the exact date of migration. Hence, I used the age of 24 as the point of migration. Figures 5.4 and 5.5 give the migration mapping for the persons born up to 1430 and between 1430 and 1825, respectively.⁴

Although the number of persons mapped in these periods is small in comparison with more recent data, the distinction between the subcontinent's contact with the West is clearly visible. In Figure 5.4 we can see a significant connection between Xianyang and Luoyang in present day China, Jalalabad in present-day Afghanistan and Islamabad in present-day Pakistan. Xianyang was the capital of the Qin dynasty and Luoyang was the capital of the Han dynasty. Ahin Posh near Jalalabad and Shah Allah Ditta near Islamabad were important Buddhist centres. These connections that occur between the 2nd and 9th centuries BCE indicate a strong Buddhist connection and developed as an offshoot of the Silk Road.

In the same period centres in present-day Afghanistan like Balkh, Ghazni, Herat, and Lashkar Gah had connections with Mecca, Baghdad, and Bukhara in West and Central Asia. Also visible is a strong connection between areas around present-day Myanmar and important centres of Bagan, Pinle, and Mottama in the period between the 11th and 14th centuries. Bagan and Pinle



Figure 5.4 Change of location of persons born up to 1430. The grey points mark the place of birth and the red points mark the place of life. The size of the red points marks the frequency of the places of death.



Figure 5.5 Change of location of persons born between 1430 and 1825.

were capitals of the Pagan and Myinsaing kingdoms and were important centres for administration and religious scholarship. Mottama was an important port city in the trade route that connected China, South-East Asia, South Asia, and the Arabia. This reveals the historical cultural relations that South Asia has shared with other Asian regions.

Most of the connections between South Asia and the rest of the world at this stage are largely inbound with a few South Asian born individuals migrating to China and other parts of the Far East between the 1st and 6th centuries CE and to Mecca, the Levant and parts of Central Asia between the 8th and 11th centuries CE. The connections with China and the Far East were primarily from the North Western areas of the subcontinent – namely

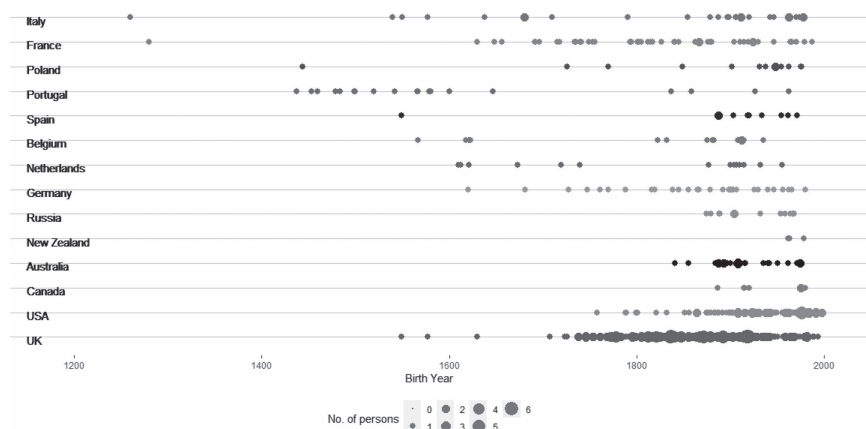


Figure 5.6 Chronological distribution of persons in the dataset who were born in Western countries (by year of birth).

present day Afghanistan and North Pakistan – and the southern part of the peninsula and Sri Lanka. The North Western regions are also the birth place for people who migrated to Arabia, the Levant, and Central Asia in the later centuries during the Abbassid Golden Age.

The later part of the pre-colonial period (1430–1825 by year of birth) sees a long sustained connection between South Asia and the West. Figures 5.6 and 5.7 chart the chronological distribution of persons in the dataset who were born in or moved to a Western country. In these charts I have represented bubbleline distribution pertaining to countries that show significant migration. Here we see that the while the earliest migrations to South Asia occurred in the 15th century primarily from Portugal, the earliest outward migration from the subcontinent did not take place till the 18th century. The UK along with other English speaking nations – the United States, Australia, and Canada – continues to be one of the most favoured destinations of people who move out of South Asia. It is interesting that Figure 5.5 does not capture the large-scale migrations of Indians to East Africa and the Caribbean of people who migrated in the 19th and early 20th centuries as indentured labour, shopkeepers, and other forms of work.⁵ Such migrations do not make it to the pages of Wikipedia and the annals of “notable” individuals. Of course, some of their descendants did go on to become important figures in the worlds of culture, sports, business and politics – but they did so from a location or a “citizenship” marker that were not included as part of this study.

Colonization and After

Figures 5.8–5.11 present the interaction between South Asia and the rest of the world in two periods 1850–1950 and 1950–present, the break being provided by the end of formal colonial rule in most of South Asia. I have added

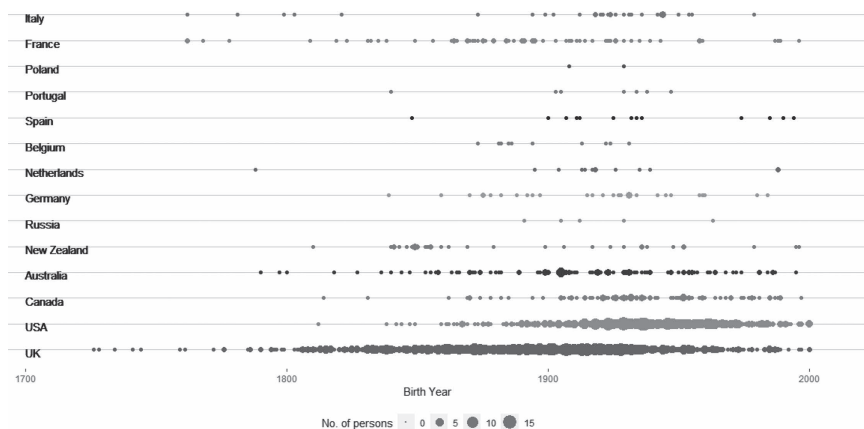


Figure 5.7 Chronological distribution of persons in the dataset who moved to Western countries (by year of birth).

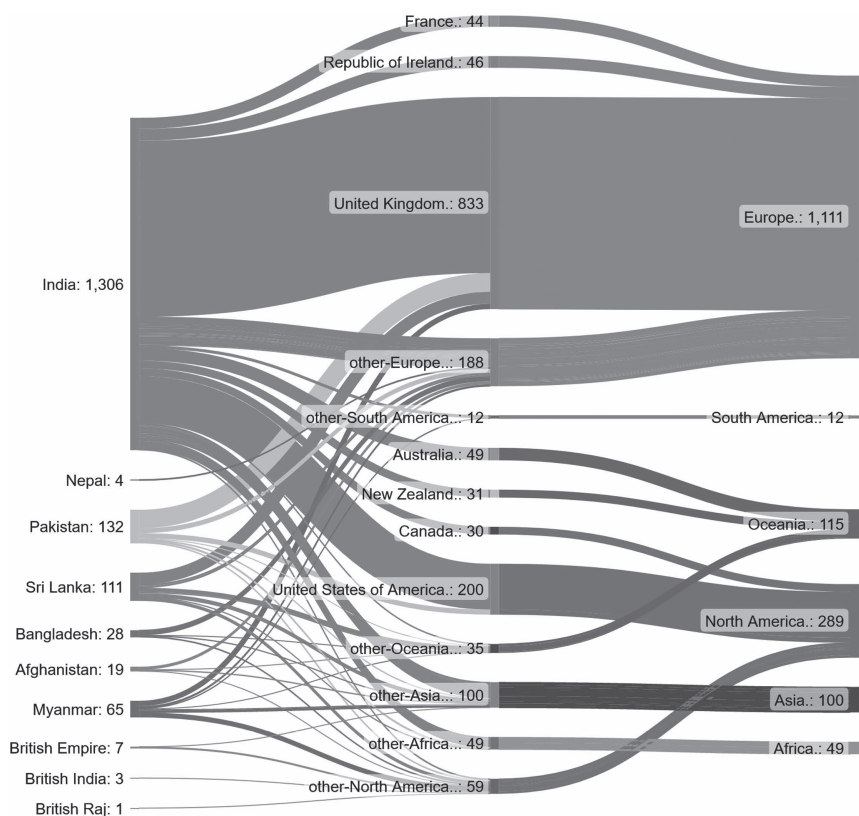


Figure 5.8 Flow of persons born between 1826 and 1925, who moved from South Asia to other parts of the world (movement within the same country excluded).

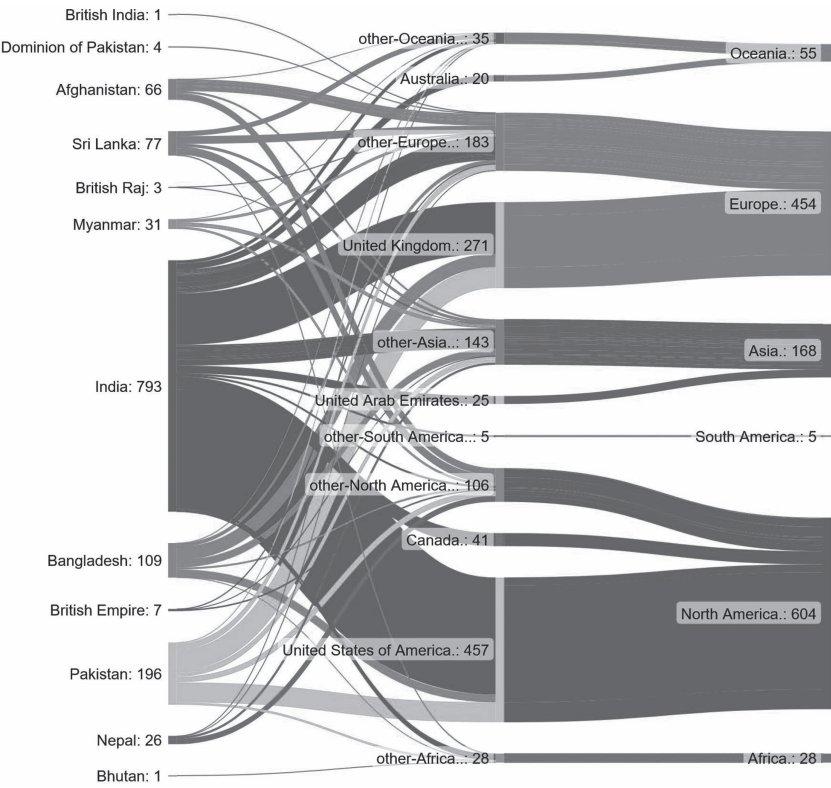


Figure 5.9 Flow of persons born after 1925, who moved from South Asia to other parts of the world (movement within the same country excluded).

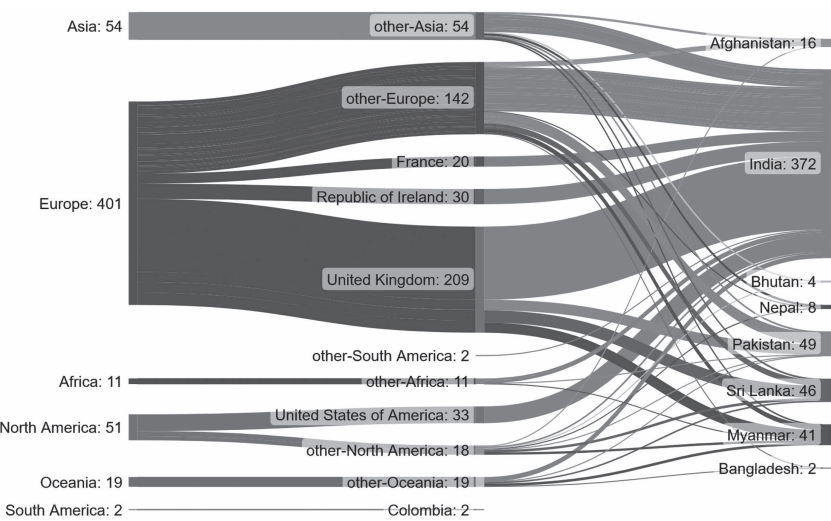


Figure 5.10 Flow of persons born between 1826 and 1925, who moved from other parts of the world to South Asia.

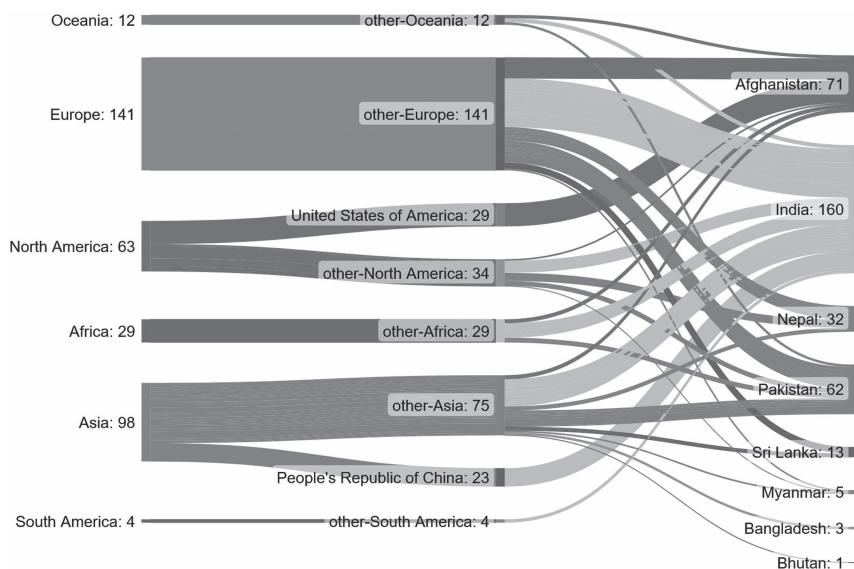
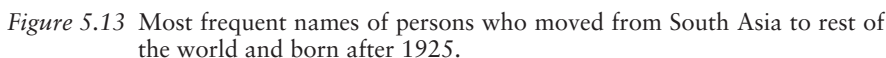
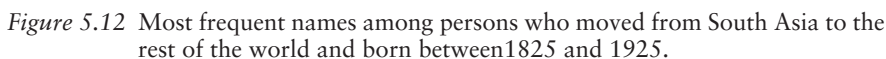


Figure 5.11 Flow of persons born after 1925, who moved from other parts of the world to South Asia.

30 years after birth as the date for counting movement. Hence the periods have been computed by the date of birth as falling between 1825 and 1925 and after 1925. While the UK and the United States have undisputedly been the choice of most individuals who moved beyond South Asia during the lifetime, the UK dominated as a ‘life attractor’ in the first phase, while the United States dominated in the latter phase. It can also be noted that a greater number of ‘notable’ persons moved out of South Asia in the earlier phase.

An analysis of the most frequently occurring names between the two datasets (Figures 5.12 and 5.13) clearly indicates that while in the first phase the ‘notable’ persons moving out of South Asia were British and other Western individuals who happen to have been born in India, those in the latter phase were South Asian citizens who moved westward for professional opportunities.

This relationship between Western countries and South Asia is not noted in the reverse movement – of those born outside South Asia into the subcontinent. While a sizeable number of persons who were born in the UK or in the United States did die in South Asia in the period 1850–1950, this proportion dwindles in period after 1950. Once again, while in the earlier phase Europeans and other Western citizens moved to India for the service of the colonial state or for opportunities, in the latter phase very few people of South Asian origin who were born in the UK or the United States chose to move to South Asia. But in the latter phase we find that Afghanistan has been the largest South Asian “death attractor” among the citizens of the UK and the United States, with most of them meeting their end of life between the years 2000 and 2020 – indicating the years of the Western intervention in Afghanistan (Figure 5.14).



In Figure 5.14 we notice a sizeable number of persons moving from China to India in the post-1950 period, indicating the Tibetan exodus after the takeover of Tibet by China and this migration being largely restricted to Himachal Pradesh (Figure 5.17).

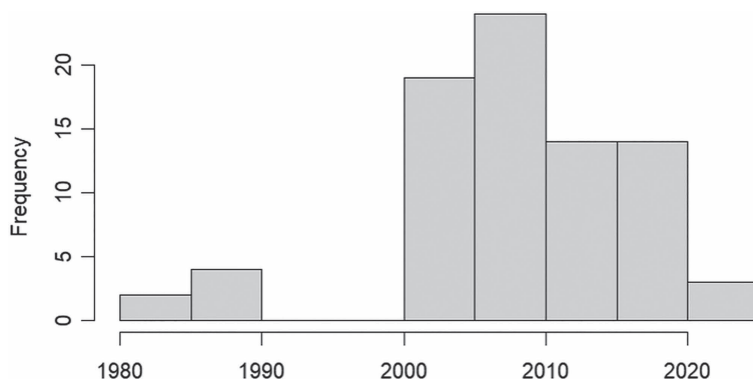


Figure 5.14 Persons who moved to Afghanistan from outside South Asia by year of death.

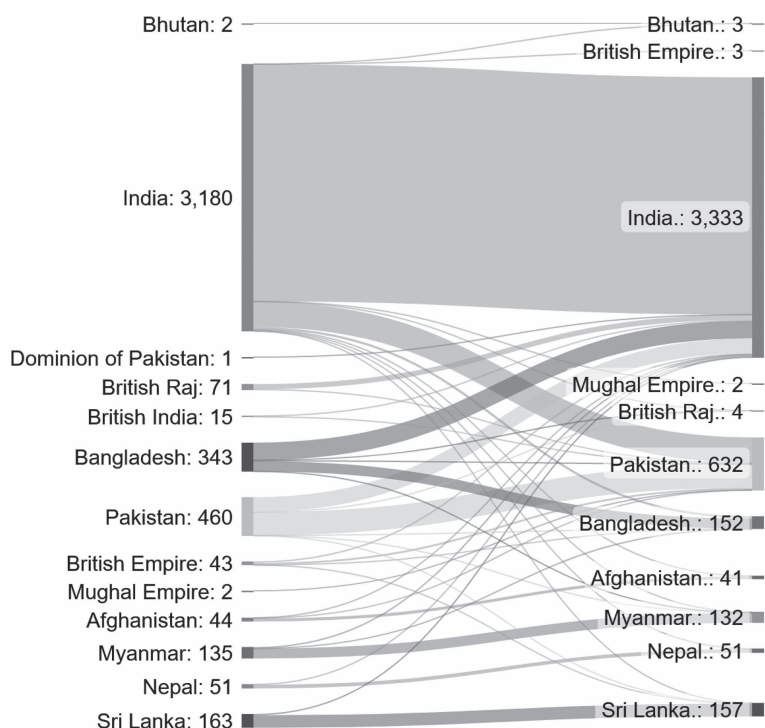


Figure 5.15 Persons who were born between 1826 and 1925 who moved to or lived within South Asia.

Figures 5.15 and 5.16 show that within the South Asian nations, other than the partition of the subcontinent in 1947 and then in 1972, there is no significant movement of 'notable' persons. We can further explore the impact and distribution of partition among the Indian states through Figures 5.17 and 5.18.

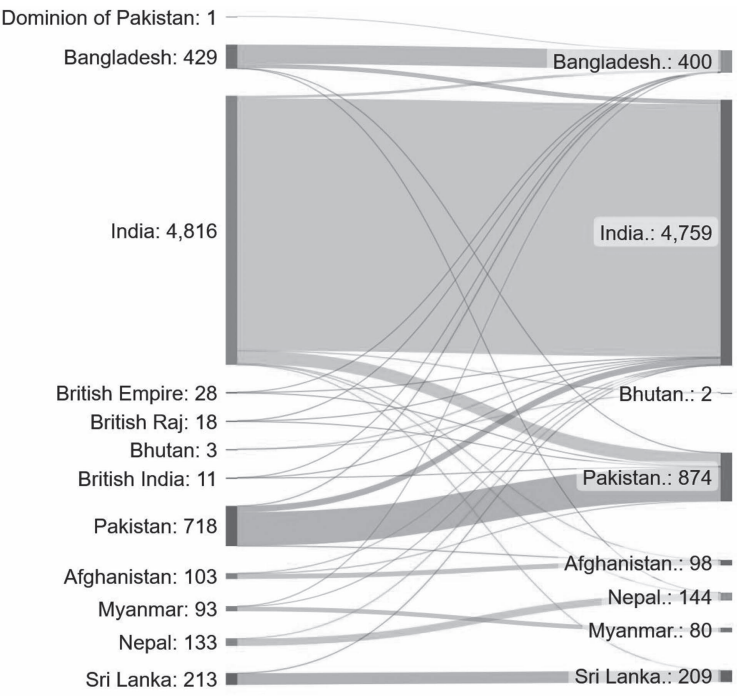


Figure 5.16 Persons who were born after 1925 who moved to or lived within South Asia.

While a large number of ‘notables’ from Uttar Pradesh and Punjab moved to Pakistan, the ‘notables’ who arrived in India largely settled in states of Delhi and Maharashtra. In fact, Maharashtra and Delhi far outdo other states in offering ‘homes’ to those who move to India from other countries, Karnataka and Tamil Nadu following them quite far behind. As noted earlier the UK and the United States are the leading “life attractors” from India and the various states contribute to this flow.

Figures 5.19, 5.20, and 5.21 seek to track the decadal distribution of “life attractor” Indian states since 1850.⁶ This includes persons who were born and lived in their state of birth which forms almost 60% of all cases where the movement is within India and information of the state of birth and state of life could be extracted. The resulting chart demonstrates that Maharashtra has been home to the most influential persons in India, the other top “life attracting” states in absolute numbers being Tamil Nadu, Kerala, Delhi, West Bengal, Karnataka, Telengana, Uttar Pradesh, Gujarat, and Odisha. The share of ‘notable’ persons among the states, however, has been shifting through the decades. We find that West Bengal had gained prominence as an important destination and “life attractor” in the period 1910–1970 reaching its peak in 1940–1950. Maharashtra has been the most consistent performer

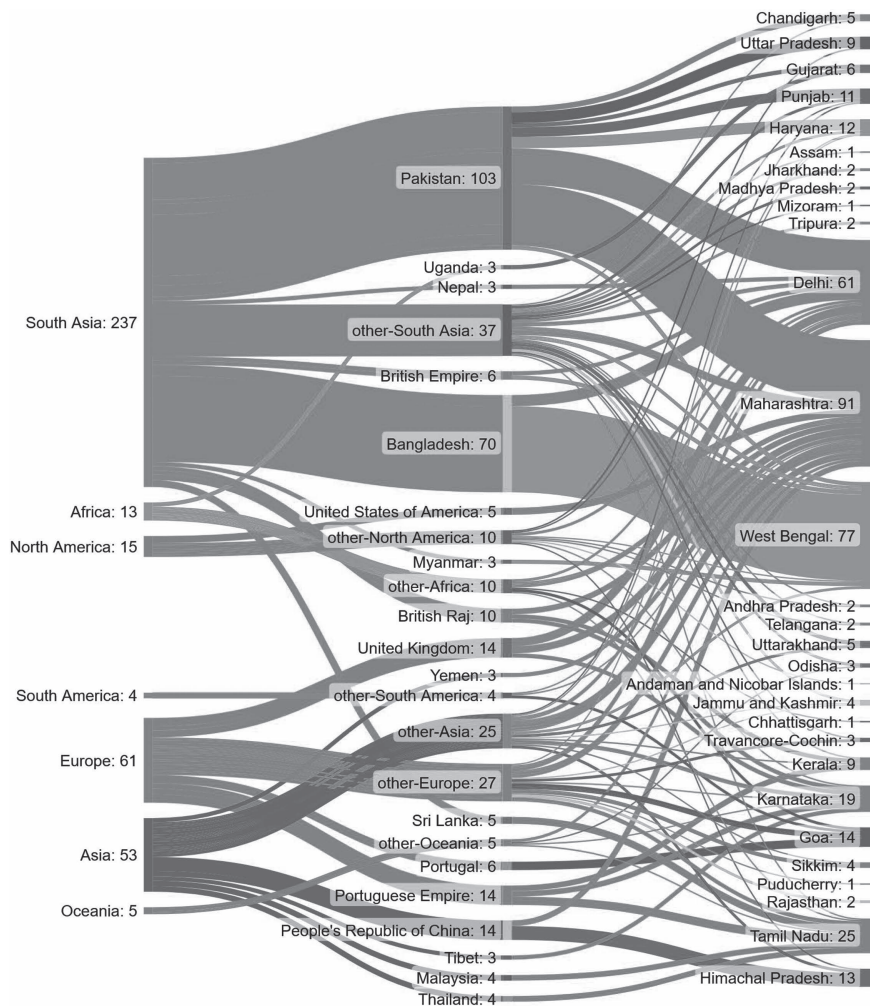


Figure 5.17 Flow of persons who were born after 1925 from outside India to various states of India.

seeing a dip in the period 1940–1980. In fact, in the decade 2000–2010, Maharashtra rose to an undisputed leading position attracting almost 60% of all famous personalities – a feat it had achieved earlier a century ago in 1900–1910 (53%). In more recent years Tamil Nadu has performed well as a “life attractor.”

Identifying Urban Centres

In the previous section I sought to identify important states of influence across the decades. However, it is urban centres and not entire states that function as

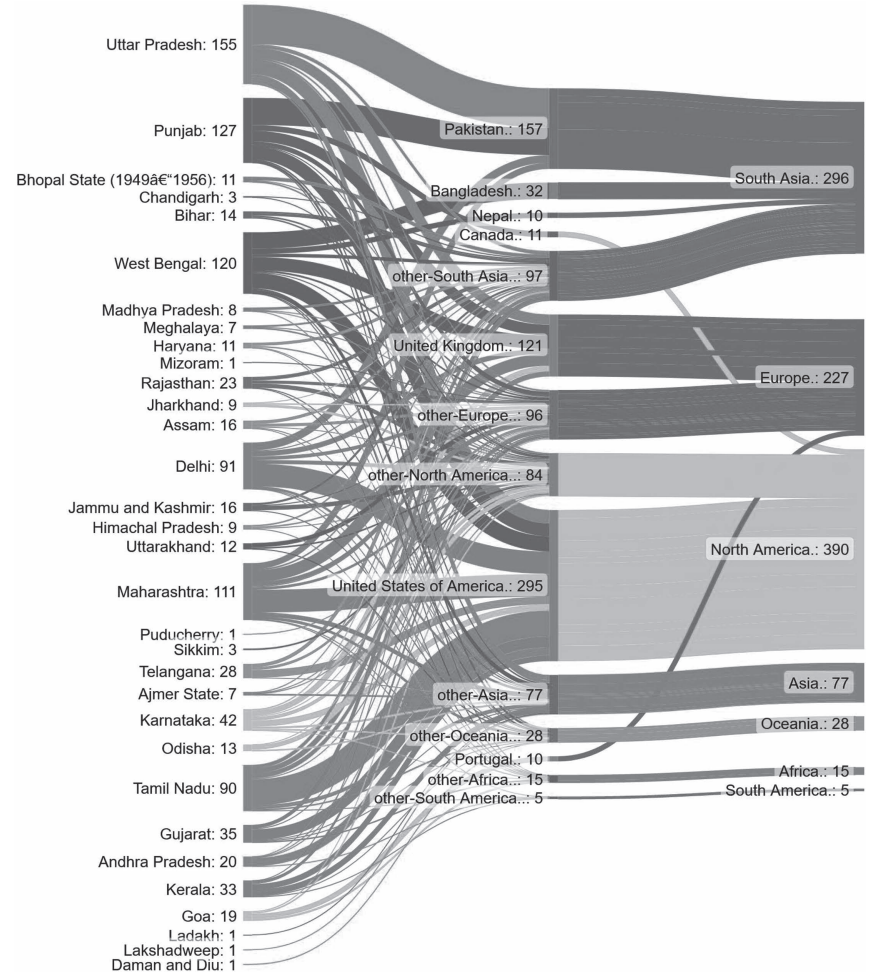


Figure 5.18 Flow of persons who were born after 1925 who moved from various states of India to outside South Asia.

“life attractors” through their institutions, infrastructure and human capital. The difficulty in identifying specific urban centres through our dataset is that on Wikidata places of birth, residence, and death can be identified at various administrative levels or even specific buildings and institutions. For instance, SSKM Hospital, Belur Math, Howrah, Serampore, Tollygunge, and Bidhan-nagar are locations that are roughly in and around Kolkata. These locations can be traced up using the administrative hierarchy maintained by Wikipedia (Table 5.4). I identified important urban centres in the dataset using geo-spatial mapping and aggregated all locations that fell within 0.5 degrees in

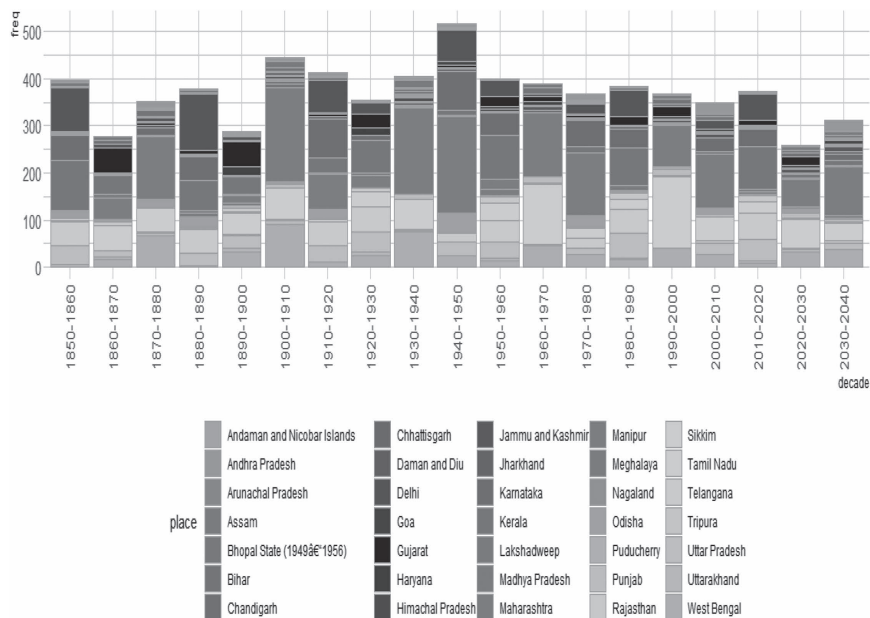


Figure 5.19 State-wise distribution of life and death calculated by birth year plus 30 years for top 10 states.

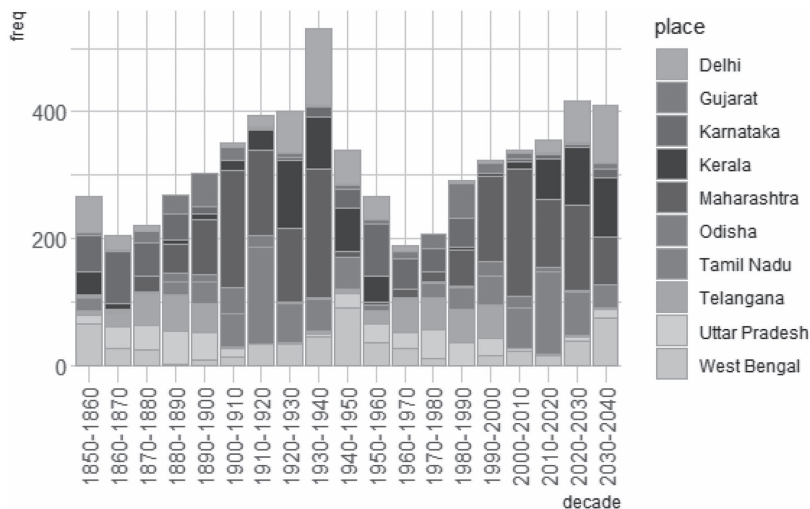


Figure 5.20 State-wise distribution of life and death calculated by birth year plus 30 years.

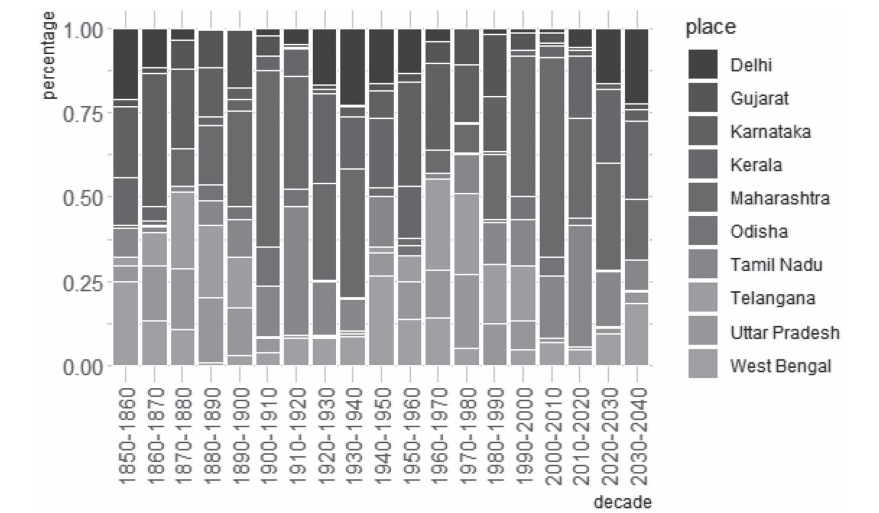


Figure 5.21 State-wise share of life and death calculated by birth year plus 30 years for top 10 states.

Table 5.4 Hierarchy of administrative territorial entities on Wikidata

Wikidata ID	Label	Instance of	Located in the administrative territorial entity	Population
Q6150733	Janakpuri	Human settlement	South West Delhi District	
Q2379189	South West Delhi District	District of India	Delhi Division	2,292,958
Q65084837	Delhi Division	Division of India	Delhi	26,495,000
Q1353	Delhi	City, mega city, etc.	India	

latitude or longitude of the coordinates of that urban centre as recorded on Wikipedia. These locations were Colombo, Chennai, Bangalore, Hyderabad, Pune, Mumbai, Ahmedabad, Kolkata, Delhi, Karachi, Lahore, Islamabad, Kabul, Dhaka, and Yangon.

Figure 5.22 gives the chronological share among the various urban centres in South Asia.

While Kolkata dominated as an urban centre through most of the colonial period and the few decades after Independence, other cities like Delhi, Dhaka, Chennai, and Karachi have held sway over the later part of the 20th

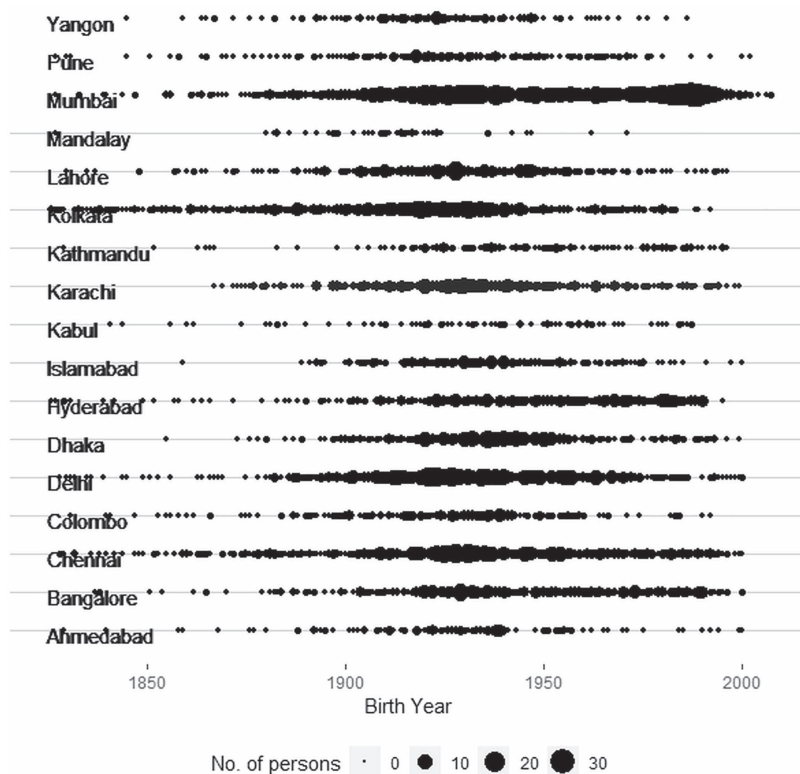


Figure 5.22 Chronological distribution of life and death at top urban centres in South Asia for persons born after 1925.

century, with Mumbai being the most prominent destination for luminaries among the various professions. Mumbai's predominance is largely due to its importance as the centre for entertainment and the arts – the city being the home of Bollywood – the Hindi movie industry (Figure 5.23).

Once again here we see the waning importance of Kolkata – once the cultural hub of the subcontinent – its role as a centre for literature and the arts ebbing since the 1970s.

Figure 5.24 shows that the while new centres of entertainment and the arts like Chennai and Hyderabad have attracted aspirants from within the region, Mumbai has been able to attract aspirants from all over the country. Indeed, a very important stream of migrants from this field to Mumbai were those who were born in the Punjab province of present-day Pakistan – making the move at the time of partition. We also notice multiple cultural centres in Kerala and Yangon as important destinations for people in the field from around Myanmar.

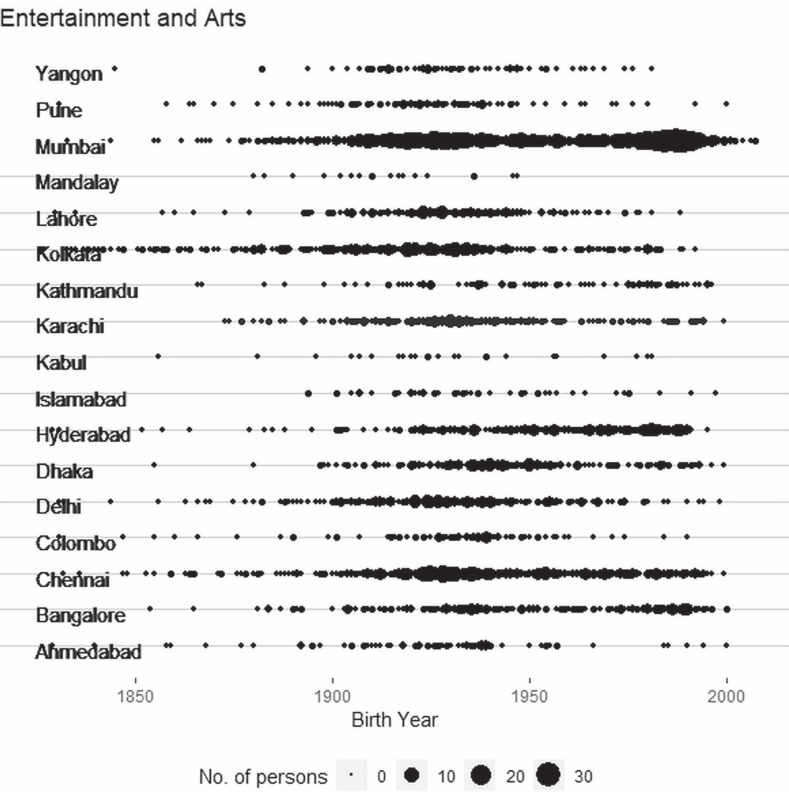


Figure 5.23 Chronological distribution of life and death at top urban centres in South Asia for persons in the field of ‘Entertainment and the Arts’ and born after 1925.



Figure 5.24 Spatial distribution of life and death at top urban centres in South Asia for persons in the field of 'Entertainment and the Arts' born after 1925.

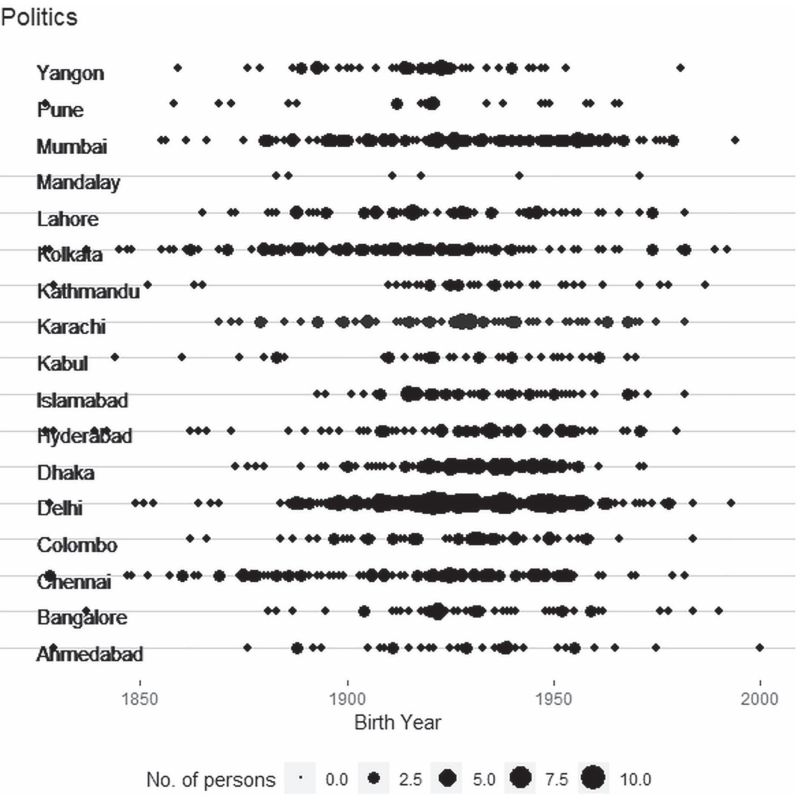


Figure 5.25 Chronological distribution of life and death at top urban centres in South Asia for persons in the field of ‘Politics’ and born after 1925.

Mumbai’s dominance in the field of entertainment is rivalled by Delhi in the fields of politics and academics – another important contributor to the dataset of important figures of South Asia (Figures 5.25 and 5.26).

Among journalists (Figure 5.27) while Kabul, Karachi, New Delhi, Kolkata, Mumbai, and Colombo attract individuals from all over their respective countries, Chennai and Hyderabad attract local talent.

Conclusion

The data used for this project has been put together by volunteer effort on the Wikimedia platform. The creation of this data has been made possible by the open ownership and accessibility of the Wikimedia resources. Shared platforms and resources are the key to attaining a minimal computing framework that is beneficial for scholarship in low resource environments. The large size of the datasets required by quantitative approaches to digital

Academics

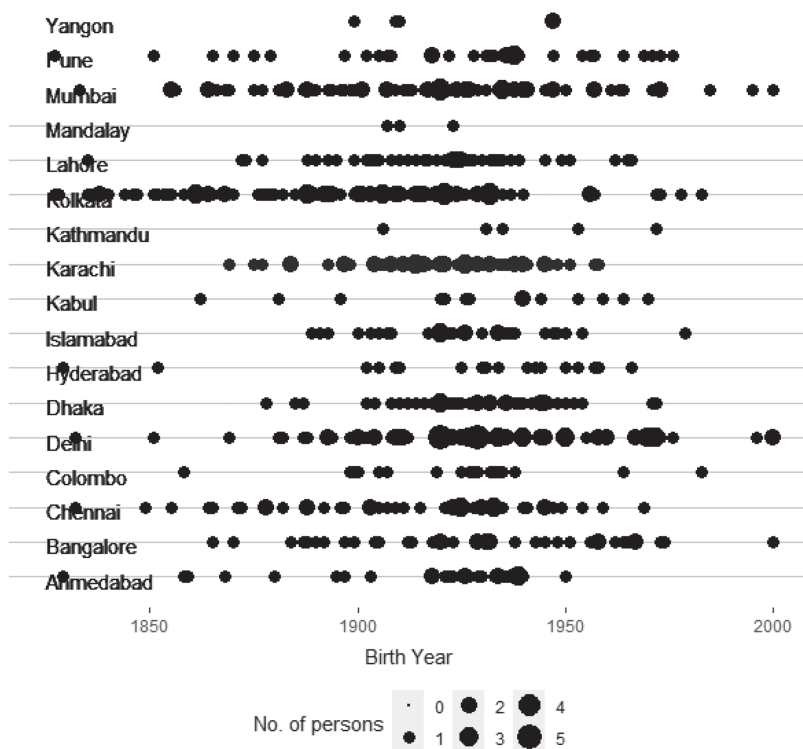


Figure 5.26 Chronological distribution of life and death at top urban centres in South Asia for persons in the field of ‘Academics’ and born after 1925.

anthropology can sustain themselves by using and making available open access and crowdsourced databases. However, crowdsourcing – like any other process for collection of primary data – needs gatekeeping to ensure the robustness of the data. Wikidata’s open source distribution enables a community-powered, real time moderation that enables accuracy of the data in the aggregate.

The data stories that this analysis has produced speaks of the changing landscapes of the South Asia’s cultural exchanges with the world and exchanges within South Asia as well. In the pre-colonial period South Asia had extensive contacts with other regions in Asia – China, South-East Asia, Central Asia, and the Arab world. The linkages were through both proximities to the Silk Road and maritime routes in the Arabian Sea and the Bay of Bengal. The picture changed dramatically with the advent of the Europeans – thereafter, even to the present day – South Asia’s primary connections have been with the English-speaking West. During years of colonialism, there was

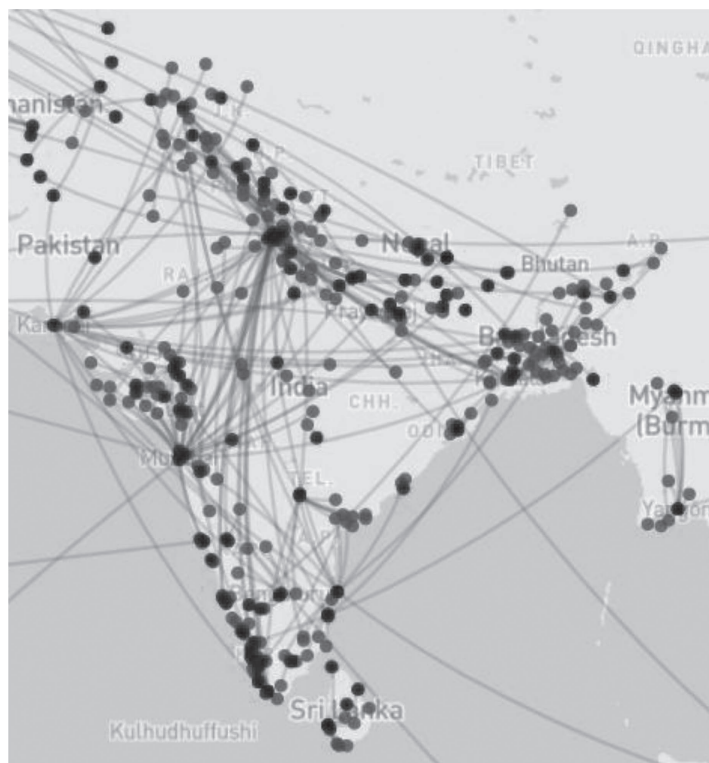


Figure 5.27 Spatial distribution of life and death at top urban centres in South Asia for persons in the field of 'Journalism' born after 1925.

a net influx of British people and other Europeans to South Asia, a phenomenon that was reversed after political independence with people from South Asia accounting for a bulk of emigrants to the English speaking West.

Within South Asia we see a story of unequal growth – with a few urban centres dominating in their influence. While the sway of Mumbai and Delhi in almost every field demonstrate the centralization of institutions and resources – a few centres in the south of India like Chennai and Bangalore have begun to improve their standing in the last few decades. Kolkata and West Bengal have clearly lost prominence in the cultural life of India since the colonial heyday. We also find relatively fewer centres and sluggish development in the central heartland of India – particularly the tribal belts.

Notes

- 1 Schich et al., "A Network Framework of Cultural History."
- 2 Wikipedia articles are dynamic pages and not static. Wikipedia maintains a record of every edit of each article. It is therefore possible that in between two accurate versions there may be inaccurate edits that may be entered by a certain user. If a

page has a reasonable readership (noted in the page views statistics) such inaccuracies would be corrected by the community sooner or later. In fact, if a reader spots an inaccuracy they can edit the article without needing any further privileges. Giles, “Internet Encyclopaedias Go Head to Head”; Clauson et al., “Scope, Completeness, and Accuracy of Drug Information in Wikipedia”; Rector, “Comparison of Wikipedia and Other Encyclopedias for Accuracy, Breadth, and Depth in Historical Articles”; Bragues, “Wiki-Philosophizing in a Marketplace of Ideas.”

- 3 Edelstein et al., “Palladio” Palladio uses OpenStreetMap a free and open source service provided by the OpenStreetMap Foundation and shared under the Creative Commons Attribution-ShareAlike 2.0 license (CC BY-SA 2.0).
- 4 One of the consequences of working with open data sources is that in open data sources demarcations of territorial boundaries are according to actual occupation and not on territorial claims. Hence, I have used maps that do not signify territorial boundaries.
- 5 Tumbe, *India Moving*, pp. 24, 67.
- 6 Here I added 30 years to the year of birth to approximate the time of movement away from the state of birth.

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Part II

Tools

Design and Development

6 Digital Assessment of Conventional Lexical Analysis of the Urdu *Marsiya* With Sketch Engine Software

Saniya Irfan

Introduction

Every day is Ashura and every land is Karbala.

It has been contested as to who gave this powerful quote. It is also stressed upon by the establisher of the Islamic Republic of Iran, Imam Khomeini, as a great message and who accentuated that even though the times are modern, we still have the same oppression and that we must keep fighting against the tyrants like Imam Husain. For him, the Iranian revolution of 1979 was a reflection of the day of Ashura (Ashura Is Integral Part of Iranian Identity – Tehran Times). Similarly, we see many such reflections of tyranny, struggle, and injustice in the very moment that we're living.

I would like to introduce my topic for this chapter with what Bertolt Brecht says, 'In the dark times will there also be singing? Yes, there will also be singing. About the dark times,' the Urdu *Marsiya*. There has been a long, ongoing, and diverse tradition of *Marsiya* not only in South Asia but also in other corners of the world. Marasi (plural), or elegies, have an old tradition with roots in the pre-Islamic Arab and Persian world, where human sentiments and pathos were expressed in the form of elegiac poetry (Nicholson). As a popular form of religious and cultural expression, subject matter of most of the Marasi is the battle of Karbala, brutal condition of the Prophet's family and repercussions of the war, but there are some of them which focus on events other than these. However, the battle of Karbala remains most popular theme amongst all.

As C. M. Naim puts it, it should be kept in mind that *Marsiya* in Urdu has a particular public-religious context, and that it also has somewhat an edifying goal beside the usual literary purposes that any good poetry has (Naim).

Marsiya is associated with *Maqatal* or its plural, *Maqâtil* Literature. Medieval Arabic *Maqâtil* literature programmatically refers to politico-religious events in early Islam and to biographical data on certain figures involved. Thematic foci are the violent death(s) of one or various prominent individuals. In addition, these works contain plentiful genealogical material and

information of the major historical events which led to, or which are closely associated, with death. They describe the attitudes of persons, groups or sects which took part in the clashes; in the style of *adab* they often include poems – mostly elegies – on the murdered individual. (Günther)

Marsiya, roughly translated as ‘elegy,’ etymologically comes from the Arabic verbal root ‘raṣā.’ Words derived from this root have meanings that cluster around actions such as to ‘bewail, lament, bemoan, and mourn.’ One of these derivations, ‘marṣyah,’ is an etymological sibling of the Arabic word ‘riṣā,’ which may be defined as ‘bewailing, bemoaning, and lamentation.’ In Urdu scholarship, it is the adjectival form of riṣā – ‘riṣāī – that is most often encountered as a qualifier to the noun ‘*adab*’ (literature) in the phrase ‘riṣāī *adab*,’ a term that denotes a group of literary genres – including *Marsiya* – associated with mourning (Knapczyk).

A poet who writes *Marsiya* is called *Marsiya* Nigar.

Marsiya comprises of the following essential components:

1. Chehra: Part which talks about the person for whom the *Marsiya* is written (Beginning/Aagaaz)
2. Sarapa: Verse describing an expressing praise for human figure, from head to toe, of the person/subject of *Marsiya*
3. Rukhsat: Journey from House/Home to the place of war/warzone (Maidaan e Jung)
4. Aamad: Arrival of this person in the warzone
5. Rajz: Challenge the other party in the war
6. Razm: Verses explaining the events that took place in the war
7. Shahadat: Verses about the martyred people
8. Bayn: Lamenting on the death of the martyrs (for whom the *Marsiya* is written)

Marsiya originated in the Arab land and travelled to Iran, where it flourished in Persian. Many famous *Marsiya* Nigar from Iran added to the genre, for example, Firdausi, Farkhi, Muqbil, but it was Mohtashim Kashi who fashioned the foundation of Persian *Marsiya*. He is known for rich use of rhetorical devices in his works. It is from Persia that *Marsiya* travelled to southern part of India with the Nawabs. Muslim Nawabs brought Turkish, Arabic, and Persian with them (Malla and Latoo).

Persian and Arabic languages and literatures had a momentous influence on Indo-Muslim culture in general and on the evolution of Urdu language and literature; in particular the Adil Shahi and Qutb Shahi rulers felt the need to render the Karbala tragedy in the language of common Muslims. In the Adil Shahi and Qutb Shahi kingdom of Deccan, *Marasi* flourished, especially under the patronage of Ali Adil Shah and Muhammad Quli Qutb Shah (Jafar). C. M. Naim further explains that *Marsiya* in Urdu were first written in the sixteenth century in South India, in the Kingdoms of Golkonda and Bijapur which were Shi’ite in orientation and closer to

the Iranian tradition than to Turk and Pathan kingdoms of North India (Naim).

Rana Safvi, a renowned Urdu critic and historian, describes the travel of *Marsiya* from southern to northern part of India in her blog post. The first *Maqatal* al Hussain (describing the battle of Karbala and the events following it) was written in Arabic in the 8th century. While retaining the tragedy in the public consciousness, these texts also served as a historiography, albeit with varying degrees of authenticity. Initially written in Arabic, the tradition continued in Persian, and then in Indian languages, starting in the Deccan in Dakhani, and in the North in Hindavi and various local dialects (Safvi).

Mir Anees and Mirza Dabeer are considered as the canonical figures when we talk of *Marsiya* Nigari in Urdu language. They are the most celebrated poets and at present, their Marasi are recited in almost every Majlis, worldwide. To put it in the words of C. M. Naim, until recently the Urdu *Marsiya* has been regarded as being almost synonymous with the poetry of Anees. Mir Anees and Mirza Dabeer were contemporaries of the 19th century North India. While *Marsiya* of Anees are popular for their imagery, lyrical quality, and other rhetorical devices, Mirza Dabeer is widely known for the Persian-Arabic usage in his *Marsiya*.

Many scholars have studied both the poets but Shibli Nomani's comparative analysis stands as a notable work in Urdu criticism. Nomani was a scholar of Urdu, Arabic, Persian, and Turkish. 'Muwazina-e-Anees-o-Dabeer,' published in 1969, is a subjective analysis of Marasi by both Anees and Dabeer. This analysis begins with a historical account of *Marsiya* Nigari beginning from Arab and Persia and the advancement of its journey in the Urdu language. He then explains the important characteristics of the *Marsiya* written by Mir Anees. He emphasizes the usage of words, simile, and metaphor and the musicality thus borne because of them in his works. Needless to say, Nomani was quite impressed by Mir Anees when he comments on his use of typical Persian and Arabic words in their own tradition unlike their usage in Urdu. Anees has used thousands of new and pleasant words in describing the battle of Karbala more than any other Urdu poet (Maulana Shibli). He also mentions that it is evident from their works that both wrote in response to each other and this is how the rivalry began.

Research Design

Objective

The investigation by Maulana Shibli was done in 1969. It was a completely traditional and subjective method of analysis. While conventional literary analysis can yield similar readings, computational analysis, with its capacity to unpack extremely complex patterns and to work on large scales, can open up new ways of understanding histories, cultures, texts, performances, literary form, and so forth (Pue).

This chapter aims to justify or match the claims of Shibli Noman is his work ‘Muwazina-e-Anees-o-Dabeer’ with the computational analysis of a software Sketch Engine.

Sketch Engine is a tool to explore language. Its algorithms analyse authentic texts of billions of words (text corpora) to identify instantly what is typical in language and what is rare, unusual or emerging usage. It is also designed for text analysis or text mining applications. It can be used to generate word sketches, word clouds, concordances and word lists. Parallel corpora and CAT integration in the software can be used for an effective translation with an already available corpora in more than 90 languages that can be used as Translation Memory. Frequency list and POS (part of speech) tagging are other special features of Sketch Engine. Corpus Architect and inclusion of RTL scripts such as Arabic makes it a favourable option to use in this research work. There was one other option in the choices of DH tools, Voyant, but the limitation of fewer languages that can be used in the software made it a less favourable one. Corpus in RTL scripts can be used in Voyant but it is just limited to Arabic and Hebrew. Also, Sketch Engine has an option to export the results in the format of an Excel, .xml, or .rtf file, which makes it easy and manageable to handle data.

Methodology

This research began by collecting the editable and navigable collections of *Marsiya* by Anees and Dabeer. Data collection has to be done keeping in mind that the text could be extracted from the file and put in use by the software. Therefore, text of selected and available *Marsiya* was taken from Rekhta, world’s largest website of Urdu literary tradition. Even though other sources were available but the limitation of being in a non-editable and non-OCRizable format made these sources not applicable for the research plan. The text was then extracted from the website and separate corpora were made for Anees and Dabeer as an MS Word document.

The aforementioned corpora were then input in the software. The efficiency of Sketch Engine is so much that it just takes a few seconds to access and read a corpus of millions of words. Sketch Engine offers a variety of features, for example Word Frequency, Concordance, Parallel Corpora Search, N-grams, etc (Figure 6.1). For this research, the feature of Word Frequency was chosen. Lists of most frequent words, in ascending and descending order, came as a result of applying this feature (Figure 6.2). The corpus was raw when it was put into the software, that is, it included parts of speech and the data of their frequency was of no use in this research. Therefore, such words, also known as **Stop Words**, were selected and omitted from the generated frequency lists. The new list with exclusions was then exported in the Excel format (Figure 6.3). It is the Excel format that made it easier to navigate the list, mark or highlight certain words that were a part of the interpretation and add comments to it, all in one place.

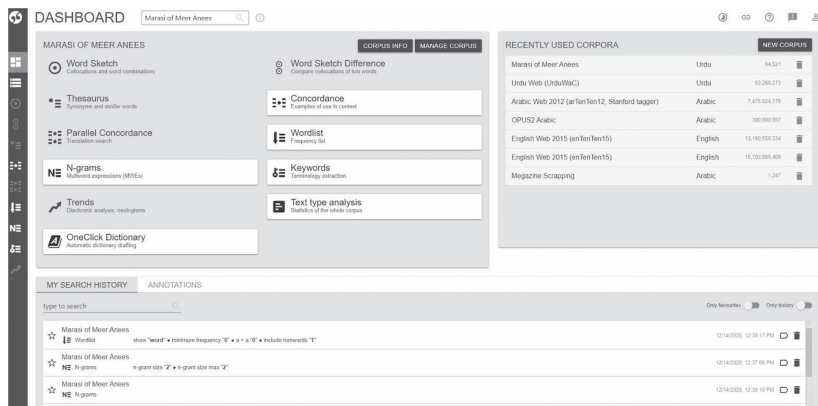


Figure 6.1 Screenshot of the dashboard of Sketch Engine software.

Word	Absolute Frequency	Word	Absolute Frequency	Word	Absolute Frequency	Word	Absolute Frequency	Word	Absolute Frequency
کیا	163	مہ	134	دھوکہ	105	یار	96	غم	78
کے	156	کی	132	کسی	105	علی	85	حاکم	77
کئی	155	جائے	132	گر	104	اندھ	85	دن	76
دل	146	کچھ	128	یا	93	تبع	84	زمیں	75
بہاش	143	مرتبہ	126	حکمر	93	نظر	83	کیوں	75
گھر	141	اللہ	126	طواف	93	یوں	83	کیا	74
بائے	137	نم	120	کپڑے	92	طرح	83	حضر	74
خدا	137	آئی	119	نشر	89	دونوں	82	رو	73
ایک	137	آپ	114	لے	88	اسے	82	دیکھا	73
جب	136	نہ	107	پھر	87	اکثر	78	پانی	73

Figure 6.2 Screenshot of the WordList function applied and resultant list of Frequent Words.

Item	Frequency
امام	35
آہ	35
خوش	35
نظر	35
قبر	34
رو	34
آپ	34
این	34
بس	34
زیر	34
جا	33
نور	33
بار	33
کچھ	33

Figure 6.3 Screenshot of frequency list exported from Sketch Engine software in excel sheet.

Scope

As already mentioned in the methodology that only the text that can be edited was selected in the data collection stage, many Marasi had to be excluded simply because the text could not be inserted in the software. The popularity of Anees and Dabeer has made all of their *Marsiya* accessible but mostly in the form of print or non-editable or non-OCRizable PDFs. Hence, the research design excluded some of the works by both poets.

The comparative analysis of Maulana Shibli Nomani talks of these works at various levels, for example, Fasahat (fluency or eloquence), Balagat (conciseness), Tashbeeh (simile), Ista'ra (metaphor), and lexical features of the Marasi. This research focuses only on the lexical criticism which can be assessed by the Word Frequency feature. Other rhetorical devices of the text can be assessed by features like Concordance and N-grams, through which a phrase (metaphor or simile) can be analysed and that too in its context.

Conclusion

Shibli Nomani's scrutiny is purely subjective way of analysing a text. His comments on the writing style of Mir Anees and Mirza Dabeer are supported with concrete examples of their works. It is evident that Nomani, along with others in the academia, was impressed by Anees more than Dabeer.

According to Nomani, Mirza Dabeer lacked eloquence in his works. There is no musicality in his *Marsiya*. Rhyme and rhythm suffer because of the usage of words. His use of simile and metaphor do not appeal to the common man who is actually a part of the audience or receptor of this *Marsiya* and the basic part of a Majlis for where a *Marsiya* is written to be recited. It is exotic for the audience to relate and thus this foreignness hinders the participation of the readers and listeners. There is a wide range of meanings associated with a word in his *Marsiya*, which invites thinking and reflection. Though he was a prolific writer, adds Nomani, yet in comparison to Anees, his *Marsiya* falls short with regard to the formal features of *Marsiya* Nigari where former was proficient in his use of rhetoric, euphemism and musicality (Maulana Shibli).

For Maulana Shibli Nomani, Mirza Dabeer's vocabulary was more Persian-Arabic which makes it obscure to comprehend. The words chosen by him to render his thoughts were more 'Saqeel' and 'Gareeb,' heavy and rarely used, respectively. Though these words may be suitable in Persian and Arabic context, they do not fit in the tradition of Urdu nazm at all. The usage of such words affects the sentence structure as well (Maulana Shibli).

One special feature of Dabeer's works is the obscurity and complexity preferred by him. 'Maineyaafreeni' or Polysemy, the capacity of words to have multiple related meanings, makes it difficult for a reader or listener to be an active participant or understand it completely and enjoy the poetic bliss. He uses the word 'Diqqatpasandi' here to point this characteristic. Diqqat in

Table 6.1 Word frequency list table from Anees' corpus

Word	Frequency
سنان	16
دندان	11
کارزار	4
ظہور	3
استخوان	3
سرزانوئے	1
ابوالفضل	1
گلبرگ	1
ہمدست	1
سیدالانام	1
صارم	1
عنان	1
عمیم	1
عنتر	1
غضنفر	1
برآوردہ	1
بر محل	1
بو تراب	1
مستغنی	1
والطور	1
انالعبد	1

Arabic means depth. It is the depth of a bandh or stanza that asks a reader to know the various contexts that the poet is talking about to understand it completely (Maulana Shibli).

On the basis of the Word Frequency lists generated from Sketch Engine, such words which fit in the criticism of Nomani are selected. Given below are the examples from the corpus thus made of Persian-Arabic words, words with numerous meanings associated with them and words with lesser usage in Urdu literary tradition, keeping in mind the partial corpus created with some selected works.

To interpret the computational analysis of the corpus, Mir Anees' usage of words was more Urdu-oriented and less obscure. A feature that deserves to be noted is the depiction in Urdu *Marsiya* of indigenous socio-cultural values and practices; the heroes and heroines are Arabs but they behave like the gentle-folks of Lucknow. Their social norms, marriage, customs, and uniqueness are all Indian, especially of the Muslim upper classes of Lucknow (Naim). As for Mirza Dabeer, Nomani's claims of the lexical repertoire in his *Marsiya*, though are true, yet can be justified to an extent. Urdu *Marsiya* primarily eulogizes Imam Husain and talks heavily of the battle of Karbala. Therefore, the Polysemy is acceptable when a reader ought to know the background and context of a particular *Marsiya*. Similarly, the metaphysical poets of the 17th-century England were also criticized for their obscurity and

complexity, and later eulogized for being different than the poets of their own time.

This genre stands on the peak of variety of recitations during a Majlis, namely, Salam, Ziqr and Nauha, with its rich vocabulary, imagery and layers of meanings. In conclusion, it can be said that Mirza Dabeer is to be praised equally, though in a different manner, like Mir Anees. One example to quote here is that of Asghar Mehdi Ashar, originator of the term *eMarsiya* and founder of the initiative ‘Farogh-e-Marsiya’ recently published a ‘Farhang’ or glossary of Dabeer’s works.

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7 Dictionary of Colloquial Terminologies

An Open Database Research Platform
for Archaeology, Anthropology, Cultural
Studies, and Digital Humanities

Sayan Sanyal

Introduction

The Dictionary of Colloquial Terminologies (DCT) is an open database research platform that will materialize a channel to hear and document the local terminologies of Indian regions. The current study assembles the local semantics to develop a comprehensive database and further a Digital dictionary of the local phonologies to get a socio-linguistic abstraction of that particular region. The academic dynamics of understanding an area of study come from the very materiality, methods, and media of making human inquiry and practices. The inclination of technology in each domain of social sciences and humanities had made it more intriguing and opens up various dialogues, discussions, and questions to address for. To get an apprehension on academic dynamics we can build upon Moti Nissani's remarks on how a discipline could be better understood if we study the comparativeness of self-contained or isolated human experiences which possesses a group of expert opinions on it (Nissani, 1997).

The period of technological advancements opens up a new door for research where it connects and builds a theory from the inter-disciplinary verticals of doing research. DCT as a research platform is a true instrumental piece of that ideation where it fills some new gaps of study. This process of connecting the various unfilled anecdotes will provide a great help to the Anthropologists, Archaeologists, Linguists, and Cultural Heritage, researchers who are somehow trying to get a quantitative output from their area of study. This study and the development of DCT as a research platform have opened up multiple facets, demonstrating how Digital Humanities as a discipline can curate research within the Indian context. Additionally, the interdisciplinary approach of incorporating allied disciplines can facilitate a broader discussion, enhancing our understanding of various fields in the contemporary era.

Digital Humanities as a discipline connects the inter-sectional approaches to ratify the theoretical and technological advancements as an axis to understand Digitality and Humanities. To build this point on a larger stretch, we can look into the observation that Shanmugapriya and Menon had provided that the Indian Humanities scholars have shown a growing interest in technological understanding like digital methods, tools, and pedagogy. This form of making inquiry had assembled a larger quest to understand the socio-linguistic abstraction of any place of study where it is important to engage in a dialogue to understand the basic inquiry of human experience which is language (Shanmugapriya and Menon, 2020). This instance of learning some basic forms of human experience will help scholars to engage in a more critical form of making inquiry practices and to reconstruct the past constructively.

During any cultural investigation such as in exploration and excavation, the first form of human inquiry starts when a researcher tries to understand the social scenario of the region. This brings an angle to study the past while conceptualizing the present in context. One of the basic elements required to start this type of cultural inquiry is the form of communication with the natives of a region, as they become one of the main testaments to guide them for future findings and discoveries. Language breaks barriers and communication broke physicalness to understand things more holistically. During such inquiries, a researcher often gets confused by the linguistic abstraction of a region and finds it difficult to communicate the necessary things with the natives of a region. This further opens up a question of understanding cultural logic in research, as observed by Enfield: “The process of people collectively using effectively identical assumptions in interpreting each other actions could be turned into Cultural Logic,” as it ratifies how important it becomes to understand the identical assumptions in a research field and interpreting a cultural logic to get a better conceptual outcome of the study (Enfield, 2000). To note a major argument in this contrast, Digital Humanities as a discipline had also provided a perfect anatomy to represent the pedagogical structure by adapting a distinctive discourse of deconstructing and delineating a knowledge-sharing process.

The use of multiple tools, methods, and pedagogical frameworks provided multiple insights to understand the objectives of making the platform. The making of Born-Digital infrastructures and providing a knowledge-sharing process to aid the Global South scholars could be a process to decolonize our cultural research spaces. To note an argument provided by Menon and Shanmugapriya that digital humanists face structural inequalities, whether in building “inclusive and diverse” (e.g. multilingual) databases, to digital infrastructures including an active research environment to the “lack of access to digital tools” as a result of prohibitive licensing fees for commercial software, and limited awareness and confidence in using open-source tools (Menon, 2020). The attempt to make comprehensive databases often needs a lump of resources to handle where it has often become a challenge towards Digitality.

Digital Humanists often debate the issues of how to access and maintain databases, raising questions of politics and ownership. In this regard, the DCT serves as an open database platform where collaborations and collective efforts can contribute to data decolonization. This allows researchers from the Global South to extract meaningful information from the database. Another major direction in this regard is that DCT as a platform provides an afterlife to all the terminologies which haven't been documented in the linguistic abstraction in a Dictionary. DCT provides insights from remote regions of India and provides an abstraction of the linguistic pattern of Indian regions.

The platform took great inspiration from the already established web-based geovisualization platform MINA (Map Indian Archaeology). "MINA is a Digital archaeological platform that promotes exploration and questions about unknown spatial patterns and relationships in Indian archaeology, further it opens up a conversation to collaborate in Indian archaeology by asking questions about unknown patterns, relationships, promoting the development of digital geospatial tools and encourage greater engagement with critical cartography" (Gupta et al., 2021). DCT took a huge inspiration in framing the outline of theoretical understandings and creating web-based geovisualization maps.

Objectives

The objectives and the importance of the project can be lined up from the fact that it deconstructs the very materiality, methods, and media of humanistic inquiry and practices, which represents the key aspect of Digital Humanities as a Discipline. The importance could be linked up from the rationale of what Gardiner and Musto had quoted, that

the intersection of humanities and the digital created an environment in which the humanities became subject to new approaches that raised issues about the nature of humanities while also opening up new research methods. The array of all the platforms, tools, techniques, methods and tools have developed all under the rubric of 'Digital' and this research has proved the praxis of digitality with collaborative actions of cultural logic in it.

Gardiner and Musto (2015)

The objectives of the research are diverse, as it implies the subjectivity and theoretical framework of disciplines such as Archaeology, Anthropology, Cultural studies, and Digital Humanities. One of the main objectives is to document and have a database of the local colloquial words/verses from across India. This objective will help researchers from the following disciplines to study the local culture of a region and will cater an additional database to document their said objectives in a convalescent way. One of

the major challenges researchers face in their fieldwork is how they can communicate with the local natives of a region. The platform will help these researchers to act as a conduit for a proper communication channel with the natives of a region, at least helping them with some of the basic words/verses with already established platforms such as Google Dictionary and Translation. Though in a way it is providing an additional supplement to already available resources on the web where it is deconstructing and curating a cultural logic for future research to be comprehensive in nature.

The other objectives of the project delineate its granularity and materiality to understand the various dynamics of a region, such as to have a prior understanding of the colloquial terms used in cultural investigations. The archival database of these terms will exemplify the need to document and study various diverse linguistic patterns present in India. Apart from the various other features present in the platform, there are some gaps that this platform tries to fulfil like how do the local semiotics collected by the material cultural researchers reflect the essence and presence of that term in research? Though it's very subjective but in a straight cohesive output, it reflects the linguistic narration of some of the most remote/indigenous/outer regions of India, as most of the cultural research takes place in rural outward parts of the nation. The materiality to deconstruct a cultural logic from these linguistic narrations will help to culturally map various communities present in different parts of India. The colloquial terminologies also shape the cleavages and praxis of socio-cultural trajectories, as it disseminates knowledge transfer of the particular region by looking at the abstract conglomeration of the represented culture, language, demographic, and so forth. At last, all of the objectives could be annotated from the fact that how these terms/verses could give a pavement to thrust the understanding to meet humanistic inquiry.

Politics of Constituting a Database

The historical and social space of a database is very important in understanding the existential politics around it. The databases as a repository always carry some annotations which had a rich significance in every context of a space, the databases as a living embodiment are continually deconstructing and reconstructing the past whereas the database as an artefact materializes the question of humanistic inquiries and carries an anecdote of an afterlife. To understand this space and the political context of the database we have to look into the function of how this database is getting democratized by various instruments such as access to the data and how its ethics are conglomerated to revive the identical identity of the database. The database is always a space where the identities have been documented and preserved, and the access to the data and transitional justice to the data curates a great significance, as "Data" is a valued currency in a database. This transformation of

data as a valued currency could be traced to the fact that this traditional shift from making a database physically to transforming it into a Digital Dataset. In the digitized form of documenting a Database, the politics of data has been the most important element in analysing how the access and manifestation have been portrayed.

In relation to the Database as a major element for constituting an Archive, Archives have so much to do in this regard and have elementary similarities with Databases, which involve similar kinds of discussions, conversations, transformations, and transitions with technology. To go on with what Foucault had quoted,

Space was treated as the dead, the fixed, the undialectical, the immobile (here I quote a physical archive in this context as we are heading towards an upliftment which is the technological advancement). Time, on the other hand, has a contrary richness, fecundity, life, and dialectic in itself, thus a Database has so much to do in this regard, with time it not only digitalized its versions but created its counterpart to look in this physical world.

Foucault (1980)

The politics of a database could be drawn from the point when the process of decolonization has been started, the moves which want to understand the colonial legacy by interrogating the existential neo-colonial power are important as it curates the framework of the archival network. The new shifts of these paradigms have altered some changes and challenged the commodification of a database in contexts. The move has initiated a process to legitimize the capital and to create a cohort where the notion of state control behind a database could be understood. In an argument with the politics of constituting a database, archives or repositories may become the same in this regard where the institutional framework process narrates some fundamental criteria like curating a database.

The Database is a relational structure in this regard, where it as a tradition of discursive concept seeks distinctive labour, and tries to connect with its existing structure but ended up losing its materiality. The archive on other hand is a discursive formation that consists of various materials that are embodied in a digital heterogeneity as a topic or as texts, subjects, and themes. The advent of this Digital Archive is liberating in a true sense where anyone could cherish its reconstruction of the past and as a set to regenerate an old panopticon that seeks an address but this address and joy has somewhere been controlled, monopolized, authorized, or maybe prejudiced by someone. Therefore, this liberation could be rightly quoted by Whitehead as “No one crosses the same river twice is extended. No thinker thinks twice, and to put the matter more generally, no subject experiences twice” (Whitehead, 1941).

Now to carry on with this problematization there are some core issues that not only archivists and data scientists are facing but scholars across the globe are seeking an answer to this statement. The politics of access and accessibility is a major concern when the advent of “Open-Access” has been granted by technological aids. The activity of archiving a database is always critical, historically situated, and contesting, making the database a force of cultural power manifestation and authority, always open to future and contingency. The open access of the database has involved politics of access/accessibility where the concept of decolonizing a database has a major concern when we talk about the politics involved in it. On a large scale, many of the databases around the world inhabit a fair line between the risks of neglect and decay on the one hand, and the privatization or the fetishization due to this make a rising market of doubt and a sense of mistrust. Another politics that is majorly related is the access between a privileged and an unprivileged makes a big concern where access has been denied for those who don’t have the authority to access a database though we can term this as Digital Divide.

The main point of carrying this discussion on how databases especially those which are digitized or Born Digital Datasets have been challenged with ownership and control rights. As it became predominantly important who will channelize the regulation on databases and how these regulating conditions of the state control monopolistic bodies becomes a challenge where it has been moulded and twisted by the state power or by the desires of the ruling exclusive classifications. The political interpretation and resistance by the ruling elites sometimes take the shape of what their ideology reflects and how these state archives tend to look like (Hawkins, 2022).

Another significant obstacle to liberty is digitalization itself, as it has been demonstrated that sharing enormous quantities of archival records online without any thought or consideration can quickly devolve into a pseudo-democratic overload. This misguided generosity can intensify state orders and create panic or trauma in the hearts of people. The ethical issues concerning fair use are the major challenge of this liberation where people from across disciplines are plagiarizing the databases and using there for their purpose of study. The ethical issues for this open access to a database are still vague for researchers. Thus, Born Digital Datasets may affect or provoke the viewer’s awareness of the possibility that human sense may be bypassed and replaced by that of an agent who no longer takes us or our desire for a coherent meaning into account (Baron, 2013).

The Digital Humanities Lens

The rationale for connecting this research to Digital Humanities lies in the fact that, with technological advancements, the field of Humanities has evolved beyond its traditional focus on theories and structural frameworks. In this transition, it has incorporated digital elements, making digitality a central aspect of the discipline. The main aim of the project is to study Digital

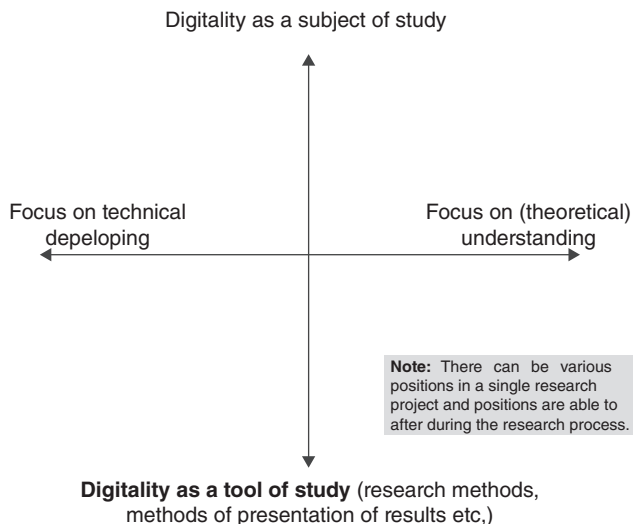


Figure 7.1 Axis of Digitality & Humanities

Source: Östman and Turtiainen (2016)

Humanities as a subject of digitality, using technology and various digital tools to achieve the project's objectives. By doing so, the project seeks to utilize these tools as methods for studying its diverse aims.

The project involves various Data Collection tools as a part of gathering the data. Initially, it started with the observational approach to note down the technicalities needed for the structural improvement of the platform, while on the other hand, it developed a personal communication approach to gathering the data. Though getting a qualitative result fosters the need to quantify the amount of data, it is getting significant respondents to have a fundamental base for data transfer in the platform. The project not only uses the following methods for data collection but also signifies the point that this project involves a technical development where these multiplicities and diversified tools help the project to signify its base around the aids of Digitality and use technology as a major tool to gather data from the people. The project also focuses on the theoretical understanding of how a Digital Humanities project has a life and beyond, where it tries to answer various possible outcomes of the future. The project is certainly adding value to the existential Digital Humanities domain, as the project will be one of the Digital Humanities projects where it can have an interdisciplinary output where it tends to reconstruct the importance of practicing and following Digital Humanities Pedagogy for building a transitional community of scholars in the Global South. The need for acknowledging the aids of digitality could nourish the existing infrastructures and will aid a chance to train people with the various digital modes and methods. The inter-sectional aspect where people come from

different backgrounds will foster the need to have a community of scholars who will allow the information to be democratized and add an ethical value to the project. The project also signifies the fact of curating a project on the realms of Born Digital materials and helps to create a habitus around different counterparts of technology. Thus, with open access of having the Dictionary online, it will enhance a new gateway for early career researchers to learn some key takeaways before starting any cultural investigation in India. Lastly, the project will entail the various facets of Digital tools used at one stage which makes the project more interesting and intriguing.

Opening of DCT

The project started on the fundamental concept of curating a Digital Humanities project for one of our courses in Fundamental of Digital Humanities in IIT Jodhpur, which is a mandatory pedagogical output in our first semester of the two-year MSc program in Digital Humanities. The aim was to create an immersive platform that will reflect the intersection of Digitality with my existing background knowledge in Archaeology and Anthropology. The intersection of these disciplines colliding with each other should reflect a method of historical inquiry and quest to build a community of Global South scholars who will aid each other by sharing values and beliefs on the morals of tools and techniques that they can also levy and employ in their domain of research.

The platform journey starts with Search Bar navigation where a user can search any term they want, along with its regional meaning, the base region from where it is collected, and the phonetic accent of that term in the regional language.

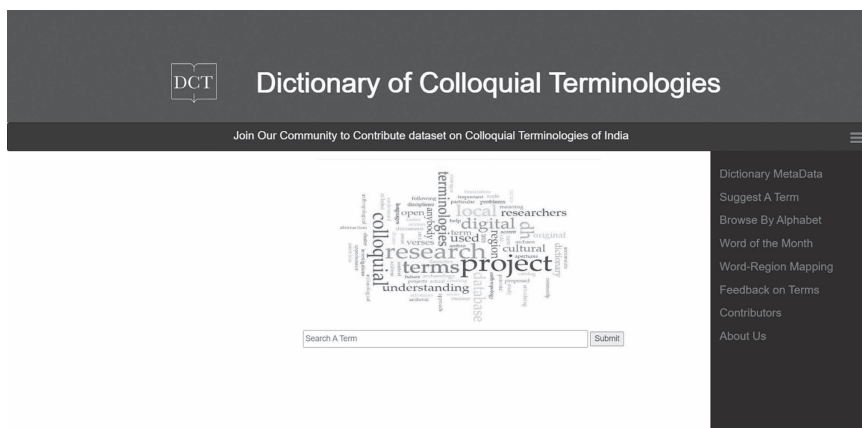


Figure 7.2 DCT HTML Website Home Page, The basic close-up of the HTML website along with a Word Map Visualization done in Voyant.



Platform Journey

- 1 *Dictionary Meta Data*: The Dictionary Meta Data comprises all the words that are collected to date and opens up with a more detailed output of the words/verses. The Dictionary Meta Data will enhance on the part to not filter any data but rather to provide a user with a comprehensive output that will highlight the term, their meaning, the social and economic scenario of the region, also when the data is collected, and who have collected the data.
- 2 *Suggest a Term*: This feature will provide a user to suggest the collected terms, where a user can contribute as much as they want, it's not limited to a single response. A user can respond multiple times also, the analogy of this contains a questionnaire which is necessary to collect the qualitative information for the dataset.
- 3 *Browse by Alphabet*: The user can browse the dictionary sorted in alphabetical order. This feature is the upgraded version of the Dictionary Meta Data where the user can filter their choices according to the way they want to show the results to be. These categorizations of the terms will help the user to navigate things in a more delineated manner.
- 4 *Word of Month*: In this special feature any term which has the highest visibility or searches can toggle up on the main page and additionally all the

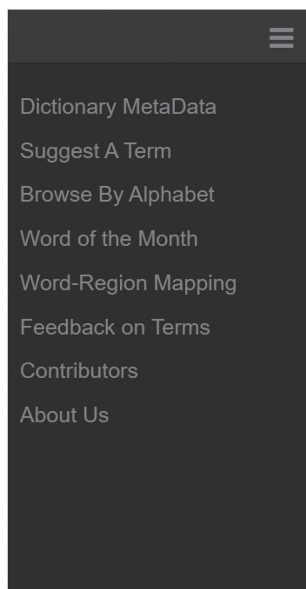


Figure 7.4 DCT HTML Website, Hamburger menu tab in DCT.

- past archival records of the most appeared words will be available on the website. These will enhance the scalability of people using the website and will help the platform to be immersive with multiple user-query activities.
- 5 *Word-Region Mapping*: This feature allows the user to locate and map all the region-specific words, along with some additional tags like who had collected the primary information, social and economic scenario of the region, and any other specific information if the researcher during their fieldwork has documented and contributed in the platform.
 - 6 *Feedback on Terms*: A user can give feedback on terms that are already added to the dictionary, and the user can suggest any alteration/modification/region corrections in the Feedback portal in the platform.
 - 7 *Contributors*: A user can see the people who have contributed to this database; this will enhance the database to form a community and also reflect the role of citizen science in open database projects.
 - 8 *About Us*: This feature will highlight the aims, objectives, and vision of this platform.

Statement of Ethics

The ethical ethos involved in curating DCT as an open-access database project has some accountability and responsibility in representing its core objectives. The accessibility and the generic contribution of people from across

these disciplines intensified its objectives and leveraged a sense of collective responsibility in representing the verses that were collected from different regions of the country. Open access to this platform had already justified the platform ethos and its clear goal for accessibility to all. The project debarred it from any kind of plagiarism, rather it took inspiration from many global projects which also became a point of motivation to build this project in its true line of interest.

The purpose to drive this project in a fair line of ethics justifies its moral point of how this project is interdisciplinary and multidisciplinary in its objectives. The role of ethics in this project involves reflection, discretion, and interplay between the different normative principles of privacy. Some of the normative principles of privacy that this project involves are as follows:

- 1 *Privacy of the Person*: One aspect of the project involves sharing the social and economic aspect of a region, which involves the perspective to study the people, culture, and societal patterns of that particular region. The project adheres to the rights involved to protect the privacy of a particular person or clan involved in the project.
- 2 *Privacy of the Personal Data*: This involves Informational Privacy, data that will be gathered through intensive field investigations. It will cover protection from compulsory disclosure of information related to religious faith, political opinions, and so forth.
- 3 *Privacy of Personal Behaviour*: This involves the respondent's personal space to carry out personal behaviour with the platform and giving the protection of the liberty to respond in the way one wants. Sometimes also referred to as Media Privacy Rights.
- 4 *Privacy of Personal Communication*: This platform protects the user and respondent's privacy over personal communication. This will give the user transparency and will provide the respondents with a sense of mutual trust and empathy.
- 5 *Privacy of Data and Image*: The platform though not showing any personal images on the website, it adheres to protect the data that is captured in the field investigations; also it will not share any kind of such data with anyone. The main aim will be to protect the integrity and accountability of the people involved in the project.

Authentication of the data also asserts the fact of ground truth in justifying the degree of confidence needed to morally establish the meaning of each of the verses. In this platform, authentication becomes a major attribute for credentialism as all the verses need to be checked and get authenticated before going into the platform. The attributes are challenging as most of the verses annotate sometimes same and different diverse real meanings but it's important to check every attribute of the words/verses. This also adds to the



Figure 7.5 (Clarke, 1997). Introduction to dataveillance and information privacy.

fact that Authentication will natively represent the core ethos and identity of the particular region from where the verse is coming.

All the Data are fully posed with Self-Ownership; the data include the ability to grant the rights and access to the personal data of respondents. Respondents filling out information in this database will see the Privacy Rights and Policies of the Database along with the objectives of the project. This will provide respondents with clarity about the platform and disseminate knowledge about the project's ethical standards. The contribution of these respondents will also get highlighted in the DCT platform which will in a way enhance their significance and contribution to the platform.

The project involves all means of fair and transparent use of Data. The project signifies the concepts of Findability, Accessibility, Interoperability, and Reusability where Data Ethics and confidentiality of it have been seen as prime things to consider. The project follows all policies of academic integrity and ethics and didn't do anything which could hurt the sentiments of others in academia. All the responses and the proof of the project data will be kept safe and have the consent of every respondent.

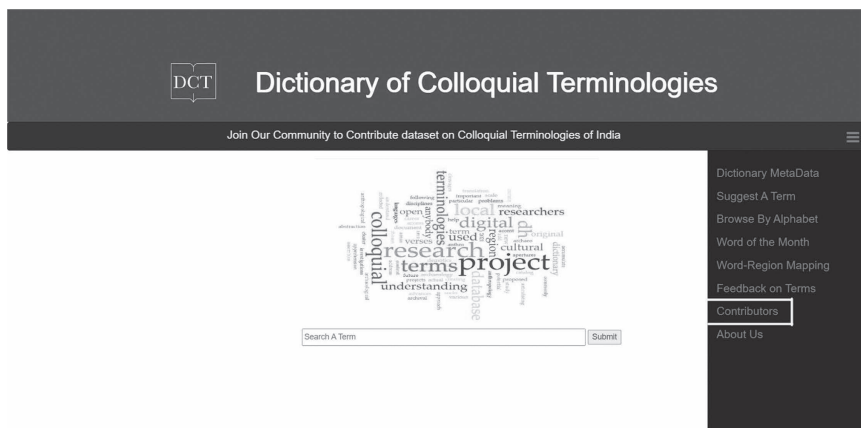


Figure 7.6 DCT HTML Website, Contributor tab.

Conclusion

In this piece, the platform DCT opens up various dialogues and conversations centred around how interdisciplinary could be curated upon. The main objective is to study this intersection where various disciplines find a space to match intellectual interests and encourage the building of digital scholars in the Indian context. DCT draws attention to the fact that it will help future researchers to have open access to all the local colloquial terms they wanted to study for their research. The importance of open access is an instrumental gateway particularly in Global South to instigate conversation centred around academic space and research collaborations. The chapter critiques an important conversation around the politics of a database and curating an archive in context. These discussions propose a way to facilitate critical discussions around Data Biases, Open-Access and majorly how a Digital Humanities project could be created in a very nutshell.

The detailed feature of the platform makes it interesting for researchers who wanted to curate a Digital Humanities project using multiple digital tools. The objectives of the project along with its critical nature to discuss conversations around Digital Humanities in the Indian context is to showcase how importantly Digital Humanities as a discipline has emerged and facilitate research on the lines of Inter-Disciplinary studies and on the role of digital tools and technologies. The opening of this DCT platform will help researchers and linguistic enthusiasts to know the local colloquial language abstraction of various regions of India. The statement of ethics is an outline to frame Open-Database projects and the ethical challenges related to Data for Knowledge generation and Data governance. Further, it opens up various ways to take digital initiatives and form a community of digital scholars

where DCT will provide them with an intellectual and social space to do research in the following disciplines.

Acknowledgement

I express my heartfelt gratitude to Dr. Dibyadyuti Roy for his insightful and constructive suggestions throughout the planning and development of this research project. His guidance and critique have been valuable in framing the theoretical understandings and developing the technical requirements needed for the platform. I am truly grateful to work under his supervision and his recommendation helped me to frame this platform.

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8 Mapping India's Linguistic Diversity and Exclusion in the Indian Census¹

Shivakumar Jolad and Aayush Agarwal

Introduction

The Indian subcontinent has long been known for its rich diversity in languages and cultures which had baffled travellers, invaders, and colonizers. Amir Khusru, Sufi poet and scholar of the 13th century, wrote about the diversity of languages in Northern India from Sindhi, Punjabi, and Gujarati to Telugu and Bengali (Grierson, 1903–27, vol. 1, pp. 1–2). Post-independence, despite the officialization of selected languages in the constitution, standardization of major languages like Hindi, Urdu, and Bengali, and linguistic reorganization based on certain dominant languages, India has remained a multicultural and multilingual country (Benedikter, 2013).

Enumerating and mapping the linguistic landscape of India are essential to understand the linguistic diversity of India and its exclusion of minority languages. Estimates of the number of languages and dialects vary from different sources depending on the type and time of the survey and its definition of language and dialect. The Linguistic Survey of India (LSI) conducted between 1894 and 1903 and compiled by George Grierson mapped the linguistic diversity of India for the first time. The LSI noted 179 languages and 544 dialects spoken in British India (Grierson, 1903–27). The disagreement between classification of languages and dialects leads to divergent estimates of languages in India. The People's Linguistic Survey of India (Kidwai, 2019) reported the existence of 780 languages (without making a distinction between language and dialect); the Ethnologue classifies 447 languages of India (Eberhard *et al.*, 2019).

Owing to the power of political leverage held by languages, enumerating languages has been politically contentious with implications on legitimizing and delegitimizing linguistic identities that manifest in politics, governance, and education. The Census of India has been classifying and aggregating languages spoken in India since 1881. Post-independence, the Census became the official classifier of languages and 'mother tongues' and came to be used by the state for planning and administration. Owing to the complexities of extracting socio-linguistic definitions of languages and dialects, the Census avoids the term 'dialects,' sticking instead with 'mother tongue.' Mother

tongues are distilled from the Census' raw returns through a process of 'rationalization' which are then regrouped under languages (Census of India, 1953, p. 2). Languages and mother tongues spoken by fewer than 10,000 individuals are classified as 'others.'

In this chapter, using the most recent publicly available data on languages by Indian Census, we map the diverse linguistic landscape of India at the national and state levels. We use the Census's rationalized mother tongue and languages and an aggregate measure of linguistic diversity Linguistic Diversity Index (LDI) using Greenberg's diversity measure (Greenberg, 1956), at the national and state levels. We rank the states according to their LDI for languages and mother tongues. We find that the LDI of India, considering the restrictive 121 language classification of Census 2011, is 0.78. If we include Mother Tongues, diversity shoots up to 0.9. The latter is closer to the diversity index of 0.93 calculated by UNESCO using Ethnologue's catalogue of 425 languages (UNESCO, 2009), which includes more languages – for instance, many of the 197 endangered languages spoken by less than 10,000 people. The most linguistically diverse states are in the North Eastern and central India, where many Tribal groups live in hilly forested regions and speak mostly Tibeto-Burmese and Austro-Asiatic languages. We find large gaps between LDI-Language and LDI-Mother Tongues, which is particularly stark for states in the 'Hindi' belt. Nine out of top 10 states with largest LDI gap are states with Hindi as the official language.

Certain languages in India are recognized by the Constitution of India (under 8th schedule) and receive state patronage. Currently there are 22 scheduled languages listed, with more than 100 'mother tongues,' and its speakers constitute 96.5% of India's population. There are 99 'non-scheduled' scheduled languages, though in relative minority (population of 39.7 million in 2011). Many states in India are linguistically reorganized based on these 'scheduled' languages. Scheduling of languages is largely a political process, driven by state politics and lobbying by dominant caste and class, and its selective patronage by state machinery undermines the rights of 'minoritized' linguistic communities throughout India.

Languages of the people in hilly and tribal regions, which historically did not receive state patronage, have been relegated to the category of minority languages grouped under Non-scheduled languages of Census. These 'minority' languages are not officially recognized by the government at the national level or as regional languages in the states where people speaking these languages live in India (Groff, 2017, p. 136). The population of some of the 'minoritized' languages, such as Bhili (with 10.4 million speakers) and Gondi (with 2.98 million speakers, based on Census 2011 figures), exceeds that of many small countries, including the country with the most languages spoken – Papua New Guinea. The mother tongues under Hindi such as Bhojpuri, Rajasthani, and Chhattisgarhi have speakers comparable to Spanish speakers in Spain, Polish in Poland, Dutch in the Netherlands, and yet, they do not have the status of Language according to the Indian Census.

Here, we highlight the structural problems in the classification of language, dialect, and mother Tongue, and how the Census process of rationalization delegitimizes several languages in India. We analyse languages (with their language families) and mother tongues spoken by Indians under both scheduled and non-scheduled groupings. We highlight the politics of language inclusion and exclusion in India and quantify the exclusion of language and Mother tongues for scheduled and non-scheduled languages. We show a high degree of language and mother tongue diversity within the Indian states and question the political patronage under “one state-one language” narrative.

Existing recent literature on India's linguistic landscape is largely based on Census 2001 data. The Census 2011 data on languages was released recently, in 2018. Given the rapid decadal growth in population, differential fertility rates among different socio-linguistic groups, and internal migration of people, India's linguistic profile would have undergone substantial change in the interim period. The COVID-19 pandemic pushed the decennial Census of India in 2020–2021, and later other unknown political reasons and the general elections of 2024 delayed it from 2021 to 2024. The census will be further delayed until late 2024, at the very least. This delay has provided extra leg space to mobilize changes in Census questionnaire (Kumar, 2020). We suggest reforms to the Census enumeration and classification of languages to improve transparency, make it inclusive of all languages, and reflect the true linguistic diversity of India.

Language, Dialect, and Mother Tongue in India

Counting and classifying the languages and dialects in India have been challenging for both linguists and the state agencies from colonial times to the present (Asher, 2008). An old popular Hindi saying “*Kos kos par badle paani, char kos par vaani*,” which means, for every *Kos* (ancient unit of distance measurement ~3 km), the water changes, and for every four *Kos*, the language changes alluding to the linguistic diversity of India (Lobo, 2018). Two principal historical pathways which led to such linguistic diversity are (a) migration of population to the area from outside and (b) the divergence within a language over time when different speakers become relatively isolated from each other and emergence of a form of speech considered as different Language (Asher, 2008, p. 32).

During the colonial conquest and rule of the British, India, as a *nation* in the European sense, based on a common culture, history, and language, did not exist. During the early colonial period, the British broadly categorized the Indian languages into *vernacular languages* (widely used by the common people) and the relatively more cultivated *classical languages* only in use among the upper and educated classes (Benedikter, 2013, p. 10; Grierson, 1903–27). Christian missionaries, scholars, and British officials attempted to comprehend the linguistic diversity, by classifying and

enumerating the Indian languages and finding their links to European and other Asian languages. Europeans from the 16th to 18th centuries had noted the general characters of principal Indian languages, and tried to compare with European languages. Systematic classification of languages and language families started in the late 18th century starting with Sanskrit by William Jones and Dravidian Languages by William Cary. The Linguistic Survey of India conducted between 1894 and 1903, led by Sir George Abraham Grierson, grouped the languages spoken in India to Aryan Languages (Indo-European), Dravidian Languages, Austro-Asiatic Languages, Siamese-Chinese Languages, and Tibeto-Burman Languages. Sir Grierson compared the challenges in distinguishing a language from dialects as that of classifying ‘Mountain’ and ‘Hills.’

Historical documents from the inscriptions and traveller diaries reveal that the state patronage was restricted to classical languages (Sanskrit, Arabic) or the “Vernacular languages” (a term introduced by the British) of the rulers and elites. Al Baruni, the Iranian scholar who extensively travelled in India in the early 11th century, noted the near absence of Sanskrit among the common populace (Grierson, 1903–27, Vol. I). Sociocultural and linguistic factors and stratifications such as caste and religion have resulted in ‘class’ distinctions in language status – high, low, and popular varieties (Asher, 2008). In many North Indian states, people distinguish between *Bhasha* (language) and *Boli* (spoken language), and list Hindi as their language in their official documents (Groff, 2017), roughly in line with *granthika*, the literary variety, and *vyavaharika*, the colloquial variety.

Often, the distinction between language and dialect is more political than a linguistic question. The power and prestige of certain selected forms, widely used across large geographic regions, often acquire the status of a language, whereas the forms which vary regionally or used exclusively by certain lower class or caste will be relegated to the status of dialects. If mutual intelligibility is the criteria, Hindi, Urdu, and Punjabi should have been the same language, whereas Rajasthani and Kumani should be different.

The Census of India acknowledged the difficulties in classifying language and dialect, and in 1951, it decided to steer clear of the controversy by adopting the approach that the “name given by the citizen to his own mother-tongue should be accepted as such and the returns with identical names totalled” (Census of India, 1953, p. 2). The Indian Census uses two specific classifications in its own unique way: ‘language’ and ‘mother tongue.’ The ‘mother tongues’ are grouped within each ‘language.’ Many ‘mother tongues’ so defined would be considered a language rather than a dialect by linguistic standards (Bhattacharya, 2002, p. 55). The Census identifies mother tongue as the language spoken in childhood by the person’s mother, or in case of doubt, the language mainly spoken in the person’s home/household language (Census of India, 2018). The report and data on languages and mother tongues of Census 2011 was released only in 2018 and has not been adequately analysed in detail at the state level.

Process of Rationalization of Mother Tongues Through the Census

Census grouping of languages and mother tongues occurs through a process of rationalization that relies on the 11 volumes of Grierson's Linguistic Survey(s) of India (1903–1927). The process of rationalization of responses, their regrouping, and consequent neglect of minority speakers leads to large-scale exclusion of languages spoken by people. The 1951 Census reported the existence of at least 783 mother tongues; later Censuses reported a typically higher number of 'rationalized mother tongues' (see Table 8.1). Census 2011 reported 19,569 raw returns, which were rationalized into 1,369 mother tongues, which were regrouped into 270 mother tongues (spoken by more than 10,000 people) and 121 languages. Languages spoken by 1.87 million people and mother tongues of 18.6 million people are placed under 'other' category (Census of India, 2018). Thus, the Census's process of enumeration does not "represent the full linguistic diversity of India; in fact, it minimises it" (Kidwai, 2019).

Census 2011 lists 121 languages with 22 scheduled (part of 8th Schedule of Indian Constitution; discussed in later section) and 99 non-scheduled languages spoken by more than 10,000 people. About 270 mother tongues have been rationalized and regrouped under these languages. The languages belong to Indo-European (Indo-Aryan, Germanic (English), Iranian (Persian, Afghani)), Dravidian, Austro-Asiatic, and Tibeto-Burmese language families. These, along with Semito-Hamitic (Arabic), constitute the main languages. The most diverse language group is the Tibeto-Burmese group with 66 languages. The most spoken languages belong to Indo-Aryan branch with 78% of population, Dravidian 20%, Austro-Asiatic languages 1.1%, and Tibeto-Burmese just 1%, spoken in North-Eastern India (see Table 8.2).

The Linguistic Diversity of Indian States

In spite of the limitations of the rationalization process, the Census gives an opportunity to measure and map the linguistic diversity (LD) of India and its

Table 8.1 Counting Languages in the Indian Census

YEAR	Returned Mother Tongues	Rationalized Mother Tongues	Legitimized Languages
1951	~	783	~
1961	~3,000	1,652	193
1971	~3,000	~	104
1981	~	~	~
1991	~10,000	1,576	114
2001	6,661	1,635	122
2011	19,569	1,369	121

Source: Groff (2017); Census of India (2001, 2018)

Table 8.2 Language Family and Speakers in India.

Language Family And Speakers In India – 2011					
Serial Number	Language Family	Sub-family	Number of Languages	Number of speakers	Percentage of speakers
1	Indo-European	Indo-Aryan	21	945052555	78.05
		Iranian	1	21677	0
		Germanic	1	259678	0.02
2	Dravidian		17	237840116	19.64
3	Austro-Asiatic		14	13493080	1.11
4	Tibeto-Burmese		66	12257382	1.01
5	Semito-Hamitic		1	54947	0

Source: Census 2011: Language Family of Scheduled and Non-Scheduled Languages

Note. The 0% entries in percentage of speakers occur due to rounding off to 2 decimal places.

states. Due to the exclusion of some languages and mother tongues by the Census (to be discussed later), the LD calculation is likely be lower estimates of LD than the expected.

The Greenberg Diversity Index is widely used to measure Linguistic Diversity (Greenberg, 1956). The Greenberg's Linguistic Diversity Index (LDI) based on the fraction of population speaking different languages, defined as

$$LDI = 1 - \sum_{i=1}^n \left(\frac{P_i}{P} \right)^2$$

Where P_i is the population-speaking language i and P is the total population of the Nation or State, and n is the number of languages. The $LDI=0$ when every person in the union under consideration speaks the same language. Maximum diversity of $LDI=(1 - 1/n)$ is achieved when everyone has an equal number of speakers. LDI will increase and approach 1, as the number of languages increases (and approaches practical infinity) and speakers are spread uniformly across the languages. We have computed India's linguistic diversity at both the national and state levels, at two hierarchical levels provided by the Census 2011 – language and mother tongue. We also split the diversity into Scheduled Language and Non-scheduled Language diversity.

Method for Computation

The approach involves splitting Census 2011 the language tables (477 entries) into Main Languages (including the 'others'; 121+1) and Mother Tongues (270 + 86 'others'+ 1 'other' language). Further, each of these divisions can be split into scheduled and non-scheduled branches. The LDI is calculated on the basis of equation 1 for each of these categories. The results of LDI calculations are shown in Figures 8.1 and 8.2.

Language and Mother Tongue Diversity of India

Greenberg's Linguistic Diversity Index

■ Language ■ Mother Tongue

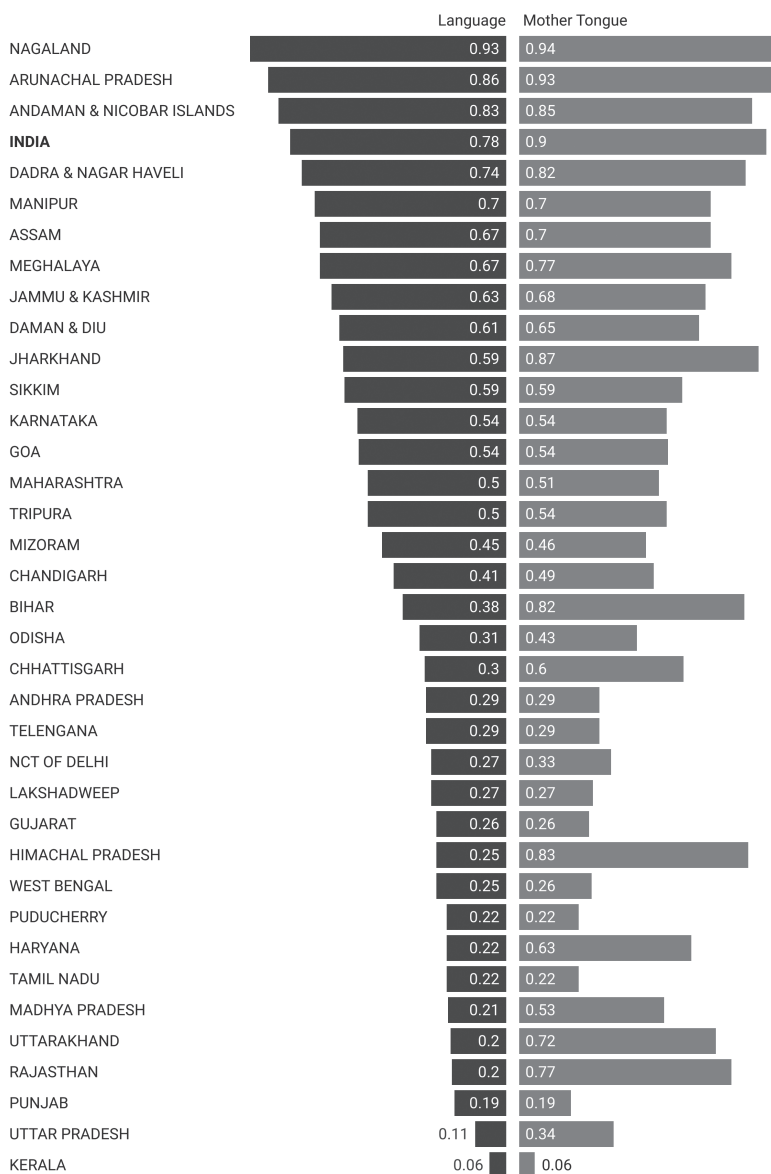
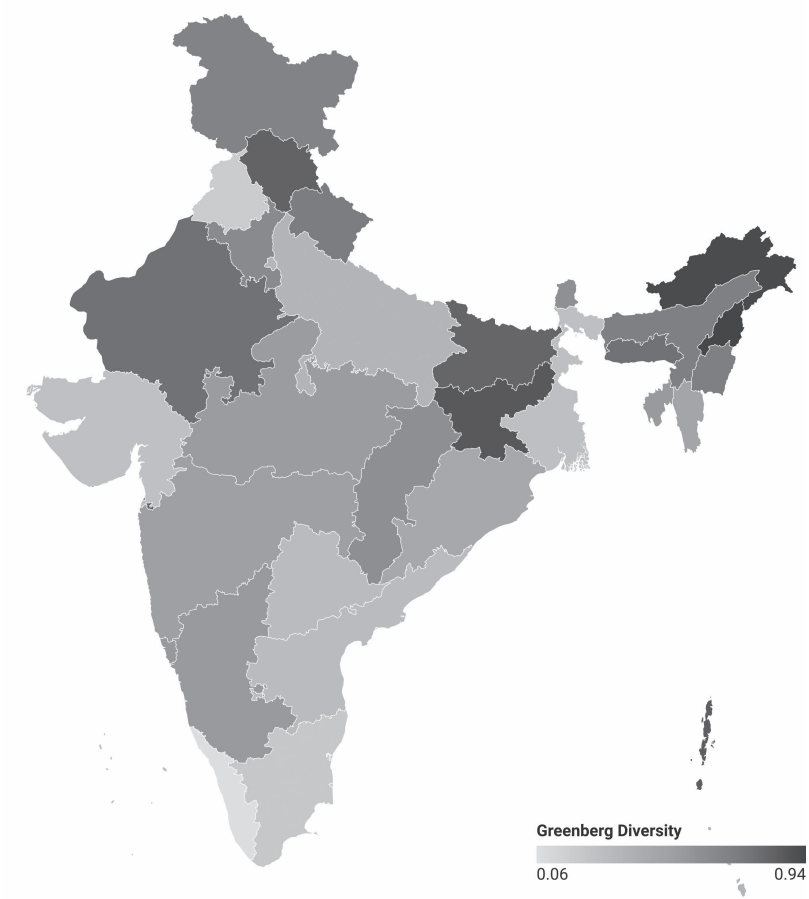


Chart: Shivakumar Jolad • Source: From: Census -C16 Languages of India • Created with Datawrapper

Figure 8.1 Linguistic Diversity of Indian states (left) LDI-Languages (right) LDI-Mother Tongue, computed using state level data from Indian Census 2011 language tables.

Linguistic Diversity of India-Mother Tongue

Greenberg Linguistic Diversity



121 Scheduled and Non-Scheduled Languages and Mother Tongues
Map: Shivakumar Jolad • Source: Census 2011 C 16 series • Created with Datawrapper

Figure 8.2 Linguistic Diversity of Indian states Languages and Mother Tongue, computed using state level data from Indian Census 2011 language tables.

The LDI of India, considering the restrictive 121 language classification of Census 2011, amounts to 0.78. The mother tongue diversity is 0.9, which is closer to the diversity index of 0.93 calculated by UNESCO using Ethnologue’s catalogue of 425 languages (UNESCO, 2009). The slight difference might be due to the inclusion of more number of languages, for instance, the 197 endangered languages spoken by fewer than 10,000 people, in the UNESCO list (see also The Economist, 2012). The LDI for mother tongues is higher because the population of speakers is distributed over a larger set.

Figure 8.1 shows the LDI of Indian states by Language and Mother Tongue. A Choropleth map of the Language Diversity Index can be seen in Figure 8.2. The most linguistically diverse states are the North-Eastern states, followed by tribal areas and islands like Andaman and Nicobar. Small states with distinct ethnic and tribal groups show greater linguistic diversity than large states like Uttar Pradesh. Isolated communities develop their own languages; hilly and tribal states have much greater diversity than the plains and plateaus. Forces of homogenization by the state do not penetrate deeply into these regions.

Most Diverse States

The North-Eastern states of Nagaland and Arunachal Pradesh have LDI-MT higher than 0.9 (see Figure 8.3a). Similarly, Manipur, Assam, and Meghalaya higher LDI-MT is greater than 0.7. The languages spoken in these states largely belong to the Tibeto-Burmese family, except Meghalaya (Austro-Asiatic and Tibeto Burmese) and Assam (Indo-Aryan), Sikkim (Indo-Aryan and Tibeto-Burmese); and Tripura (Indo-Aryan and Tibeto-Burmese). Anadaman and Nicobar Islands have a mixture of Indo-Aryan (Bengali), Dravidian (Tamil, Telugu), and Astro-Asiatic Languages (Nicobarese). Table 8.3 shows the languages, percentage of speakers, and LDI of four, most linguistically diverse small states in India. Table 8.4 shows the same for large states.

Least Diverse States

Among the least diverse states are Kerala, Uttar Pradesh, Punjab, and Rajasthan. In Kerala, 97% of the population speak one language – Malayalam (32.4 million speakers). Pania, one of the MT of Malayalam, is spoken by only 15,530 speakers in Kerala. The LDI and LDI-MT are roughly the same – 0.06. Uttar Pradesh (UP), the largest state of India with a population of about 200 million according to Census 2011 (larger than Brazil, the fourth largest country in the world), has Hindi as the dominant language – 94.08% – and next Urdu at 5.42%, the remaining languages falling within half a per cent point.

Language Versus Mother Tongue Diversity in States

Many states which show lower language diversity according to Census classification show high mother tongue diversity. This is especially true in Hindi-speaking states in North, Central, and Western India, as many mother-tongues have been grouped under Hindi. The LDI of Hindi-speaking states is low primarily because 54 languages are treated as mother tongue under Hindi. Of the top 10 states ranked according to the difference between Language and Mother Tongue Diversity, 9 have Hindi as the official state language. For Himachal Pradesh, Rajasthan, and Uttarakhand, the difference

NAGALAND- Languages spoken by the people

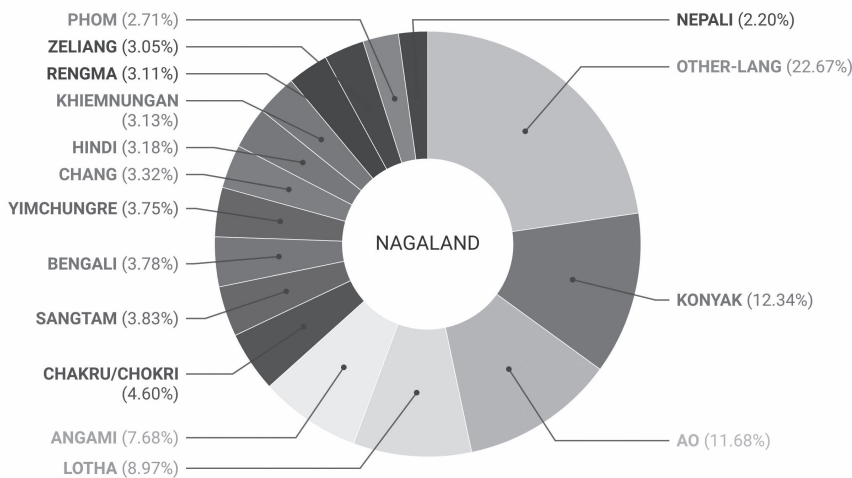


Chart: Shivakumar Jolad • Source: Census 2011 • Created with Datawrapper

KERALA- Languages spoken by the people

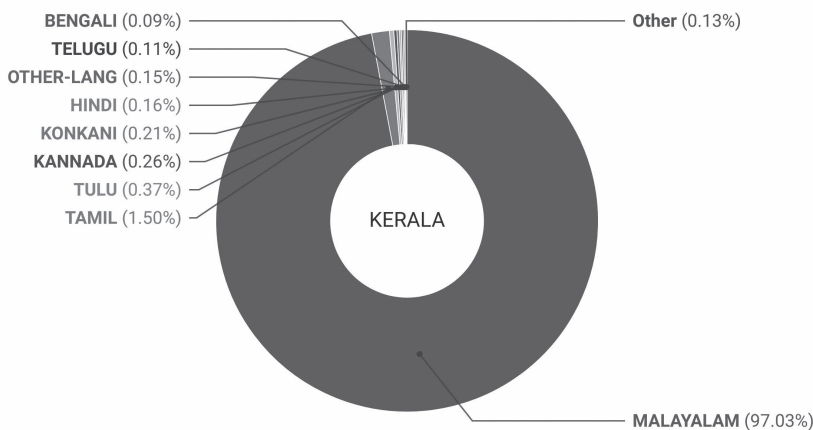


Chart: Shivakumar Jolad • Source: Census 2011 • Created with Datawrapper

Figure 8.3 Languages spoken by (a) the most linguistically diverse state in India – Nagaland (b) least diverse state in India – Kerala.

between LDI-Mother Tongue and LDI-Language are more than 0.5 (0.579, 0.575, 0.514, respectively; see Table 8.5). The top 9 states which show the greatest difference between Mother Tongue and Language Diversity are the states which have Hindi as the official language of the state. The standardized Hindi is primarily the *Khariboli* dialect of Delhi and neighbouring areas

Linguistically most diverse (small) states in India
Language, Percentage of Speakers, and Language Diversity Index

Source: created by Shivakumar Jolad with Datawrapper. Census 2011.

Table 8.4 Languages spoken in top three linguistically most diverse large states in India

Linguistically most diverse (large) states in India						
Language, Percentage of Speakers, and Language Diversity Index						
Language	Assam	Language	Jammu & Kashmir	Language	Jharkhand	Language
						Karnataka
ASSAMESE	48.38%	KASHMIRI	53.27%	HINDI	61.95%	KANNADA
BENGALI	28.92%	HINDI	20.83%	SANTALI	9.91%	URDU
HINDI	6.73%	DOGRI	20.04%	BENGALI	9.74%	TELUGU
BODO (S)	4.54%	PUNJABI	1.75%	URDU	5.96%	TAMIL
MIRI/MISHING	1.98%	BHOTIA	0.86%	HO	3.01%	MARATHI
NEPALI	1.91%	TIBETAN	0.80%	KURUKH/ ORAON	2.89%	HINDI
KARBI/MIKIR	1.64%	KHANDESHI	0.28%	MUNDARI	2.86%	TULU
ORIYA	0.70%	SHINA	0.26%	ORIYA	1.61%	KONKANI
SAN TALI	0.68%	MARATHI	0.18%	MALTO	0.46%	MALAYALAM
GARO	0.55%	NEPALI	0.18%	KHARIA	0.42%	GUJARATI
OTHER-LANG	3.96%	OTHER-LANG	1.55%	OTHER-LANG	1.19%	OTHER-LANG
Language Diversity Index	0.67		0.63		0.59	0.54

Source: created by Shivakumar Jolad with Datawrapper. Census 2011.

Table 8.5 Difference between Language and Mother Tongue diversity of 10 Indian States

Language and Mother Tongue diversity of 10 Indian States with Maximum Gap (Greenberg Linguistic Diversity Index)

Serial Number	State	Language	Mother Tongue	Difference
1	HIMACHAL PRADESH	0.254	0.833	0.579
2	RAJASTHAN	0.197	0.772	0.575
3	UTTARAKHAND	0.202	0.716	0.514
4	BIHAR	0.376	0.818	0.442
5	HARYANA	0.216	0.625	0.409
6	MADHYA PRADESH	0.212	0.527	0.315
7	CHHATTISGARH	0.296	0.597	0.301
8	JHARKHAND	0.59	0.87	0.280
9	UTTAR PRADESH	0.112	0.342	0.230
10	ODISHA	0.313	0.43	0.117
	INDIA	0.783	0.9	0.117

of Northern India, and its universal adoption by these states undermines the Linguistic Diversity of the region.

In Himachal Pradesh (HP), Hindi as spoken language is 85.89%, but Hindi as mother tongue (15.68%) comes the third after Pahari (31.9%) and Kangri (16.25%). Both these languages are clubbed under Hindi, along with Mandeali, Kulvi, Bharmouri/Gaddi, Chambeali/Chameli, and Sirmauri, among others. Punjabi, Nepali, Kashmiri, and Dogri are other languages spoken (see Figure 8.4a). In Rajasthan, the LDI-Mother Tongue of Rajasthan (0.772) is four times higher than LDI-Language (0.197). The language diversity appears low as nearly 90% of the population are listed as speakers of Hindi, whereas only 27.31% identify it as their mother tongue. About 36.84% identify Rajasthani as their mother tongue (see Figure 8.4b). Other major mother tongues are Marwari (9.04%), Mewari (6.09%), and Wagadi (4.94%). Uttar Pradesh's (UP) LDI-MT (0.34) is three times larger than LDI-Language (0.112). UP has a significant proportion of mother tongues of Hindi: Bhojpuri (10.8%), Awadhi (1.9%), Bundeli/Bundelkhandi (0.65%), and Brajbhasha (0.36%), among others.

These two examples show how the Census classification hides the linguistic diversity of states and promotes homogeneity of official languages. All the top nine states listed earlier use Hindi as official state language, and it also happens to be widely used in schools as a medium of instruction, and for administrative use. Languages such as Pharai, Kangri, Rajasthani, Marwari, and Mewari are among hundreds of other languages widely spoken by the people that find no administrative recognition.



Figure 8.4 Difference between Language and Mother Tongue Diversity of two large “Hindi speaking” states: (a) Himachal Pradesh and (b) Rajasthan.

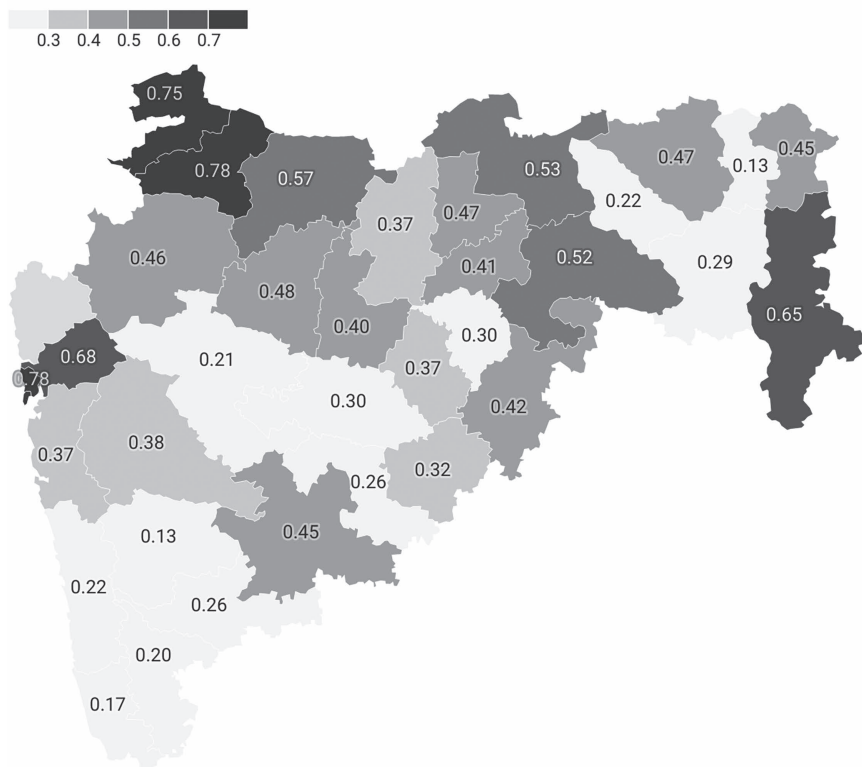
Regional Variation of Linguistic Diversity Within States

Linguistic Reorganization of States was created (based on State Reorganization Committee (SRC) recommendations in 1953) with a view to promoting the use of regional language of the state for political and administrative work, while simultaneously promoting the use of one language (Sengupta, 2009, p. 159; Bayer, 1986). As seen in the previous sections, states of India are far from monolingual or bilingual. The language and dialects spoken vary across districts within the state. Yet many states promote the use of one dominant ‘state’ language in all administrative works across the states. The urban areas in particular are hubs of migration both from within the state and outside. As a case study, we investigate the LDI of different districts of Maharashtra, and the variation between Rural and Urban areas.

Figure 8.5 shows the LDI-Mother tongue variation across different districts of Maharashtra. As expected highest diversity can be seen the Tribal dominated districts such as Dhule, Nandurbar, Gadchiroli, and Amaravati districts. Highly urbanized districts of Mumbai, Mumbai-Suburban, Thane (undivided) also show very high linguistic diversity. Southern and coastal

Maharashtra Linguistic Diversity Index- Mother Tongue

Greenberg Linguistic Diversity Index for Districts of Maharashtra



Source: Census 2011- C16 series • Map data: © OSM • Created with Datawrapper

Figure 8.5 Linguistic Diversity Index (Mother Tongue) of Maharashtra Districts.

districts (Sindhudurg, Kolhapur, Ratnagiri, Sangli, Satara), along with few central districts (Ahmednagar, Beed, Osmanabad), show lower LDI.

We further investigate the difference between Urban and Rural LDI across districts in Maharashtra (Figure 8.6). We find a distinctive pattern that Urban areas have much higher LDI than rural areas. At the state level MH-Urban LDI at 0.66 is twice that of rural areas (0.34). In Hingoli, the Urban-Rural LDI ratio is 3. Mumbai is totally urban, and has the second highest LDI in Maharashtra (just below the tribal dominated district Nandurbar). Although, cities are centres of political power, and administrative and economic hubs, they have largely neglected inclusion of linguistic diverse communities. Administrative and Economic transactions, and medium of instruction in schools are largely limited to the state language or Hindi and English.

Linguistic Diversity Index- Rural and Urban Difference in Maharashtra

LDI- Greenberg's Diversity Index

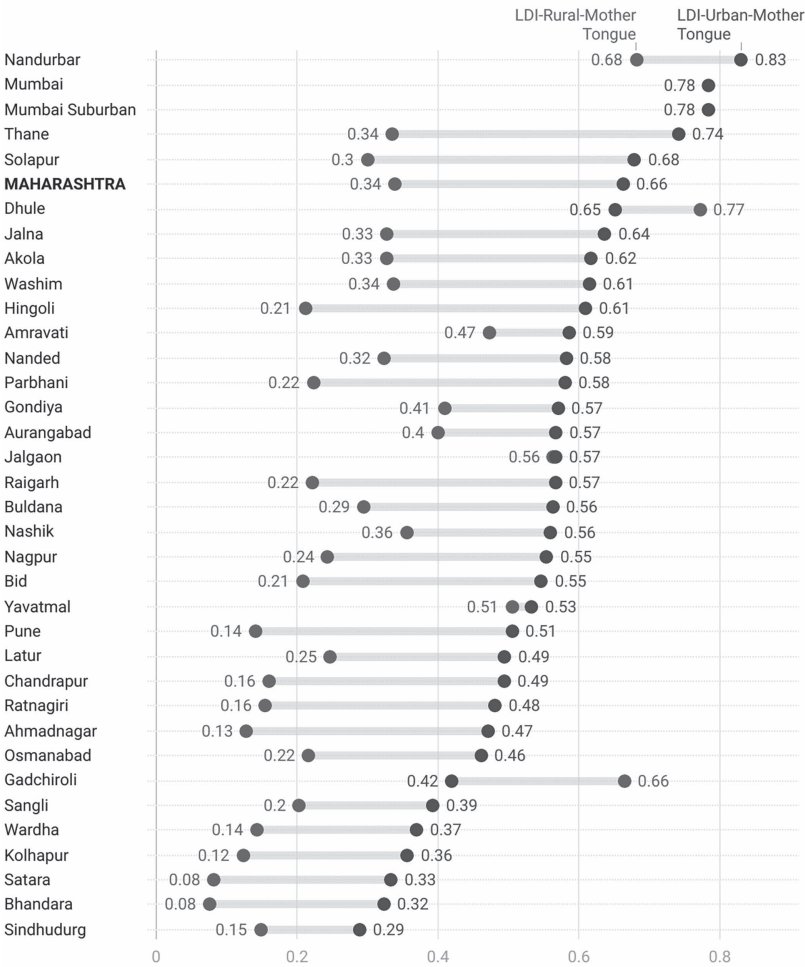


Chart: Shivakumar Jolad • Source: Census 2011 - C 16 Series • Created with Datawrapper

Figure 8.6 Difference between Urban and Rural Linguistic Diversity Index (Mother Tongue).

The LDI gap between urban and rural is highly correlated with the degree of Urbanization. We plot the LDI gap with respect to Urbanization based on Census 2011 data (Figure 8.7). In general, greater the Urbanization, greater the LDI gap. Exception to this can be seen in few districts like Gadchiroli and Dhule. Some districts like Hingoli, Ratnagiri, and Solapur show higher LDI gap, than what is expected from their level (low) of Urbanization.

Urban-Rural Gap in Language Diversity Index and Urbanization in Maharashtra Districts

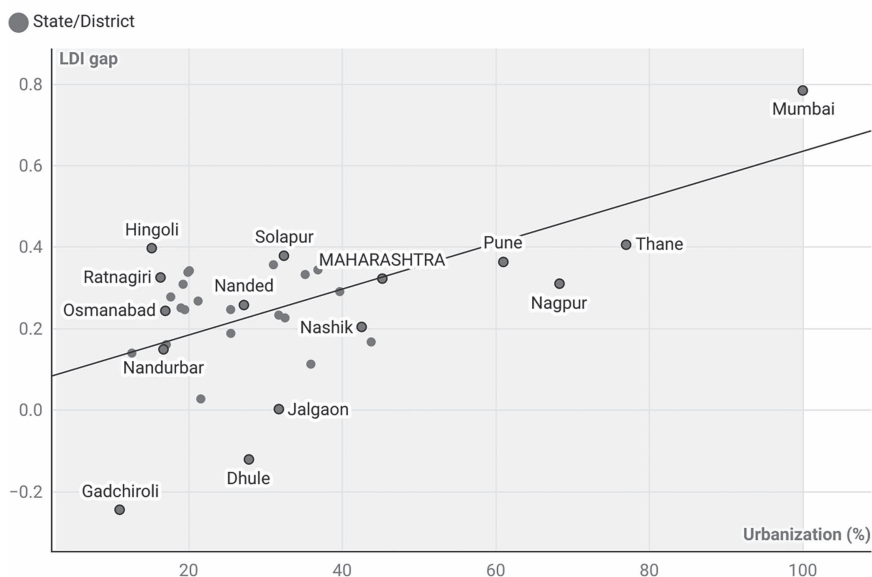


Chart: Shivakumar Jolad • Source: Census of India -2011 • Created with Datawrapper

Figure 8.7 Correlation between LDI gap and urbanization level of districts.

Inclusion and Exclusion Under Scheduled Languages

The Constituent Assembly, during 1948–1949, debated the ‘officialization’ of certain languages over others based on their scripts, number of speakers, rights of linguistic minorities, and media of instruction (Constituent Assembly Debates, 1946–49; Agnihotri, 2007). The eighth schedule under the Constitution of India recognizes 22 official languages. About 122 mother tongues clubbed (spoken by more than 10,000 people) are subsumed under these scheduled languages, as shown in Figure 8.5. Largest among these is Hindi, which has 56 MTs such as Awadhi, Bhojpauri, Rajasthani, Magadhi, Marwadi, Pahari, and Gharwali under its umbrella. About 27 of these have these Hindi-MTs have more than a million speakers. Odia has four MTs – Sambalpuri, Bhatiri, Desia, and Proja (Ori) with more than million speakers.

Scheduled Languages meant the Government was obligated to take measures for the development of those languages so that “they grow rapidly in richness and become effective means of communicating modern knowledge” (Benedikter, 2013). The official language resolution of 1968 states that “concerted measures should be taken for the full development of scheduled languages in the interest of the educational and cultural advancement of the country” (Ministry of Home Affairs, GOI, 1968). These languages are

Source: Census 2011 language tables

Different Mother Tongues under Hindi language

Census 2011- India

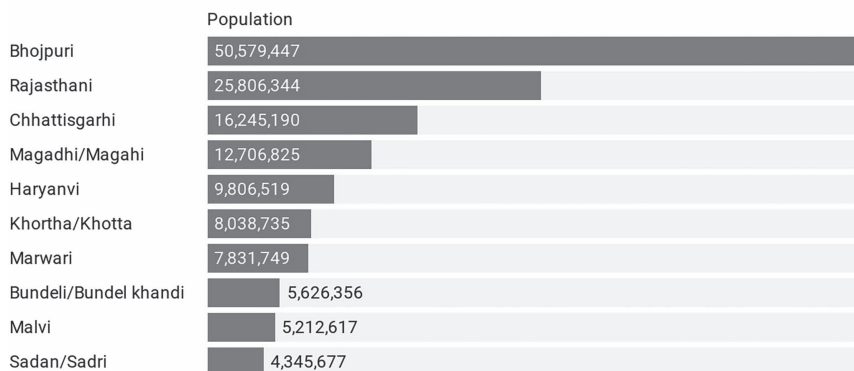


Figure 8.9 Top nine Mother tongues listed under Hindi with more than one million speakers.

Source: Census 2011

considerations. Sanskrit is in the official Schedule even though only 24,821 people claim it as their language, whereas Bhili with 10.4 million speakers and Gondi with 2.98 million speakers are excluded (Census 2011 figures). There is a demand for 38 languages to be included in the 8th schedule (Ministry of Home Affairs, GOI, n.d.). Only Sanatali from the Austro-Asiatic family and Bodo and Manipuri (Maitei) from the Tibeto-Burmese Family are in the Scheduled Languages list.

While scheduled languages receive official recognition, their mother tongues do not. Many of the 122 mother tongues identified under the Schedule have more than 5 million speakers and yet are not given the status of language. Mother tongues classified under Hindi languages such as Bhojpuri has 50.6 million speakers, Rajasthani (25.8 million), Chhattisgarhi (16.2 million), and Magadhi (12.7 million) have more than 10 million speakers and still do not have the language tag (see Figure 8.9 for a graphical representation). Apart from these, over 16.7 million people speak mother tongues of Hindi classified under ‘other,’ derecognizing their linguistic identity.

Non-Scheduled Languages and Mother Tongues

The languages not listed in the 8th Schedule of constitute non-scheduled languages spoken by 39.7 million people according to Census 2011 are treated as ‘minority’ languages (Constitution of India, 2008, Schedule VIII). Census 2011 lists 99 non-scheduled languages (which includes English) and 147 mother tongues (part B) spoken by more than 10,000 people. Some of the non-scheduled languages have 3 million to 6 million speakers – more than

certain European national languages. The largest of these being Bhili/Bhilodi with 10.4 million native speakers, Gondi (3 million), Kurukh (2 million), and Khandeshi with 1.86 million speakers (see Figure 8.10). The exclusion of these languages has implications for the land and forest rights of the Adivasis and other minority groups. Barring Santali, Manipuri (Maitei), and Bodo, all the languages belonging to the Auto-Asiatic and Tibeto-Burmese Family spoken by the tribal belt, the North-East, and Himalayan states in India are given the non-scheduled language status.

Some of these ‘minoritized’ languages have speakers exceeding 3 million, surpassing the population of a few European countries. Census figures and the Constitutional provisions under the eighth schedule have acted as an instrument of legitimization and delegitimization of languages in India by governments at both the central and state levels. The use and planning of official languages have immediate implications on the education opportunities in schools and colleges (Groff, 2017). Majoritarian language imposition by the

Non-Scheduled Languages in India (Top 25)

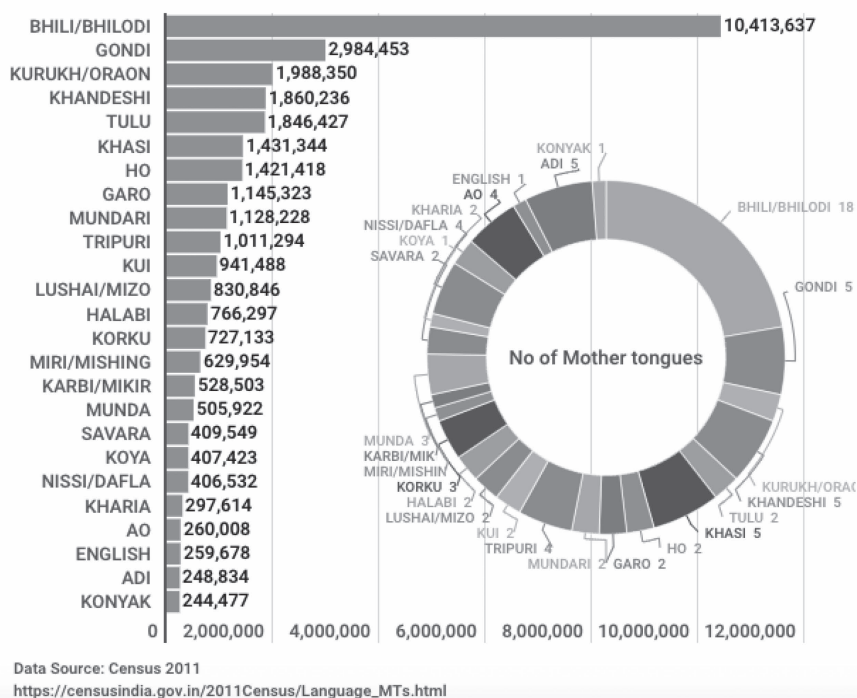


Figure 8.10 Top 25 Non-Scheduled Languages and the number of mother tongues associated with them.

Source: Census 2011.

state and the markets limits the access to resources and upward mobility for the disadvantaged linguistic minorities.

Excluded Languages and Mother Tongues

Census classification only lists those languages and mother tongues that are spoken by more than 10,000 people. According to Census 2011, about languages of people 1.87 million people are grouped under the 'OTHER' category. Mother Tongue exclusions are even higher. The cumulative population of 'other' minority mother tongues is 18.6 million, of which Hindi alone has 16.7 million people. Figure 8.11 shows the mother tongues excluded under the 'other' category within their main Language. Assamese has 495,000 speakers, Bengali 284,000, Gujarati 163,000, and Marathi 158,000 speakers listed under 'other' mother tongues.

Population (in 000) speaking 'other' category of Mother Tongue

As per Census India 2011, excluding Hindi

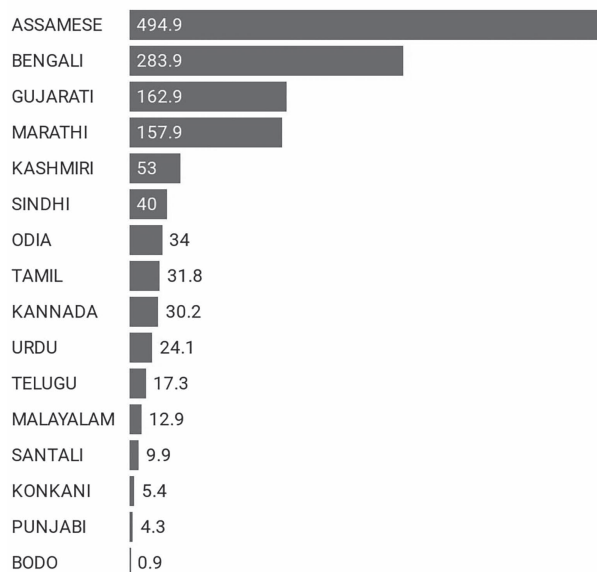


Chart: Shivakumar Jolad • Source: Census 2011 • Created with Datawrapper

Figure 8.11 Population placed under 'other' category of mother tongue from their main language (excluding Hindi's others, which has 16.7 million speakers).

Source: Census 2011

Conclusion

Language classification and officialization have been contentious since the time of Independence in India. Disregarding the enormous linguistic diversity, the nation and the states have used selective languages as political tools for identity and homogenization. The Constitution of India paved the way for official promotion of a few selected languages listed in the 8th Schedule while neglecting hundreds of other languages and dialects spoken in India. The linguistic reorganization of states paved the way for the use of the dominant language of the state as the official language, neglecting diversity of speakers within the states, rendering many to the ‘linguistic minority’ category. The creation of new states between 1956 and the present gave political legitimacy to few selected languages through their official use in these states.

The Census of India is the official aggregator and classifier of languages in India (although its process of enumeration and classification has delegitimized the linguistic identity of millions of Indians speaking minority or minoritized languages). In this chapter, using Census 2011 data, we have computed the Linguistic Diversity of India (LDI) and Indian states at two levels of classification – language and mother tongue. We have shown that if only main languages are considered, the LDI of India is 0.78, which falls well below the computed value by UNESCO at 0.93. However, the mother tongue LDI of 0.90 is much closer to the latter. This still does not factor in the languages and mother tongues cumulatively spoken by 20.47 million people as the Census places them under an ‘Others’ category. North-Eastern India, hilly regions, and tribal states in Central India have the highest LDI, where the languages mostly belong to Tibeto-Burman and Austro-Asiatic Languages. Some of the large Hindi-speaking states in North, Western, and Central India like Uttar Pradesh, Rajasthan, Uttarakhand, and Madhya Pradesh are at the bottom in LDI-Language ranking, but that is largely because Hindi camouflages numerous (54) mother tongues within itself. Nine out of 10 states which show maximum divergence between LDI-MT and LDI-Language are the states with Hindi as their official language for administration and medium of instruction in government schools. In North and Central India, Hindi is used as the official language, even though the mother tongues used by people significantly differ from Hindi (Himachal Pradesh, Rajasthan, Jharkhand, Bihar, Chhattisgarh).

The Census has played a key role in strengthening majoritarian languages and languages with significant political clout while neglecting the vast majority of languages spoken by the linguistic minorities and scheduled tribes in the central and Himalayan states. The process of rationalization of mother tongues erases their linguistic identity and delegitimizes minority languages at multiple levels: (a) it erases the identity of languages spoken by millions of people by not publishing it in official records, (b) it homogenizes the linguistic identity of mother tongues by placing them under the umbrella of dominant languages, and (c) it derecognizes languages and mother tongues

spoken by less than the threshold of 10,000 people by placing them under the 'Others' category. Census enumeration, instead of representing linguistic diversity, minimizes it.

The Indian Census 2021 is being delayed by the Government for various reasons (the COVID-19 pandemic being one). This frees up time to debate upon and address the question of capturing language information and its subsequent aggregation and classification in India. The Census should give legitimacy to the linguistic identities of all Indian residents. The upcoming Census should disclose the classification of languages and mother tongues, including those spoken by fewer than 10,000 people. The states should acknowledge the linguistic diversity they hold within them, recognize the linguistic rights of minorities, and as far as possible be inclusive of all the major languages spoken in its official use and educational institutions. The states should move away from policies of language imposition and promote a diverse set of languages in official communication and schools, books, and print media.

Note

- 1 Some of the results discussed in the paper have been published as a magazine article in *The India Forum* dated August 2021 (Jolad and Agarwal, 2021).

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9 Digital Methods in the Collection, Management, Reuse, Sharing, and Circulation of Indian Heritage Data

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Sharmistha Chatterjee, and S. V. Rajesh*

Social Context of Heritage in India

To mark India's 75th Independence Day, Google Arts and Culture launched its 'India ki Udaan' (India's ascent), a Web-based exhibition that showcases moments in India's post-1947 history, including key persons, scientific and sporting achievements, and women in Indian society (Google Arts and Culture 2022). The digital exhibition includes 120 illustrations and 21 stories and collections from select state-sponsored cultural institutions (e.g. the Ministry of Tourism, Museum of Art and Photography, and others). Google's foothold in digitizing efforts (Roy 2020) and its success in securing over 100 Indian partners in these exhibitions draws attention to growing interest in engaging heritage through digital interaction. Google Arts and Culture has not provided a measure of interaction and viewership of its digital exhibition, yet such engagement is facilitated by the availability of mobile devices (e.g. smartphones, tablets) and low-cost mobile data plans that make it possible for a greater number of Indians to connect and participate in digital heritage initiatives.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) (2020) defines cultural heritage as the "cultural legacy which we receive from the past, which we live in the present and which we will pass on to future generations." This includes tangible heritage such as monuments and collections of objects, as well as intangible heritage or "living expressions inherited from our ancestors, such as oral traditions, performing arts, social manners, rituals, festive events, knowledge and practices related to nature and the universe, and knowledge and techniques linked to traditional crafts" (UNESCO 2020). Formed in the aftermath of the Second World War, UNESCO is an international agency that promotes collaboration among United Nations member states through education, science and culture (Keough 2011), including the World Heritage program.

While informative, UNESCO's initial framing of heritage was decidedly Euro-centric (Cleere 2001; Harrison and Rose 2010), and Indigenous Peoples and other non-Western scholars critiqued and challenged the

conceptualization (Arizpe 2000; Aikawa 2004). Indigenous Peoples, for example, typically do not make distinctions between natural and cultural, tangible, and intangible heritage and thus, the Euro-centric conceptualization fragments and disconnects Indigenous communities from their knowledge and heritage (Battiste and Henderson 2000). These concerns are further highlighted in the underestimation of the influence of colonialism on science and ‘global cultures’ (Longkumer 2015). Until recently, non-Western scholars did not see their perspectives and values reflected in international legal frameworks, and this situation is beginning to change (Anaya 1996). For example, Wijesuriya et al. (2013, p. 13) note that the international community has begun to recognize the connectedness of past, present, and future, and “cultural heritage as places where social and cultural factors have been and continue to be important in shaping them, rather than as a series of monuments offering physical evidence of the past.” Scholars recognize differences and asymmetries in power are often obscured in national and international intellectual property strategies when it comes to knowledge and cultural expressions (Anderson 2004). Therefore, an understanding of the social and legal context of heritage data is necessary.

Heritage, including archaeology, is not exclusively for specialists in academia or state-oriented cultural institutions (Stone 2015). Public interest in Indian archaeology was brought into sharp relief during the demolition of the disputed structure Babri Masjid in December 1992, the loss of human life in its wake, and the subsequent legal proceedings regarding ownership of the grounds where the mosque once stood (Basak 2018a). These social developments had two impacts for archaeologists and heritage professionals. First, the role of the Indian judicial system in this highly visible case underscored legal and policy issues associated with heritage sites (Menon and Varma 2019); and second, the participation of the Archaeological Survey of India (henceforth, the ASI), the national institution for archaeology, and heritage preservation drew public attention to the ‘doing’ or practice of archaeology (Varghese 2018).

The practice of archaeology is conceptualized as the collection of archaeological data, the interpretation of archaeology, communication of archaeological knowledge, and the preservation of heritage, which we will return to in a later section. In conventional practice, the archaeologist is an authority on the past, and as such, their narrative is privileged over the views, values, and knowledges of local communities (Figure 9.1). Local communities often live in and interact with cultural landscapes, and they have rights and deep interests in heritage, and in passing on their knowledge, traditions, skills, and practices to the next generation. The community can be descendants of a past society, which means that archaeologists necessarily coordinate and work with local peoples (Neogi 2011). In the Indian context, Selvakumar (2006) has remarked that archaeological knowledge is often published in the English language, a situation that limits its reach to the vast majority of Indians, suggesting the need to centre multilingual publications and other

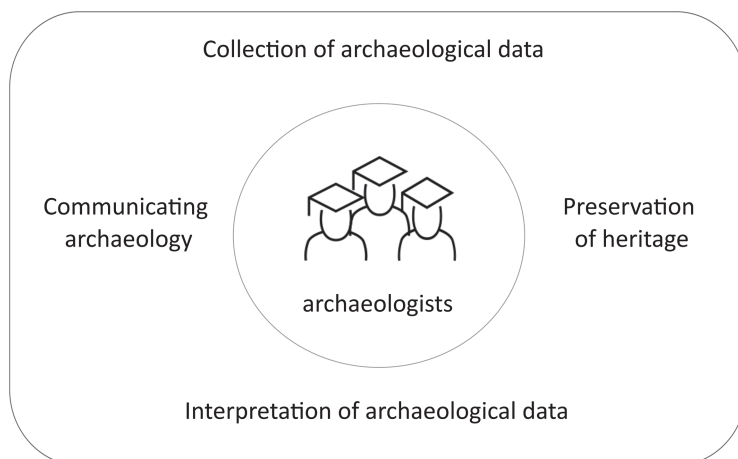


Figure 9.1 An illustration of conventional practice in archaeology where the archaeologist assumes authority over the documentation and recovery of archaeology, the analysis and interpretation of data, the communication of archaeological knowledge, and the preservation of heritage. Recent developments in the field of archaeology challenge the centrality and singular authority of the archaeologist, and push for community perspectives and local voices in the practice of archaeology. ‘Graduate’ icon is adapted from Richard Schumann (2015) <https://thenounproject.com/icon/graduate-155087/>.

media (e.g. podcasts, graphic novels, websites, etc.) to enhance engagement with heritage.

Conventional archaeology is extractive and typically distances local communities from their heritage. Archaeological practice has colonial roots such that a non-European (i.e. Indigenous, Black and other racialized) archaeologist was thought to be ‘too [biased]’ to work in their own community, and thus, European (i.e. White) scholars alone could provide ‘objective’ knowledge about the past. Such Euro-centric views of power and knowledge-making typically served to delegitimize the views of communities being studied and often erased their histories and understandings of heritage (Wylie 1996).

Non-Western scholars have a long history of pushing back against such perspectives and practices, and they examine them through postcolonial and decolonial lenses. These lenses pull attention to a scholar’s positionality in knowledge making and the circulation of knowledge via global and local power asymmetries in a racial hierarchy, raising questions about whose narrative is it, who writes it, who is left out, who benefits from the exclusion, and to what end. These efforts situate the university as a racialized site of knowledge production, and seek to transform it by re-centring historically excluded voices, and by amplifying the plurality of perspectives and interests of the groups whose heritage is represented so that these communities

benefit from heritage research (Bhambra et al. 2018). These critical perspectives inform digital scholarship.

Growing interest in digital technologies and greater volumes of digital data are raising new kinds of questions and challenging colonial practice in heritage research. For example, through maps of wheelchair accessibility on an American university campus, Arie Hamraie (2018) has demonstrated that when examined through an explicitly intersectional lens, digital tools and data can challenge disciplinary norms and simplistic legal compliance of disability law. Hamraie (2018, p. 255) argues that accessibility maps themselves are value-laden, and “composed and designed through observations, narratives, deliberations, and materializations.” She seeks to challenge these implicit views through Mapping Access, which is a “critical design and participatory digital mapping project” to document spatial structural barriers on the university campus while “enrolling broad publics in the iterative, troubled work of defining and detecting access” (Hamraie 2018, p. 256). The outcome is not to create or crowdsource an objective spatial document; rather, this is an ongoing negotiation and open-ended process to develop a broader understanding of ableism as an oppressive system in the everyday.

Roopika Risam and Alex Gil (2022) introduce minimal computing as an approach that moves away from prescriptive computing platforms and software in developing digital humanities projects, and instead emphasizes decision-making processes that are “driven by the local contexts in which scholarship is being created.” Specifically, they argue that decisions are based on constraints that scholars are working with in their specific contexts, which can include scarce resources such as funding, infrastructure, labour, and freedoms such as movement and speech. They pose four questions to guide technology use in constrained environments, namely (1) what do we need; (2) what do we have; (3) what must we prioritize; and (4) what are we willing to give up. These guiding questions shift focus to digital scholarship informed by local conditions, and open intellectual space on the strengths and interests of local scholars, and technologies for use and maintenance in their local context.

We begin with a brief overview of the collection, management, reuse, and sharing of data in Indian archaeology and key issues in the reuse, sharing and circulation of archaeological data, followed by a discussion of digital methods in Indian heritage, and highlight works-in-progress. We write from our perspectives and privileges as university archaeologists located in the global South (Abhayan, Sharmistha, Rajesh) and global North (Neha). We build on Menon and Shanmugapriya’s (2020) remarks on the difficulties in creating active digital research environments in the Indian context, and discuss paths that archaeologists have explored and suggest others that could be further developed to curate digital heritage for the future while more equitably engaging with descendant and oppressed communities in multilingual India.

The Collection, Management, Reuse, and Sharing of Heritage Data in the Indian Context

Documentation of archaeology in the form of field notes, maps, drawings, illustrations, photos, geographic coordinates, and other measurements is data for further processing and analysis, and are the basis for interpretation and understanding of past societies. These datasets are a record of the archaeological context of recovered tangible artefacts or belongings of ancestors. Archaeological sites are often disturbed or destroyed where construction projects and resource-extraction activities are frequent, and in such scenarios, archaeological documentation can be the only data available for study and future analysis. Thus, these heritage datasets are one of a kind and are not reproducible.

In the Indian context, archaeologists from three main cultural sectors interact with local communities during the collection of archaeological data. They include university researchers, state department archaeologists, and archaeologists from the ASI. Each of these sectors differs in terms of resources, infrastructure and personnel to manage, process, analyse, curate, and share archaeological datasets. The ASI's budget comes under the central government's Ministry of Culture. As a national agency, the ASI has multiple roles in that it oversees permit granting for archaeological fieldwork, and develops and implements heritage policy, in addition to directing field explorations and excavations and providing training. Formal excavation permissions for universities are channelled through the respective state department, and are presented before the ASI-led Central Advisory Board of Archaeology (CABA). The CABA evaluates and issues excavation permits to applicant institutions. Thus, there is a clear differential in power, staffing, and funding resources between the ASI, universities, and state departments.

In addition to the three cultural sectors, heritage professionals from museums and agencies such as the Indian National Trust for Art and Cultural Heritage (INTACH) can engage with local communities in the preservation of heritage. Members of local communities are often deeply interested in, and participate in what Bishnupriya Basak (2018b, p. 141) calls "heritage-making," as do members from "learned societies."

Archaeologists interested in managing and reusing Indian heritage datasets face a number of barriers. Conventionally, the archaeologist or team that collects data in the field keeps them for publication or in storage, which can result in 'gatekeeping' with limited or no access for further study by other heritage specialists. Even when 'legacy' datasets are available, they often require significant investment of time and resources to make them reusable and shareable, and they are associated with legal, ethical, and policy issues including who has decision rights to use, modify, and circulate them, when, and under what circumstances (Smith et al. 2011). These are longstanding issues in archaeology and many other fields of study (Borgman and Pasquetto 2017; Boté-Vericad and Termens 2019; Carroll et al. 2021; Kansa and Kansa 2022; Sobotkova 2018).

Moreover, at present, there is no digital repository to access archaeological reports, nor is there a reliable and accessible digital database into which Indian archaeologists can deposit datasets, or examine and reuse data for different questions (E. Gupta et al. 2017). Rather, datasets are shared informally through social and professional networks and the quality of received data are tied to the archaeologist's reputation and professional standing. Datasets are most commonly stored on personal computers, external hard disks, and cloud-based storage where available. This is true for most university archaeologists, and the situation might differ for state and ASI archaeologists. Other sources of information about archaeology include the ASI's publications, student thesis and other scholarly publications, historical texts (e.g. mediaeval, colonial documents) and oral histories from communities.

The ASI publishes its *Indian Archaeology – A Review* (IAR), an English-language print periodical. The IAR offers unparalleled chronological coverage on archaeology in Independent India because the first volume was published in 1953 and the ASI continues to publish the periodical. Each volume consists of several sections, including 'excavations and explorations,' in which one can examine an inventory of archaeological activities carried out during the calendar year. A typical summary on an archaeological investigation will detail where, when, and who was involved, as well as what was recovered. An archaeological director ideally prepares their end of season report and submits it to the ASI for compilation into the IAR. In cases where the archaeological director has not (yet) published a full archaeological report at the conclusion of the project, these summaries are all that is available for scholarly examination, which makes the IAR invaluable for archaeologists.

Yet there are known issues with the information in IAR, as well as in published works and informally shared datasets. Prior to the 1980s, archaeologists typically did not report geographical coordinates (e.g. latitude and longitude) for sites that they surveyed. This situation has changed with training in geospatial techniques such as Global Positioning Systems (GPS) and the availability of GPS units for fieldwork. Archaeologists now regularly report geographic coordinates and sometimes combine these with documentation using specialized survey equipment such as high-precision total station (e.g. an electronic theodolite that measures angles and distances), aerial, satellite or other remotely sensed imagery, and Ground Penetrating Radar (e.g. geophysical technique that uses radar pulses to image the subsurface without excavation). The IAR summaries do not detail field techniques and specialized tools used in documentation, a situation that limits how legacy datasets can be reused.

Furthermore, site names, for instance, are sometimes given the same name as the village or town they are located in or in proximity to. District names and state names are also available in the IAR summaries. However, as discussed elsewhere (N. Gupta et al. 2021; S.V. Rajesh and Patel 2007), place names often have multiple spellings, and districts and other administrative divisions change names as well as geometries. This means that linking reported place names in

legacy reports with geographical coordinates requires careful examination and processing (Suganya 2020). Hand-drawn illustrations and field maps that were produced or historical maps that were compiled need similar care in processing, especially if they are to be georeferenced (i.e. a technique that mathematically fits an image into geographic/Cartesian space) for further analysis.

Similarly, information on stratigraphy (a technique in relative dating based on the super positioning of old deposits overlaid by more recent deposits) and the soil and sediment matrix of recovered artefacts is generally not available. This is particularly true for excavations during the 1950s and 1960s. This situation means that such datasets have limited chronological control and one cannot say with confidence which artefact dates to which relative period. In many cases, field directors report ceramic typology and use this as a proxy for chronology. While this technique can be an effective way to organize and associate artefact classes in the field, it is not a substitute for documentation of the archaeological context. Moreover, original photos, illustrations, and other visual documentation are typically difficult to access or are unavailable for examination. In the case of published articles, these important data are sometimes only available as low resolution images.

In the same vein, there is no formal compilation of the names of archaeologists and their institutional affiliations or direct information on how their careers progressed from one position to the next. IAR summaries typically have the name of the field director, and sometimes have the names of members in an archaeological field team. This information can be helpful in better understanding who the archaeologist was in terms of their social and economic privileges (e.g. gender, caste, class) as well as their education and training. Compiling this information across universities, for example, can help archaeologists in showcasing institutional strengths and training priorities, which in turn can assist in the recruitment of students.

There are growing numbers of universities that are interested in digital scholarship. However, structural issues persist in terms of building multilingual databases and digital infrastructures for collaborative research to expensive licensing fees for commercial software (Menon and Shanmugapriya 2020), as well as the availability of training and ideological resources to fully support digital research. In the case of the University of Kerala, the Department of Archaeology has a dedicated computer lab for students working with geospatial datasets and specialized software such as QGIS for geospatial processing and analysis, and Adobe Photoshop and Agisoft Metashape for processing images, photogrammetry, and 3-dimensional models. The SRM University, Andhra Pradesh, has recently set up a Geographic Information Systems (GIS) Centre on its campus to facilitate and encourage collaborative geospatial projects.

Significant room exists for collaboration between all sectors in the archaeological community. Legal responsibility for the custody and maintenance of archaeological sites and artefacts (protected and unprotected) are vested with the ASI and state archaeology departments, depending on national or

regional importance, respectively. When archaeological features or artefacts are accidentally disturbed, the community typically contacts either the ASI or state department for further action. In most cases, the ASI does not intervene; rather, it transfers the task of recovery and documentation to the state department or informs the community member to contact the state department directly. In most situations, the state department recovers movable archaeological materials without established archaeological documentation techniques.

The retrieved information and materials are not examined by state (or ASI) archaeologists nor are materials and data shared with universities for further archaeological study. While there are individual archaeologists in state departments who are eager to pursue further study of recovered archaeology, collaborations with university archaeologists are typically discouraged, and state department supervisors do not support these activities. Yet there are some nuances in practice. For example, the Director of State Department of Archaeology in Kerala recently established a cooperation with University of Kerala, whereby doctoral students in archaeology can access legacy data housed at the state department for the purpose of research. Most importantly, however, the community rarely, if ever, hears back on the ‘afterlife’ of any recovered artefacts, or learns about how archaeology deepens an understanding of their ancestors. From the perspective of members of the local community, archaeology, and by extension, heritage research is an apparent dead end, which distances them from heritage and from decision making about its care and use.

The situation is further complicated because of existing heritage legislation such as The Ancient Monuments and Archaeological Sites and Remains Act, 1958, under which monuments and sites are protected, establish restricted and prohibited areas around such sites. In prohibited areas, construction is not permitted within a 100-metre radius of the site. Restricted areas do not allow construction or renovations within a 200-metre radius of the site, although exceptions are possible with a No Objection Certificate (NOC) from the ASI. When enforced, this strategy can be effective in limiting potential damage to monuments and sites from construction. Yet, from the perspective of a community, when archaeological material is recovered on their land, there is concern and fear that their piece of land (read homes, community, and livelihoods) could be taken over by the ASI to protect heritage. As such, some communities are hesitant to report archaeology when it is accidentally disturbed. These factors influence how archaeologists practise their craft in the Indian context. In the next section, we discuss recent efforts and works-in-progress to explore paths that broaden the scope of digital heritage research.

Digital Methods in Indian Heritage Research

In the face of rapid economic change, local communities and scholars alike have growing concerns over the destruction of archaeological and historical

sites of interest, a situation that has enhanced efforts to document and preserve tangible heritage (Lahiri 2017). Greater awareness of public interest in archaeology and the availability of new communication platforms are encouraging Indian archaeologists to embrace ‘archaeological blogs and websites’ and social media (Pratap 2014). Some archaeologists remark that popular publications (Paddayya 2015) are key to engaging with the public, and they are aware that Web 2.0 tools can facilitate communication of archaeological findings to a wider range of Indians potentially more rapidly, and more readily than traditional archaeological reports. Yet these new forms of communication come with growing concerns over ‘public education’ (Paddayya 2015, p. 238) that glorify the achievements of dominant groups (e.g. trace technologies and innovations into antiquity), deliberately mislead Indians about authoritative accounts of the Indian past, and obscure archaeology’s relationship with Indian history (Chakrabarti 2008). In the next subsections, we present case studies to illustrate how we are bringing critical perspectives in digital heritage research, given the constraints we have previously discussed.

Past Cultural Landscapes of Nalanda and Bodhgaya project

Sharmistha Chatterjee has received funding from the Indian National Science Academy to work on the World Heritage sites of Nalanda and Bodhgaya. The project aims to study the environmental factors and the past cultural landscapes of the two major Buddhist sites in Bihar. Travel to the site of Bodhgaya for three days allowed Chatterjee to observe at least 23 groups worshipping and offering prayers to the Bodhi tree and learn that these groups were from different corners of the world. Given the complex nature of this heritage site, the project aims to understand the past and present local, regional, and transnational networks emanating from Nalanda and Bodhgaya.

There are several lines of investigation, including ethnographic documentation of religious groups, movements, rituals and pilgrimages, as well as critical analysis of pilgrim accounts, colonial texts and maps, and archaeological field surveys. To manage, process, and analyse these diverse and different data, the project needs at a minimum, a geodatabase to manage spatial datasets, and maps, and a digital data management tool for images, documents and ethnographic datasets. These datasets are currently stored on personal computers and external hard disks. With SRM University’s new GIS Centre, there could be possibilities for secure centralized data storage, and a server for hosting digital projects. Moreover, such rich information and knowledge is not easily shareable in traditional scholarly publications nor would storage on personal computers enable circulation and engage specialists and non-specialists with this heritage. Thus, Chatterjee intends to use an interactive platform so that datasets and knowledge can be available to a wider range of interest groups.

At present, the project is in its first phase where the focus is on compiling information on Nalanda and Bodhgaya and their hinterland. This will situate the heritage sites in the local cultural landscape, and enable an understanding

of patterns of landscape use and connections with hinterland sites. To do so, relevant topographic sheets have been digitized, and reported sites have been overlaid to examine their proximity to topographic features, settlements, modern road networks and other cultural features represented in the digitized maps.

Information on reported sites comes from early IAR volumes, which as we have previously discussed, do not have associated geographical coordinates. In the absence of such location data, Chatterjee made the decision to visit and survey relevant sites, and collect coordinate data for the integrated map. Pilgrim accounts are another source of information on place names and distances between sites. Some pilgrims wrote their accounts in Chinese, referring to place names in the same language, and used *li*, the unit of measurement that they were familiar with. This situation means that the translation of place names and transformation of distances between places require careful processing.

British colonial maps are a source of information on the network of embankments and canals and their integration with the main flow of the Ganges. Colonial texts additionally discuss how water management systems were implemented in the arid topographies around the two sites. However, working with colonial maps raised issues of projection and scale. To resolve these issues, Chatterjee used GPS coordinates collected from field surveys to georeference them (i.e. bring them into geographic space) for further analysis. Moreover, her examination of satellite imagery covering the hinterland showed the range and distribution of paleochannels, which are remnants of rivers and stream channels that have dried out and have since been filled with younger sediments. These inactive channels are particularly informative as lesser-known monasteries are located along them and suggest a strong link to this cultural landscape.

Chatterjee also attempted to draw a connection between movable tangible heritage and the heritage sites. Scholars believe that substantial numbers of laymen, religious preachers and their followers likely travelled to and from Nalanda and Bodhgaya throughout centuries, and these journeys could be represented in the archaeological record through artefacts such as beads, votive tablets and inscriptions. However, artefacts housed at museums and other cultural institutions do not have associated stratigraphic context. Nonetheless, these heritage data provide opportunities to examine connections between Nalanda and Bodhgaya and communities and regions near, and afar. In the next phase of the project, focus will shift to exploration of tools and technologies based on priorities for managing various digital datasets and outcomes that enable interaction with datasets and knowledge from the project.

Kerala Megalithic Gazetteer Project

The Kerala Megalithic Gazetteer Project (KMGP) was developed with the aim to document, analyse, and share data about Megalithic burial architecture

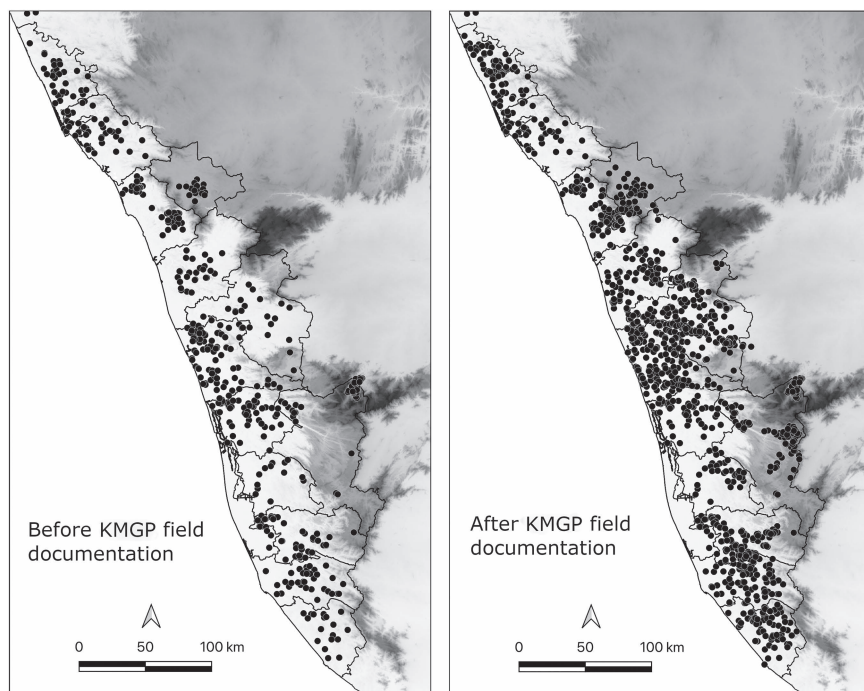


Figure 9.2 A comparison of the number and distribution of documented sites before (left) and after (right) the Kerala Megalithic Gazetteer Project (KMGP) field documentation. Many more Megalithic sites in more districts in Kerala have been documented through the project, as is demonstrated on the after (right) map.

constructed during the Iron Age in Kerala (Abhayan 2018; Abhayan et al. 2020, 2021). G. S. Abhayan (lead investigator) and S. V. Rajesh are collaborating in this project funded by the University of Kerala. Prior to the project's launch, there were roughly 700 reported Megalithic sites. After a partial survey of nine districts (of 14) in Kerala, the number of recorded sites increased to roughly 1,100, suggesting the scope of work that still remains (Figure 9.2). The survey strategy adopted for KMGP uses present political divisions or 'wards' under each panchayat. The survey team starts by talking with local residents in each ward about the project and its aims, and asks about Megalithic burials that residents know about. In this way, the community is in direct contact with the survey team and gains familiarity with the project.

The project has impetus from early scholarship on the Megalithic sites that lacked supporting data or had only partial information for archaeological interpretations. For example, it was common to have limited information on the orientation of burials, their distribution of burial types, and position of specific features. Therefore, when compiled, the Megalithic database can be used to critically examine previous interpretations and persistent ideas about

Table 9.1 An example of the field record for each site created by KMGP researchers.

Site name	Maruthampara
Ward	Arakuparambu
Village	Tazhekkode
Taluk	Perinthalmanna
District	Malappuram
Geo-coordinates	11°00' 15" N & 76°15' 30" E
Condition of the site	Intact (?)
Land Ownership	Private land (Mr. X)
Documented by	Soorya P.
Nature of site	Burial Monument: Cist with Cap stone (1 no.) (Photo nos. 3212–3215)
Measurements	The cist has a 110 cm width and 170 cm length and the capstone has 80 cm length and 10 cm thickness (all measurements are based on visible ends of the slabs)
Other remains	Potsherds having coarse fabric, incisions, grooves and ledge (Post-Iron Age?) (Photo nos. 3223–3230) Single sherd of Black-and-Red Ware bowl (Photo no. 3243) Evidence like clay lumps, a few ceramics and iron slags (photo nos. 3246–3252)

Source: P. Soorya and G. S. Abhayan, University of Kerala

Note: The number of reported fields (rows) and the precision of geographical coordinates are reduced for publication.

the homogeneity of burial practices across the peninsula. To encourage and facilitate research on the Iron Age, the database will be made available online for further study by archaeologists, other specialists, and the public. We will discuss issues around publishing location data of archaeological sites and the potential for further destruction because of looting.

The digital database consists of geographic coordinates of sites, photo documentation of the site and its physical setting, a description of the site (e.g. burial structure, dimensions, orientation, material used, present condition), and documentation of movable artefacts, if any (Table 9.1). This information is tied to the site name, and is stored in Comma Separated Values (csv) format for analysis and reuse.

The datasets are currently stored on personal computers, external hard disks and cloud storage. With growing amounts of digital data from field surveys and excavations, the project will soon require secure centralized storage. The University of Kerala has server facilities that are available upon request. It is unclear whether web hosting facilities are also available to researchers, whether support staff are available for maintenance of digital infrastructure (e.g. security updates, licensing and installation if needed) and for the development of digital publishing on campus and beyond.

Publishing sensitive location data is a key issue for archaeologists. Archaeological sites are often destroyed by looting or ‘treasure hunting,’

and Megalithic burials are especially vulnerable to this destructive activity. Therefore, there is an inherent and potentially increased risk for misuse when precise locations of archaeological sites are published, along with accurate descriptions and what they look like. A further concern is the reuse of stones that make the burial architecture, as local communities tend to take what they need from these sites. Thus, the question arises about weighing the commitment to scholarly access to research data, while protecting archaeological sites and facilitating community engagement with heritage. This is a known issue that impacts archaeology across the globe. While there is no guaranteed solution to prevent looting, from a data perspective, there are techniques to reduce the spatial resolution of fine-grained location data. This strategy has been successfully implemented in the Digital Index of North American Archaeology (DINAA) project by allocating each site to about a 15–20-km grid cell (Anderson et al. 2015; Kansa et al. 2018). Even with data at a low resolution, the DINAA project shows that it is possible to carry out informative and impactful landscape-level analysis, and serves as an example of the kind of negotiation that is needed for ethical digital scholarship.

MINA: Map Indian Archaeology

MINA is a Web-based map project that aims to open social and intellectual space for critical digital archaeological research in the Indian context. Neha Gupta built the interactive Web project as part of the Michigan State University's Institute on Digital Archaeology Method and Practice. Gupta et al. (2021) provides a detailed narrative about the project. MINA is a 'proof-of-concept' that enables one to explore and navigate different aspects of Indian archaeology through information published in the IAR volumes. The result is an interactive map visualization of 2273 archaeological investigations carried out in India from 1953 to 1960.

MINA is hosted on GitHub (<https://dngupta.github.io/mina.github.io/>), and all the code and data (as csv) are available in the public repository. The map uses Leaflet, a popular, open-source JavaScript library that supports mobile-friendly maps. Four libraries, namely, L.tileLayer, Omnivore, L.markerClusters and L.heatLayer, are used to display a base map, get the data, and display them as markers and clusters. The resulting Web map enables the user to move around the map, allowing them to zoom in for further detail, and examine information on individual investigations. The clustering feature provides a summarized view of the investigations based on their approximate geographic locations, whereas the individual markers have pop-ups with additional information such as the site name, the year of its investigation, the field director's institution and the state in which the site is located. The idea behind the project was to promote interest in Indian archaeology and in digital methods, and to encourage critical discussion about sources of information such as the IAR, and field techniques.

Similar to the Kerala Megalithic Gazetteer Project dataset, Gupta had concerns regarding sensitive location data. Yet, unlike the Megalithic burials, MINA works exclusively with site inventory prior to the 1980s (before the regular reporting of geographic coordinates), and therefore, all the site location data are low resolution. All the sites were geocoded on the basis of place name, district and/or state, and have an accuracy of about 100 km. In the case of location data from the 1950s and 1960s, it is also likely that many archaeological sites have since been disturbed or destroyed during the process of construction and/or resource extraction.

The project was built without a formal budget during Gupta's post-doctoral fellowship. The situation presented two factors that influenced decision-making around the technology used, as well as the scope of the project. First, Gupta did not have a permanent institutional home, as post-doctoral fellowships in Canada are time-limited positions. This meant that if the project were built on, or within the institution's digital infrastructure, it would tie the life of the project to Gupta's term of employment. Precarity also meant that the project would not have a budget for data collection, for software and licensing fees and for maintenance, and so, Gupta would be responsible for maintenance and any associated costs. Second, archaeology of India is a specialized subject and it has limited exposure in the Canadian context. Gupta has previously worked on GIS-based research projects that constrained sharing of knowledge about Indian archaeology, and did not readily facilitate sharing and circulation of archaeological knowledge. The motivation to move to public-facing scholarship was strong. Therefore, Web-based tools that were 'portable' and did not require significant time, monetary and infrastructure resources to use and maintain were attractive options.

Overall, MINA has provided opportunities to learn about digital tools, the challenges of working with sources like IAR, and the possibilities of broadening the scope of digital archaeological research. MINA also serves as an ongoing teaching resource, a ready-to-show-and-tell that can get students excited about working with digital tools and technologies in social science and humanities research.

Conclusion

The collection, management, reuse, sharing, and circulation of digital heritage data in the Indian context are changing the way archaeologists practise their craft. There is sustained public interest in the Indian past, and growing demands to access data and for transparency in knowledge making and care of heritage. In this context, the role of the Indian judicial system, heritage legislation and Archaeological Survey of India, the national institution for archaeology and heritage preservation has come under scrutiny.

The documentation of archaeology in field notes, maps, drawings, illustrations, photos, geographic coordinates, and other kinds of measurements

constitutes heritage data. These datasets are a record of the archaeological context of recovered tangible belongings of ancestors. In scenarios where an archaeological site has been disturbed or completely destroyed, archaeological documentation is often the only data that is available for study and future analysis. Such heritage data are unique and they are not reproducible.

Archaeologists interested in the reuse and sharing of heritage datasets face a number of challenges. Typically, the field director or team that collects data in the field keeps them, and they sometimes engage in ‘gatekeeping,’ a practice that limits or prevents access to data such that other scholars cannot conduct further study. When such ‘legacy’ datasets are available, additional investment of time and resources are necessary to make data reusable and shareable. Further attention is needed to negotiate legal, ethical and policy issues associated with heritage data, including who has decision rights to use, modify, and circulate them, when, and under what circumstances.

Sharing of Indian heritage data is made more complex as there are currently no digital repositories to access archaeological excavation reports or to deposit archaeological inventory, or in turn, to reuse existing archaeological datasets. Archaeologists typically share datasets informally through their social and professional networks. They regularly use personal computers and external hard disks to store and share datasets. Some universities now provide secured data storage, yet these facilities are available only upon request. There are greater numbers of universities investing in geographic information systems (GIS) training, and infrastructure needed for this specialized training, which in turn, could open intellectual space to discuss data governance and data curation issues.

In the Indian context, archaeologists from three sectors interact with local communities during the documentation of archaeology. In addition to the ASI, archaeologists from state departments of archaeology and from universities regularly collect data, and each sector differs in terms of resources, infrastructure and trained personnel, as well as in terms of institutional aims and goals. This situation has an impact on the collection, management, reuse, and sharing of archaeological data. Most often, when a community accidentally disturbs an archaeological site, or finds an artefact, they contact the ASI or state department, and one of these departments takes responsibility for documentation and recovery of archaeology. Yet archaeologists at the ASI or at state departments rarely carry out further study of recovered artefacts, and they typically do not share the data with university researchers. As a result, the community rarely learns more about the archaeological artefacts or associated society. In effect, this creates an impression that archaeology and more broadly, heritage research leads to nowhere, and serves to distance the community from heritage and decision making about its use and care.

Archaeological publications such as the ASI’s *Indian Archaeology – A Review* (IAR) is a key source on archaeological activities carried out during each calendar year. While this is an invaluable source on archaeological inventory, there are known limitations in this periodical, including irregular

reporting of geographic coordinates (e.g. latitude and longitude) until the 1980s, and limited or no remarks on specialized equipment used during field documentation. Until the late 1960s, archaeologists often reported ceramic typology, but missed stratigraphic documentation. The absence of archaeological context constrains the range of questions and analysis that archaeologists can conduct with legacy datasets.

Growing interest in digital methods is encouraging archaeologists to broaden the scope of heritage research. Through three case studies, we show how the reuse and sharing of datasets and the circulation of archaeological knowledge is facilitating the use of a diverse range of sources, and promoting critical examination of these sources to challenge persistent ideas about the Indian past. Increasingly, archaeologists use digital methods to facilitate collaborations across disciplinary boundaries, and concurrently engage local communities in heritage research.

Greater investments are needed at the institutional level to support research linkages between universities and communities, and to promote digital scholarship within institutions and beyond. At the same time, researchers must carefully assess what resources are available to them, their digital needs, and priorities in decision making when designing their digital projects. All too often, conversations about data reuse and sharing are left to the terminal end of projects when limited time and few funds are available for modifying the design of a project. Therefore, it is recommended that archaeologists take more consideration of issues around data reuse and sharing when they are designing their projects. Because of the deep interest of communities in their heritage, archaeologists should concurrently consider ways to broaden the scope of community participation so that the community can benefit from digital heritage research. Given that archaeology is carried out in local communities and community participation is key to long-term care of heritage, adopting a more inclusive strategy is desirable and achievable. This, in turn, can help keep India's diverse multilingual communities connected to their heritage.

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10 The Promise and Perils of Bot-Based Public History¹

Srijan Sandip Mandal

Introduction: On Bot-Based Public History

This chapter is an attempt to assess, as the title suggests, the potential and pitfalls of doing public history, that is to say, creatively communicating the past for audiences beyond the academy,² through artificial general intelligence in the form of a conversational video chatbot. The assessment is based on my experience of co-creating a conversational video chatbot named “Hukam Singh” in May 2021, which I kept refining and testing intermittently for nearly a year until it was launched at the India Art Fair in New Delhi, India.

“Hukam Singh” was one of 20 conversational video chatbots that were created by an international cohort of creators who were selected to be part of the RadBots project by Dara.network. Dara is a “video-first messaging platform for creators, entrepreneurs, and cultural practitioners” that is designed to build its communities’ social capital. It distinguishes itself from other such platforms by having no advertisements on the platform and by not selling any of its user data.³ In early 2021, Dara issued an open call “to bring together 20 authors to craft chatbots that respond in close-to-real-time via video messages.” Supported by the Goethe Institut Mumbai and British Council, the goal of the RadBots project was “to democratize technology and open up discourse on underrepresented voices and genders as a collective artistic effort.”⁴

In keeping with the goal of highlighting underrepresented voices, I proposed and co-created a bot based on a forgotten historical figure. I chose a historical figure, unlike the other creators who were part of the project and chose fictional personas, because of the public history promise inherent in the form of the conversational video chatbot designed to represent a real person from the past. Such a bot offered the prospect of an interactive biography through which people could learn about the past and the person themselves through life-like conversation. Among the forgotten historical figures I knew from my research and reading, I chose Hukam Singh because of his cogent criticism of, and consistent opposition to, the restrictions imposed on the fundamental right to freedom of speech and expression, enshrined in Article 19 of the Constitution of India.⁵ Hukam Singh was a three-term member of the lower house of the Indian Parliament, namely the Lok Sabha, as well as

its third Speaker, not to mention the Governor of the Rajasthan state of the Indian Union,⁶ but I chose him because of the work that he did as a member of the Constituent Assembly of India and the Provisional Parliament, which framed the Constitution of India and enacted the very first amendment to it, respectively. In both those deliberative bodies, he made dissenting interventions about the ever-expanding restrictions that were sought to be imposed on fundamental rights such as the freedom of speech and expression. And in those interventions, he pointed out that constitutional restrictions on constitutional rights create discretionary power, that power resides with the government, and the government is nothing more than a political party that has managed to win a majority in an election. Since any discretionary power that is born of a majority can potentially threaten minorities, he advocated for an unrestricted right to freedom of speech and expression, among others, so that they remain beyond the reach of even Parliament.⁷ He failed in this attempt, of course, but his articulate voice was representative of a dissenting opinion that I felt was relevant to contemporary India and, therefore, should be conveyed to people in the present. A conversational video chatbot seemed the ideal way in which to bring back such a forgotten historical figure, and his still relevant views on such an urgent subject, to life.

Accordingly, I thought up and wrote a 61-word character summary and 630-word imaginary dialogue between the bot “Hukam Singh” and an ideal user, based on Singh’s recorded interventions in the Constituent Assembly Debates and the Debates of the Provisional Parliament along with the transcript of a long oral history interview he did with the Nehru Memorial Museum and Library, New Delhi. All the creators were required to craft a character summary of fewer than 100 words along with dialogue of 300 to 500 words between the character their bot would assume and the ideal user; the reason was that the character summary and dialogue would constitute the basis of the bot’s responses and behaviour. Once the summary and dialogue were done, I chose a suitable photograph of Hukam Singh, which could be used for the bot, before using Google Cloud’s Speech Recognition and Speech Synthesis to identify a voice and accent that would suit the bot “Hukam Singh.” Since there are no available recordings of Hukam Singh speaking, the voice had to be a figment of my imagination. All of these ingredients were put into the portal that Dara had built for the creation of the bots, where they were processed through GPT-NEOX and OpenAI GPT-3 DaVinci’s natural language generation to produce the bot “Hukam Singh.”⁸ As its co-creator, I chatted with the bot, as did the other creators, along with individuals we had invited to do the same. These conversations continued for almost a year until the launch of the RadBots during the India Art Fair, mentioned earlier, from April 28 to May 1, 2022.

This experience of co-creating and testing the bot “Hukam Singh” has allowed me to arrive at my considered opinion of the possibilities and problematics of doing public history through conversational video chatbots such as the ones created in the RadBots project. This is what I have sought to

articulate in the sections later, in the hope of contributing to the nascent scholarship on the intersection between artificial intelligence and public history.

The Promise of Bot-Based Public History

What is most promising about conversational video bots, including historical ones such as “Hukam Singh,” is their potential reach. That is because they are accessible to anyone who has an electronic device with a working Internet connection. In other words, conversational video bots are accessible to a majority of the world’s population, given that more than 60% of the world’s population is estimated to use the Internet.⁹ Of course, being technologically accessible to a majority of the world does not mean that conversational video bots are linguistically accessible to as many people or, for that matter, even half that many people. In fact, if a bot is created to communicate in the most-spoken language in the world, namely English, as “Hukam Singh” has been, it will still be accessible to only a fourth of the number of people to which it is technologically accessible – at over 15% of the world’s population,¹⁰ assuming, likely erroneously, that all English speakers have access to the Internet. Irrespective of the percentage of the world’s population to which conversational video bots are accessible, actual access to the bots, especially the historical ones, is additionally contingent upon awareness and interest, meaning that the number of people who are likely to know about the existence of such bots or be curious enough to chat with them is only a tiny fraction of that 15%. And since signing up with an email account, even if for free, is likely to be a requirement for chatting with conversational video bots, as it is for chatting with “Hukam Singh,”¹¹ the number will be tinier still. Despite these caveats, the potential reach of a historical conversational video bot, such as “Hukam Singh,” is arguably much greater than any other form in which history has hitherto been produced or presented – including film. And that is principally due to its ease of, and low barriers to, access.

While such potential reach ensures that more people are likely to encounter it than any other form of history, what makes conversational video bots so potent is their interactivity. This interactivity is achieved by allowing users to have a conversation with the video bot, which can take place both through text and through video. The conversation is, of course, a simulated one, in that the users are conversing with artificial intelligence, which has been trained – to the extent that such training is possible – to imitate a person, whether real, historical, or fictional. But, the simulation is generally so verisimilitudinous that a user can allow himself to ignore the fact that there is no person at the other end of the conversation, only artificial intelligence. This verisimilitude, though, is limited to the text conversation, for, over text, the exchange of messages with the bot is strikingly similar to any that a user may have with an actual person. That is not the case with the video conversation, for, over video, the user encounters an image, albeit one that is talking

and moving, but talking mechanically and moving in a predetermined loop. That tends to shatter the illusion the text conversation allows – of believing that one is chatting with an actual person.

Nevertheless, the conversational video bot, at least while responding over text, can induce the user into suspending disbelief and, as a result, into believing that they are chatting with an actual person. And when that bot is based on a historical person, a user can conceivably extend that suspension of disbelief into believing that they are actually chatting with a person from the past, long gone yet responding to their words from the great beyond. Even if most users are unlikely to grant themselves such credulity, they can still come away from the experience with the feeling that this might have been how a conversation with the historical person – on whom the bot is based – would have transpired had the person been living and chatting with them. This means that they are able to have a conversation with a historical person such as Hukam Singh – Speaker of the House of the People, Member of Parliament, and Member of the Constituent Assembly of India – who would otherwise have been inaccessible to them even if they were living and would certainly have not been available to them for a private one-on-one conversation that can start, continue, end, and resume at their behest. Simply put, the bot can make a historical person available for a chat at the beck and call of a potentially infinite number of people. That is a level of interactivity not available with any other form of history ever created for public engagement, not films, not plays, not exhibits, not even video games.

What this interactivity inherent in the bot does is allow a user conversing with the bot to co-create a narrative with the bot, a narrative that the user can tailor to their interests through their questions and responses. This means that every user conversing with the bot can conceivably co-create a unique narrative about the past pertinent to the historical person represented by the bot, thereby allowing for multiple pasts to be simultaneously produced and co-exist at any given time, all at the behest of the users whose interests they reflect. The historical bot can thus allow users to exercise a level of agency over the production of the past that has hitherto been unavailable to all but the trained historian and some other professionals engaged in adapting the past to the present in a given form. In none of those forms – academic, artistic, or otherwise – did the public have a part to play in the production of the past, reduced as they were to the role of the recipient – as reader or viewer or listener. The historical bot upends that hierarchy. It dislodges the privilege of authorship that the producers of the past in its existing forms usually enjoy. Instead, the historical bot extends that privileged position to every user conversing with it, providing them with an opportunity to use their questions and responses to direct the past it produces. Thanks to the bot, the user becomes the author of their co-created past, one of many – potentially infinite – such authors and as many co-created pasts.

This, then, is the promise of the conversational video bot, based on historical figures such as Hukam Singh – their accessibility, their interactivity, and the agency they allow users.

The Perils of Bot-Based Public History

However, bot-based public history is not without its perils. In fact, it might be more perilous than promising. A particularly problematic aspect of conversational video bots, including those based on historical figures, is their inability to respond factually on a consistent basis. As a result, users may encounter a number of fabrications interspersed among the facts that come up during their conversation with the bot. This phenomenon, called artificial hallucination,¹² stems from the bot's inability to distinguish fact from fabrication. That is because conversational video bots "do not have an understanding of what is true and what is not," thus making them susceptible to generating responses that are "completely false."¹³ Crudely put, bots lie, and historical bots lie no less.

Now, it could be argued that this ought not to be a problem because people lie too, and people in the past likely lied no less. As such, a bot designed to represent a historical figure should be able to lie too. It could even be said that expecting a historical bot to be truthful or, more precisely, respond factually to users interacting with it amounts to having a superhuman expectation of the bot, that is, expecting the bot to do something that no human can be relied upon consistently to do, which would only render it less human and shatter the illusion of interacting with an actual individual from the past that the bot is designed to create. Such an argument, however, ignores the fact that the bot lies, or more accurately responds based on fabrications, out of epistemic absence, an absence that does not allow the bot to understand the difference between fact and fabrication, much less recognize when it is responding factually and when it is not. Therefore, the bot's lies are random, and because they are random, there is no pattern to them, meaning that the lies can reveal nothing about the historical figure the bot is representing, something that the pattern of lying in actual individuals can. In fact, the lies make the bot less representative of the figure that it is designed to represent.

That brings us to arguably the most problematic aspect of historical bots. These bots offer users the impression that they are interacting with the historical figure themselves. That impression is, of course, illusory. It is illusory not just because the historical figure is no more, but because the historical bot is not and can never be a digital replica of the historical figure. What the user is interacting with can be described, at best, as an interpretation of the historical figure, an interpretation arrived at by the author based on the sources that they have consulted pertaining to the historical figure.

That the users have access to only an interpretation of the historical figure is not the issue. After all, the most credible form of history centred on a singular historical figure, namely the academic biography, does exactly that, as do other forms of such history, namely the biographical documentary or exhibition. Even less credible, though more creative forms of presenting historical figures, such as the biographical play, novel or film, do the same thing, albeit with greater artistic liberty than that available to historians, documentarians,

or curators. The issue is that the historical bot does not allow as much authorial control or intent to the public historian co-creating the bot. In fact, it allows little authorship to the human co-creator. The artificial intelligence, trained on a given dataset, exercises the lion's share of authorial control, but it does so without any authorial intent.¹⁴ That is why the bot only generates responses; it is not conscious of any of them, thereby creating a condition of responsive randomness, albeit of varying degrees. And because no one can trace why the artificial intelligence powering a historical bot generates the responses it does,¹⁵ there is no explanation available for either the randomness or the fabrications. Neither is the result of authorial intent, for there is little authorship extant to speak of. In the historical bot, it is almost as if the author is dead – not because of the user assuming interpretative autonomy, but because of the inexplicable alchemy producing the bot's responses.

The part authorship that is still being claimed over historical bots such as "Hukam Singh" is the result of the particular process put in place for the creation of the bots in Dara's RadBots project. As mentioned earlier, all the creators were required to write a short script illustrating an exchange of dialogue between the character the bot would assume and the user.¹⁶ The idea was that the script, specifically the lines allocated to the character, such as "Hukam Singh," and the words used in those lines, would constitute the basis on which the artificial intelligence would build its responses. To that extent, then, how the bot responded and the words it responded with could be said to have been rooted in authorial intent and control. However, the extent of authorship, even in this process, is limited to mostly the tone of the bot's generated responses, and not to its tenor. That is because the script, by virtue of its length, is itself limited in its scope, so any question to the bot that is beyond the bounds of the script generates a response of the bot's own making, and not the public historian's, though the responses do try to mimic the language and style deployed in the public historian's script. What the user then gets in its interaction with the bot is, at best, the tone intended by the public historian co-creating it, but without necessarily the tenor intended by them. Simply put, the historical bot is more bot than history.

As a result, the chances of the user encountering a misrepresentation of a historical figure are high in a historical bot, much higher than would be in other existing forms of history where the historian exercises far more, if not near complete, control over their interpretation and presentation. In fact, the user can safely assume that the persona being presented to them through the historical bot is a distortion of the historical figure it is supposed to represent. Consequently, the past that is being presented to them through the historical bot would probably be misleading as well. This means that the user can reasonably expect their interaction with the historical bot to yield not only information about the past but also misinformation, possibly even more of the latter than the former. Given this probability, the user cannot afford to trust anything that the bot responds with during their interaction and would be required to verify every single one of its seemingly factual responses to

establish its credibility. Since that is unlikely to happen with most of the users with whom the historical bot interacts, and given that the historical bot can have innumerable users, the magnitude of misinformation that can potentially be generated and circulated among the public is staggering. While the misinformation generated by a bot cannot be compared to the misinformation produced with the intention to deceive, on account of its relative randomness, it is misinformation still because of the way it can unintentionally mislead the user about the past.

Therefore, despite its interactivity, creativity, and accessibility, anyone interacting with the bot is likely to come away none the wiser about the past and probably even misinformed about it, thereby defeating its purpose as a creative tool for communicating the past and rendering it, in fact, a perilous form of public history.

Conclusion: The Future of Bot-Based Public History

In this chapter, I have tried to argue that bot-based public history is a contradiction in terms. It is not history because the responses generated by a historical bot are incapable of drawing on a critical examination of sources relevant to the historical figure that the bot is supposed to represent, thereby reducing the bot's responses to algorithmic imagination that is only tonally tethered to the historian's intent and interpretation. And because historical bots are not historical, the historical bot cannot be a form of public history.

Yet the promise of historical bots is potent. Its accessibility is unparalleled indeed, as is its verisimilitudinous interactivity, which is enhanced by the creativity of its form and the agency it allows the users conversing with it. Thus, dismissing the possibilities of bot-based public history outright might be a myopic move. Instead, engagement with historical bots in the form that they can take now may be a more meaningful way forward. That engagement is possible in the domain of pedagogy, that is, in the teaching and learning of history.

The historical bot can be a particularly promising aid in the teaching and learning of historical thinking,¹⁷ a term used to encapsulate the set of cognitive competencies that learning how to do history can allow students to cultivate. Historical thinking is being increasingly recognized in the field of history education as the essence of what students can acquire through the learning of history.¹⁸ That is because thinking historically endows learners with habits of mind that enable them to discern fact from fabrication as well as recognize credible sources of information and separate them from the not-so-credible, especially on the Internet, where misinformation is legion. Since the Internet constitutes the dataset on which bots are trained, the historical bot is the ideal interlocutor for introducing learners to the techniques through which they can quickly and reliably verify the information that they are encountering embedded within the coherent and life-like responses generated by the bot.

Thus transforming the historical bot into a pedagogical tool, though, restricts its potential to the classroom, thereby defeating the possibility of public history that historical bots promise. That is because the site of public history exists necessarily outside the classroom – among the public – where not only students, but all interested individuals can constitute the potential audience for history. However, the form remains too susceptible to distortion and fabrication for it to even aspire to, much less approximate, the credibility and reliability that should be expected from public history. But artificial intelligence-powered bots have been evolving at such an incredible pace and in such amazing ways that it should be possible to build a bot that can more reliably represent a historical figure. It would require a meaningful collaboration between bot developers and historians, whereby a bot can be trained on all the primary sources and historical scholarship available on a historical figure. Once a bot is trained with this dataset, it should be possible for the bot to more consistently and accurately approximate that historical figure. And if that can be achieved, then the historical bot will realize its revolutionary potential and actually become the most potent form of public history ever produced.

That day is not far.

Notes

- 1 This chapter owes its existence to Maya Dodd. She was the first person to recognize that my experience of co-creating a historical conversational video bot could be written up as an academic essay. She was also the person who invited me to write it up as a chapter for this volume. But, most importantly, she was the person who remained infinitely and inexplicably patient with, and encouraging of, me over a period of almost a year while I struggled to compile the words required for this chapter.
- 2 Faye Sayer, *Public History: A Practical Guide*, 2nd ed. (London: Bloomsbury Academic, 2019), 2.
- 3 “Meet Dara,” *Dara.network*, accessed June 18, 2023, <https://dara.network/>.
- 4 “RadBots FAQs,” RadBots: An NFT Collective of Conversational Videobots, accessed June 18, 2023, https://docs.google.com/document/d/1-dplsZVMg1Bg0QG1BUaSwOGag2fEwtVtbHm8_mhddE/edit?usp=sharing.
- 5 Srijan Sandip Mandal, “This MP Warned the Constitution Didn’t Give Indians Freedom of Speech: He’s Been Proven Right,” *ThePrint*, November 26, 2017, <https://theprint.in/opinion/constitution-right-to-free-speech/18236/>.
- 6 “Sardar Hukam Singh,” Former Speakers, The Office of Speaker Lok Sabha, accessed June 18, 2023, <https://speakerloksabha.nic.in/former/hukuamsingh.asp>.
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Part III

Community Projects

11 Khidki Collective¹

Reflections on Academic Method Beyond the University

*Swathi Shivanand, C. Yamini Krishna, and
Chavali Phanisri Soumya*

* * *

Can academics converse with the public in ways that are engaging yet not simplistic, insightful yet not pedantic, detailed yet not irrelevant?

Can academics collaborate, not to produce an edited volume circulated only amongst practitioners of their niche fields of enquiry but to produce writings that offer critical support to publics and collectives engaged with political questions of the present?

Can academics produce meaningful and accessible translations of their long years of carefully gleaned and nuanced arguments so that it can be “used”?

These are some vital questions for us from the Khidki collective, a group modestly populated by academics engaged with the Deccan. This chapter is not written from the standpoint of the collective having achieved something extraordinary. Certainly, we do not claim that our small interventions (i.e. thematically curated multiple article series, talk series, and building open-access archives) have yielded anything significant. Yet our collective is concerned with some fundamental questions around the structures and practices of knowledge production. What does it mean to be pursuing intellectual labour at a time of growing anti-intellectualism? How do we do collaborative, collective work outside the space of the neoliberal university which seeks to colonize our time and bodies? These are not original questions, and academics broken by the neoliberal state and university systems have been asking these questions for decades now.²

We ask these questions yet again, but from a specific historical conjecture in India: the weaponizing of latent anti-minority prejudice into violence against minorities; and the helpless inability of ‘progressive’ academics, located for long years within an exclusionary university system that has kept them safe, to respond effectively to this reconfiguration of common sense towards active discrimination and violence. Against this broader ‘national’ context, where do we find, or how do we create, resources to stand against these reconfigurations? For Khidki, this place of action is the region, specifically the Deccan. In this chapter, we reflect on our journey in order to consider what it means

to interrogate a politics of knowledge production from a place and how the digital opens and limits possibilities of communication.

Why Place? Why Deccan?

Could Deccan be a method, in that it offers us a way of doing, in this case the work of building contra common sense? Can the study of the Deccan help us evolve a method to understand other regions? For us, thinking of the Deccan as a method offers the following possibilities:

- 1 The multiple histories of the region help challenge reductive narratives of history and challenging the singularity of the nation. In that, it allows our collective a rich expanse of material from which we could contest homogenizing narratives.
- 2 The region's multilinguality helps challenge some of the mainstream academic practices such as working in silos. Deccan's linguistic diversities require that we work as a collective, with members possessing the ability to work with one or more languages of the Deccan.
- 3 Through working on the Deccan, where we belong and have stakes in, we are underlining the importance of academic work to be engaged with the contemporary social and political reality of the regions in which it is based.
- 4 If the work we do from the collective is broadly within the realm of public history, the region of the Deccan offers us specificities: to think about who the publics are, how and what narratives of the past circulate, and interventions (even if only discursively) can we make.

Locating Khidki

These articulations of place, of Deccan, and its importance to our work as we imagine it is retrospective – or more precisely has evolved from *doing* place-based, discursive work over the last three years.

Beginnings

In January 2021, between the two devastating waves of the pandemic, two of us wrote an article on the (ab)uses of history in the then recently concluded municipal elections of Hyderabad city (Shivanand and Krishna, 2021). Key promises made by the Bharatiya Janata Party (BJP), seeking to expand its electoral influence in Telangana, had included renaming Hyderabad as Bhagyana-gar (as a way to reclaim the city's supposed 'Hindu' past) as well as getting 'rid' of the 'Nizam culture' in the city. As scholars have shown, the representational after-life of the Asaf Jahi state in Indian historiography has been plagued by an unacknowledged communalism (Beverley, 2015; Shivanand, 2019). The BJP was deploying this latent communal common sense for its electoral gains.

As a resident and scholar of her beloved Hyderabad city, Yamini had been distressed at BJP's deployment of anti-Muslim rhetoric that presented skewed versions of the city's Asaf Jahi past. For Swathi, whose doctoral thesis dealt with the interconnected discourses of communalism and development in 20th century Hyderabad-Deccan, BJP's electoral rhetoric was a classic example of how these narratives continue to animate political life in contemporary India. We were invested in the Hyderabad-Deccan region through our academic work and felt the need to raise a small voice against the vilification of the region's history. It sprang from the necessity we felt for our historical work to speak to contemporary politics.

The article, even though carefully edited by the publication's editor to make it engaging and accessible to the non-academic reader, could still have been lost to the abyss of the Internet. But this small moment of the publication of this article was rescued from the surfeit of the genre of writing we call "academics-writing-for-public" because of the conversations that began to be deliberately built around it. A collaboration between Yamini and Hyderabad Urban Lab (HUL), following the article, led to a series of online conversations, titled the *Gol Mez* (Figure 11.1).

The *Gol Mez* (roundtable conversations) were centred around Hyderabad. For HUL, Yamini and some of the other participants in the *Gol Mez*, these conversations around the region and the city, it was hoped, would enable us to develop a method of understanding historical and contemporary social, economic, cultural and political questions and conceptualize Hyderabad as an intellectual field. But could Hyderabad also allow us to explore the possibilities of speaking across and against borders and against rigid reified identities? Further, if the work of research, or more broadly intellectual production, produces a new subjectivity in that it remakes us and gives us new stakes in the world around us, could we build something such that these stakes are not lost to time because there isn't an ecology of sharing and nurturing?

With these nebulous aspirations, the *Gol Mez* began. Scholars from various vantage points but whose intellectual and geographical base was the Deccan were asked to respond to the following questions:

- 1 What has been your experience with Hyderabad as a field?
- 2 What does Hyderabad as geography mean to your personal and intellectual journey?
- 3 What role does Hyderabad as an intellectual field play in your research?
- 4 What specific questions does it enable you to pose?
- 5 Can you imagine ways to develop resources to further work in Hyderabad and do you think you would be interested in contributing to it?

These were questions that invited scholars to reflect on the intellectual and affective dimensions of their academic practices and how they situate their work within the broader region of Hyderabad (Figure 11.2).

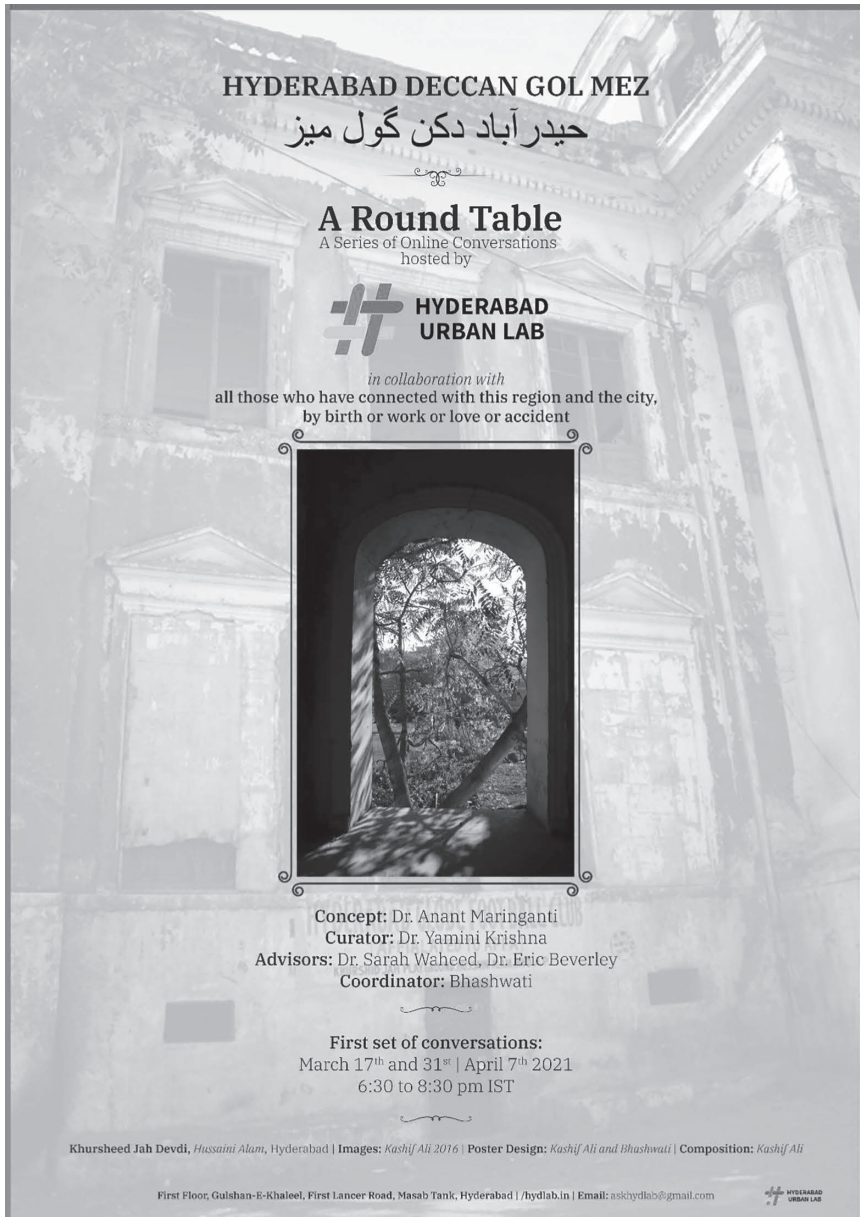


Figure 11.1 Poster announcing the Gol Mez Conversations.

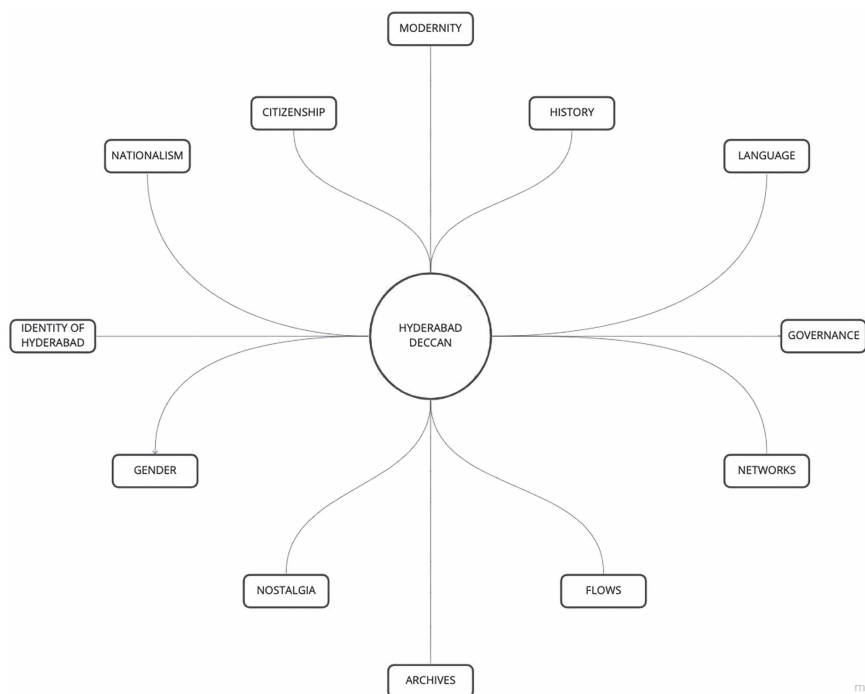


Figure 11.2 A mind map showcasing key thematics that arose during the Gol Mez conversations.

Creator: Phanisri Sowmya.

A significant recurring theme amongst many scholars who presented in these Gol Mez conversations were the possibilities of challenging homogenizing narratives of the nation through the historical particularities of Hyderabad. If Santhosh Sakhinala spoke of how a Deccani consciousness animating the planning and establishment of art institutions in early 20th-century Hyderabad does not find space in narratives of national modern art, C. Yamini Krishna pointed to how the frames of the nation-state and the linguistic-state loom large on the cultural and film historiographies of the Deccan. Sarah Waheed spoke of how the dominance of the ‘national’ histories leads to subsumption of histories of rulers like the Chand Bibi, the warrior queen of the Deccan while Swathi Shivanand pointed to how histories of the violence that accompanied the bureaucratic integration of Hyderabad into the Indian Union does not find narrative space in histories of independent India.

Another theme that animated the work of many of the scholars who presented in the Gol Mez was the idea of belonging. Sarah Waheed, whose family hails from the region, spoke of her own relationship with the Deccan as one

varying between enchantment and disenchantment and viewed Hyderabad as a window onto pan-Indian histories. She discussed the mobility practices of the Hyderabad Muslim community and how they carry the idea of home-place with them which shapes places in their migrant countries as well as places in Hyderabad. Khatija Khader also spoke of diaspora and placemaking through her work on the Yemenese diaspora who reside in Barkas, a neighbourhood in Hyderabad city.

These ideas of region, nation, state on the one hand and belonging, place-making, displacement come together in a particular configuration in the case of Hyderabad the city and Hyderabad-Deccan the region. The violence and propaganda by state and non-state actors in the years preceding and succeeding the September 1948 Police Action transformed the region entirely and continues to reverberate in both intimate and public realms. Many of Khidki's explorations into the past and present have taken this period as the starting point and sought to bring these two sets of ideas in conversation with each other.

Inhabiting the Digital

These ideas – brought together through some astute curating in the Gol Mez – not only have informed some of our fundamental motivations but were also the starting point for post-Gol Mez conversations. Some of us who participated in these conversations were drawn towards imagining something of a collaboration, which would eventually take the shape of the Khidki Collective.

The material conditions of isolation forced upon all of us by multiple waves of the pandemic made many of us receptive to online conversations. Khidki emerged from these long zoom conversations, scheduled for times that worked for everyone spread across different time zones. The minutes of our meetings, documented carefully, reflect shared concerns: What does it mean to produce academic work at a time of rising anti-intellectualism and polarization in India? How do we respond to the yawning gap between the intellectual production that we had devoted much of our lives to and what was available for consumption through mass and social media? How do we make sense of how much this affected us? Perhaps, we were also driven by a very human desire to be heard and listened to and the hope that we could intervene in public discourse around spaces, politics and histories. In any case, these conversations, eventually led us to something of a common minimum programme: of engaging outside academia. This practice of engagement with the public, initiated during the pandemic, has also meant that the work of Khidki has primarily been in the digital realm. Zoom meetings, WhatsApp, and Signal groups and social media accounts have played a significant role in the way Khidki was imagined and its subsequent practice of knowledge production and communication.

Our Work

In the last three years, our work has revolved around the practice of communication and translation; in particular of the modern histories of the Deccan. When we began, we did not think necessarily of our work as public history but over time, framing our practice as such offers us some clarity.

The Public History Frame

The questions of “Whose public? “Whose history?” were some of the most pertinent questions raised by public historians (Grele, 1981). Thomas Cauvin (2016) notes that public history emerged in response to historians becoming ivory towers and their writing itself being dry and factual without attempting to make it intelligible to people. Grele draws a trajectory of history’s publics. History has always been a public act and historians have always addressed different kinds of publics. Grele notes that this definition of the public became narrower in the nineteenth century to mean only the peers, professional historians and students.

Even as the professionalization of the discipline was afoot in Europe and America, the past continued to be of much interest to different publics – journalist-historians, readers of historical novels, and politicians among others. Amidst these emerging groups interested in engagements with the past, a hierarchy emerged between ‘professional historians’ and ‘amateur historians’ with the former often dismissive of the latter. Yet the demands on the historian have changed, more so since the 1960s, in the context of struggles against racism, war, sexism and class bias, in which the ‘professional historian’ has had to focus on making history relevant, beyond the narrow confines of it as a profession. While locating the emergence of public history among these shifts, he also critiques the co-option of public history by corporations and funding institutions. This may have emerged in response to the need for creation of jobs beyond academia into corporations, museums and archives but has led to yet another kind of narrowing of the notion of public in public history. Grele calls for a redefinition of public history drawing from Marx’s view that people make their own history. He writes,

Thus the task of the public historian, broadly defined, should be to help members of the public do their own history and to aid them in understanding their role in shaping and interpreting events. Sometimes this merely means helping to bring to the front the information, understanding and consciousness that is already there. Most often it means a much more painstaking process of confronting old interpretations, removing layer upon layer of ideology and obfuscation, and countering the effects of media-made instant history.

(p. 48)

In India, reviewing the field of public history, Chowdhury and Mandal (2017) argue that the discipline has not had much acceptance in the country, even as a ‘hunger for the past’ rages on. Historians have engaged with the public in India, according to them, as an adjudicator of ‘disputes relating to the past that arise in the domain of popular culture,’ even though this ‘role has not been offered to them by the public.’ A pivotal moment in such an understanding of public history, they argue, is when the faculty at the Center for Historical Studies at Jawaharlal Nehru University, New Delhi, released a pamphlet presenting historical evidence against the claim that the Babri Masjid was the site of Rama’s birthplace. This made no difference to public perceptions and the demolition of the masjid has – first slowly and then in an accelerated fashion – paved the way for more eager circulation of sectarian narratives.

However, one could make the argument that motivations that undergird public history has been driving some historical enterprises since the early years of independent India. In the 1960s, eminent historians participated in decolonization efforts by undertaking textbook writing enterprises through the National Council for Educational Research and Training (NCERT). While these textbooks sought to cultivate both nationalism and a rigorous historical consciousness, more recent engagements by historians in textbooks, such as the one in 2005, attempted to address the exclusions of caste, gender and regions in earlier historical narratives and introduce students to advances in historical scholarship (Bhattacharya, 2009). Although attached to the diktats of the state and the needs of the nation (as understood by some), these textbooks could potentially be considered as the first products of public history given that its orientation was *communication of historical scholarship* to a large *school-going public* over generations, in order to develop *a historical consciousness*.

We lay out this brief history of public history in India in order to contextualize our motivations and our work at the Khidki Collective. While we do not undertake the work that activists or activists-academics (Aronowitz and Giroux, 1985; Cann and DeMeulenaere, 2020) do, we see our current work in operationalizing our commitment towards equality in the domain of discourse, knowledge production and pedagogy. As in the 2005 version of the NCERT textbooks, our motivation is to make the historian’s method visible through the work we do, in the hope that it creates resources for use by those on the ground to counter practices of inequality justified through prisms such as of ‘correcting historical wrongs,’ ‘tradition’ and ‘right kind of nationalism.’ This cultivation of a critical historical consciousness, we hope, will enable different publics to address the manifold attack on history and delegitimization of history by the Hindu Right.

Curating Articles, Borrowing Readers, Translating Insights

Over the last two years, curating thematic series of articles for public engagement has become one of Khidki’s modes of engaging with the public. Until

now, we have put together three curated series in collaboration with online digital news platforms. All three series emerged from a desire to intervene in existing public discourses on the past and present of the Deccan region; the first and the third were published to mark the anniversary of Hyderabad-Deccan's integration into the Indian Union in 1948. The third series in particular was in response to the announcement of the Telugu film *Razakaar*, which belonged to the genre of films such as *Kashmir Files*, *Kerala Story* among others – that is, intended to communalize the past through the creation of polarizing narratives.

The first curated series, simply titled 'Deccan Series,' came following the *Gol Mez* conversations and the decision to build a collective. Starting from September 17, 2021, the anniversary of the 1948 Police Action, we published a series of eight articles around the theme of belonging in/to the Deccan, which touched upon the idea of 'what it means to belong to the Deccan, which does not exist as a state or administrative entity, but still defines people and communities, how they live, what their politics is.' Our invitation to scholars was to interpret this theme stitching in ideas of nostalgia and diaspora, nation-state vis-a-vis the region, language worlds of the Deccan, modernity and Dakkan consciousness and art. Our only brief was that it be written in a manner accessible to an interested, non – academic reader. Three members of the collective, Anant Maringanti, Nikhilesh Sinha, and Swathi Shivanand, worked together to provide feedback to authors and edit it for reader accessibility.³

In 2022, we curated another set of articles with *The Wire* around the theme 'Many Worlds of the Deccan.' In our call for articles, we invited abstracts and then essays that focus on ideas and practices of coexistence, 'syncretism,' changing nature of social relations due to the rise of religious nationalism, among others. Based on our previous experience, we wrote a slightly longer brief on the form of the writing expected from contributors.

The requirements for the article are fairly simple. The writing has to be accessible to a general audience so please do write in a clear and engaging manner, preferably without academic terminology. The word limit is 1200 words. This however does not mean that it needs to be simplistic, rhetorical or mere assertions without any substantiation.

In this case too, three members of the collective Anant Maringanti, Swathi Shivanand, and C. Yamini Krishna did the work of providing feedback and editing the pieces before sending it to the publication.⁴

In 2023, we collaborated again with *The News Minute* to produce another series: *The Dangers of a Single Story*, this time to revisit the period of 1948, 75 years of Hyderabad-Deccan's "integration."⁵ The curators for this series – C. Yamini Krishna, Swathi Shivanand, and Pramod Mandade – worked with the authors to ensure that the writing was fit for non-academic audiences. We highlight these aspects of active curation because these curated series was

unlike a special issue in an academic journal. The intent and desire have been to attempt to translate academic insights into language and frameworks that are accessible to interested readers.

But who is this ‘interested reader’ who was ‘outside the academia’ that we were imagining? This merits some discussion. Writing in mainstream publications is a common method adopted by academics, yes. But what is perhaps not acknowledged in this process is that we do not write for some mythical “people” but that we actively *borrow* audiences created and sustained by publications.

What is the significance then of such *borrowing* for academics? Firstly, this marks a significant break from the motivations behind most academic writing in a neoliberal academic universe. In a world where our jobs, our pay, our incentives are linked to publishing in Q1, Q2, Q3 journals or some such arbitrarily created standards, publishing is often a procedural formality. In more sophisticated neoliberal versions of this universe, the motivations range from being recognized as ‘thought leaders,’ ‘renowned experts’ or ‘accomplished academics.’ For many of us, our articles being cited may be thrilling but is rarely ever the primary motivation behind our writing, living as we do in a ‘publish or perish’ industry. Academic regimes actively promote the dissociation of academic knowledge production from popular, public realms, in several ways. Secretly or not-so-secretly, many academics inhabit notions of academic knowledge as “superior,” that it need not be communicated outside this realm or even that it cannot be communicated at all. Universities which ask more and more of our time and bodies in its service do not remunerate or offer space for this public engagement, unless it meets some criteria of a rating agency. In such a context, ‘writing for the public’ as an activity stands lonely and unremunerated.

Yet academics write plentifully, and especially in times of crises. But how often does this writing recognize that we do not write from the position of authority but from the need to communicate? Would recognizing that we write for audiences *borrowed* effect some change in what we write, how we write, maybe even why we write? We wager that it would. When we write for outside the academia, the reader is not ours. Unlike in academia, where most readers are looking specifically for the area/questions we are engaged with, the reader has merely chanced upon the article. The reader offers you their time and attention only during the space of the article before they move on. They will not remain engaged with the article if it is inaccessible merely because it is ‘important’ or is full of details. Unlike writing for academia, to be read is the primary goal when academics write for reading publics. The audience then is at the heart of this exercise. Communication is key.

Translation then becomes essential to this exercise; specifically, the translation from academic language to non-academic language. By terming it as translation, we recognize that academic language operates in a realm far removed from the public. For instance, ‘production of territory’ is a fairly common usage among academics but has very little meaning in the public

realm. How does one translate this idea and its value into one that is accessible to the interested reader?

An editorial team consisting of Khidki members spent a significant amount of time with the authors offering feedback and revising the articles along with them. This was in order to make the articles intelligible for a non-academic audience while not losing out on the rigour of academic writing. Yet in the operation of this principle, we faced the following questions:

- 1 How much should the editorial team intervene in the process of revision, especially if these are niche areas of enquiry one has not worked with closely?
- 2 In what ways does power operate in these acts of revision?
- 3 What in our training as academics prepares us for writing for the public?
- 4 How do we (both author and editor) reconcile with the inevitable losses in translation from academic to non-academic and from writing to editing?

Our training as academics often means that we have very little idea or training about what the ‘public’ wants to read and how they engage with it. We often fail at treading the line between simplicity and simplistic and the articles could end up being too general. At other times, we are so focused on granular details of our work or the specific questions that could be engaged with only by other scholars of the same field. These are some aspects which we had to encounter during the process of editing the public pieces; what does it mean to be an editor when it is not your field? Are we venturing into the field of journalism? What marks our endeavour as different from journalism? Should there be an effort to differentiate at all?

The editorial effort was to provide the context, drawing attention to the importance of the details cited in the article, using less the words of our trades. Our effort was to retain the explanatory nature of the pieces, that is, we were oriented towards making the pieces to answer “what can the reader understand about their social, political or cultural life by reading Khidki’s pieces?” Can Khidki’s work provide a lens to people to understand their own experiences? We must admit that we have not fully or always succeeded in this endeavour – partly because as academics, we do not have the fully developed ability to communicate to non-academic audiences and our own hesitation at exercising a heavy hand editorially.

If translating academic insights into accessible language was one arc of our work, we began to recognize that to work only in the English language is extremely limiting. The Deccan itself is host to so many kinds of languages and to ignore the region’s languages is to perhaps make oneself irrelevant. Besides, contesting the production of communal common sense within the linguistic universes of Indian languages also requires resources. In this, we made a small beginning when our third series was not only published in *The News Minute* but also simultaneously translated in most languages of the Deccan: the Telugu translations were published by Saranga; the Marathi

translations by Aksharnama; the Kannada translations by Varthabharati. Both Marathi and Kannada translations evoked responses by authors from these linguistic realms. If Rahmath Tarikere, a noted litterateur praised the articles for introducing a new historical perspective on this period within the Kannada language by drawing on life experiences, a Marathi writer accused us of being slavish in our purported glorification of Asaf Jahi rule. No matter the tenor of the conversations that the articles generated, engaging with Indian language readers has further bolstered our belief that the work of building critical historical consciousness has to take place within these linguistic realms.

Hosting Conversations, Building Archives

Our first major project in the direction of imagining an archive for the region has been building a digital archive of Sabras magazine from 1938 to 1962, supported by the Shergil Sundaram Art Foundation-Asia Art Archive, and undertaken by C. Yamini Krishna. The project was born out of Yamini's engagement with *Idara e Adabiyat e Urdu* which houses a collection of Deccani intellectual Dr. Syed Mohiuddin Qadri Zore and his son Rafiuddin Qadri. Through helping in building a digital archive of Dr. Zore the project was attempting to give back to the archive. *Sabras* was a magazine started in 1938 by Dr. Syed Mohiuddin Qadri Zore, a prolific linguist, historian, critic, and a litterateur. Dr. Zore was a modernist intellectual working in the context of the flourishing of other institutions such as Asafia Library, Osmania University, Jamia Nizamia, Lutfuddowla Research Institute, and Darululoom in the Deccan. Dr. Zore and his fellow intellectuals worked towards producing a historically situated identity of the Deccan consisting of shared cultures and communities, at a time when the rest of the subcontinent was seeing a rise in communalism. Dr. Zore went on to establish *Idara-e-adabiyat e urdu*, a pedagogical and intellectual organization which worked towards the spread of modern ideas among the youth and also undertook publication of scholarship on various aspects of society during the mid-20th century. Our interest in Dr. Zore aligns with our commitment to the Deccan, Dr. Zore championed the idea of Dakhaniyat or Deccani identity and fostered intellectual work on the region. Today the archive of *Sabras* can serve as an entry point into the intellectual history of the region. Through this initiative of cataloguing and making 30 years of Sabras available online open access, we hope to bring back some of the forgotten histories of Deccan into circulation.

While this initiative of digitizing Sabras follows a more conventional method of creating an archive, we have attempted to create another kind of archive through hosting a series of online talks titled 'The Deccan Conversations.' Starting from April 2023, we have been inviting early career scholars working broadly on the Deccan and its adjacent regions to present parts of their work. Hosted on alternate Saturdays of every month, we began these talks as a way to continue the work of communicating scholarly works to the



Figure 11.3 Announcement poster released on the Khidki Collective's social media accounts.

Creation: Swathi Shivanand

public; and as a way to build a network of scholars working on the region (Figure 11.3). While the format followed a typical academic template – presentation by speakers and then a dialogue with an interlocutor (often a senior academic) – we followed this up with a recording of the talk posted on the collective's YouTube channel and summaries of talks on social media handle. The YouTube channel @khidkicollective is meant to be a repository of all the conversations hosted by the collective. The motivation behind the uploading of the talks with permission has been to create an archive of the Deccan on the Internet. We wanted to supplement this by making available key ideas that scholars engaged with in their talk as an index on our social media platforms. The interested reader – or in this case, listener – could be led to the YouTube channel. The hope has been that these talks could find their ways

out of the immediate confines of the conversation to something of a resource that people could turn to, over time.

The Digital Moment

The realm of the digital and its tools have been key to imagining Khidki as a virtual collective and how it conducts its public engagements. This ready acceptance of the virtual format has been particularly useful for an unfunded collective which runs on individual initiative for it allows us to have public dialogue at minimal costs. Another advantage has been that we are able to create a digital safe space in the highly polarized political environment today where the physical safe space has been increasingly difficult to sustain.

Challenges of the Digital

But the digital raises pertinent challenges as well. The digital sphere is ephemeral, and constantly shape shifting. An initiative, event, discourse on the digital is both present and not. The pace of the medium does not allow for longer reflection and engagement, because of the pace at which the conversation shifts. For instance, articles from the curated series were shared by media houses on their social media platforms. But as two of our members pointed out in their reflections after the series, the articles get lost in the surfeit of articles shared by the media houses and on social media. How do we ensure its life given the transience of the social media moment? Should we ensure a life beyond? Our tentative solution to this has been to move it to the repository on our blog, from where it can be accessed, returning to public view every now and then.

How does a collective, comprising members whose primary training is to pause, reflect, and analyse, at a pace diametrically opposed to that of social media, negotiate with this encounter with the unfamiliar? The structure and functioning of social media require that it be fed content on a regular basis for the accounts to have any kind of significant reach or to reach outside of familiar academic networks. Given the ceaseless demands on our time as academics from the universities we inhabit and our inability to meet the needs of content generation by social media, the digital as a mode of public engagement has its limitations.

What kinds of public we can then reasonably reach out to is a question we have been asking ourselves. When each article was published, members of the group shared the articles on various social media platforms, including WhatsApp. In the first two sets of curated series, the articles that gained most circulation were likely those which were of interested to already existing readers who were part of digital groups and collectives engaged in thinking, writing and reading about the erstwhile Hyderabad state or the city. The Hyderabad-Deccan region is unique in terms of fostering a very active public of individuals belonging to the region, some current citizens and some

diaspora – this despite the fact that it does not exist as a state anymore. This public engages with the geography of Hyderabad Deccan through mailing lists, Facebook and WhatsApp groups. These groups keep track of writing on the region, share and discuss among other group members. Often there is heated discussion on articles published in newspapers and magazines. These groups perceive a strong bond with the region and lay claim on to the discourse produced on the region (Krishna, 2023). Our articles on Hyderabad Deccan then resonated with these existing publics. When we published articles that did not have ‘ready audiences,’ we were unable to decipher its reception.

The digital also often ends up becoming a postmodern repository⁶ without strong context, that is, unless carefully curated the digital sphere becomes majoritarian, replicating the existing structural inequalities digitally. For instance, the conservative right-wing forces have taken over several digital platforms and a lot of disinformation gets circulated without much scrutiny. Digital is often seen as ideologically neutral platform to archive ‘all’ perspectives. How do we as scholars address and resist these postmodernist tendencies? We approach the digital with the view that ‘all’ perspectives do not have the same ethical weightage and digital curation needs to keep the social hierarchies and inequalities of knowledge production in mind. Digital curation needs to be rooted strongly in social justice politics.

The Idea of a Collective and Its Publics

If digital alone is not sufficient to have a wider public dialogue, what methods should we adopt as scholars to engage with academia outside of the Anglophone world? Many universities function in the Deccan region and have been host to scholars such as Rahmath Tarikere among others, who have produced insightful historical work on the region. The expansion of the collective towards creating hospitable spaces and to invite scholars from non-English intellectual traditions to participate in its undertakings may seem a tall order but is a necessary future direction. This is necessarily a slow process requiring that we first build our own capabilities to engage intellectually in languages of the Deccan, to achieve this aspiration.

In this, we have been encouraged by the reception to the Kannada translation of our articles among activist-intellectuals after they were published in a widely-read newspaper. For some, it spoke to their experiences as journalists, for others, it spoke to the absence within regional scholarship about critical historiography of the region. This has led us to ponder about whether the reader for our work is necessarily regional. If so, how best do we create a platform for conversations across languages and intellectual traditions? These are questions we are asking ourselves as a collective.

Another set of audience we have had for both our talks and the curated series are other academics, who have attended our talks or shared the articles on their social media. Given that we see our work broadly as challenging the

ontology of knowledge production in academia, the enthusiasm from fellow academics has been encouraging. This response has also made us wonder about whether and how best we should harness this desire for intellectual camaraderie outside the neoliberal university. But this has also made us wonder if Khidki's output is oriented towards the public, in the sense that it responds to the needs of the public? Or are we an avenue for academics to do public-facing work in the ways and modes they can and the focus is then on transforming academic ontology itself?

Academia is a lonely place, many of us concur. Has the digital then enabled the formation of academic and non-academic publics? The emergence of academic collectives in the contemporary moment seems to suggest so. Like the Khidki collective, other digital collectives such as ALA, dedicated to Kerala studies and Bahujan Economists, a platform for Bahujan communities in economics in India, among others are bringing together academics in the form of collectives. Anti-caste collectives in particular are working to connect students from marginalized communities to networks of privilege, bolster capacities to inhabit these collectives.

While Khidki is part of this new moment of academic digital collectives, we are alive to this question of perpetuating privilege and that digital networks can operate in either direction of reproducing or challenging caste and language hierarchies. As academics belonging to privileged castes, we are more likely than not to perpetuate such hierarchies in whatever we build. The domination of the Brahminical elite in the university sphere has led to a valid mistrust in the university, which often brings into question the relevance and significance of academic work. As scholars who have benefitted from the power inequalities in university systems and who are venturing out into the non-academic world in search of audiences for our academic work, it has been important for scholars associated with Khidki to ask, who is this work for? How do we operationalize our commitment towards egalitarianism in our work as the collective? How do we do this in the cacophony of the postmodern digital sphere? These are questions that frame our work.

Notes

- 1 Khidki Collective is a group of humanities and social sciences scholars with an abiding interest in the Deccan, more specifically the Hyderabad-Deccan. The collective came together in mid-2021 to initiate conversations around regions broadly. Crucial to this endeavour is a recognition of the political stakes in contemporary India when we foreground histories, place-making practices, and lived experiences within regions that challenge or resist homogenizing 'national' narratives. We are committed towards facilitating conversations on the region beyond the walls of the university. To this end, we have held online round-tables (Gol Mez), curated two article series in news websites and undertaken digitization exercises of archival material. In this chapter, we will reflect on our beginning, founding objectives, and our aspirations for the future. More importantly, we will reflect on our primary endeavour of translating research and academic insights into public-facing work. That is, we will engage with the challenges that many of us trained in

Anglo-American/elite Indian academia face in undertaking translation across languages, in this case from academic to non-academic, without losing out on the rigour and complexity of the insights. In this sense, Khidki has been an affective journey, calling on us to examine our intellectual and stylistic practices. It has also been a political journey, as we attempt to foreground multiple ways of belonging to the region. Khidki, as its name suggests, is an opening, a window into the world of regions where we can begin to build networks and spaces of resistance through conversations and exchanges through productive digital tools that enable the creation of a virtual collective.

- 2 There have been coordinated university strikes in the United Kingdom and the United States of America on a series of issues plaguing the neoliberal university such as low pay, no job security, rising living costs, and exploitative labour practices towards contract workers. The students have also marched the picket line in solidarity (Burns, 2018).
- 3 This series can be found here: <https://thekhidkicollective.wordpress.com/2023/10/01/the-deccan-series-at-the-news-minute/>
- 4 This series can be found here: <https://thekhidkicollective.wordpress.com/2023/10/01/many-worlds-of-the-deccan/>
- 5 The series can be found here: <https://thekhidkicollective.wordpress.com/2023/10/01/the-dangers-of-a-single-story-series/>
- 6 Tom Evers (2013) notes in the turn of “digital humanities” that it encourages uncritical positivism.

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12 Participatory Engagement and Methods in Digital Humanities

Medhavi Gandhi

Introduction

The evolution of digital media over the past decade has changed how we share knowledge, engage, and interact with information and the effect this exchange has on popular culture. Whether it is an open knowledge nonprofit platform like Wikipedia or commercially motivated social media platforms, there is an emphasis on participation, building together and sharing information; these approaches impact not only how we conduct research and learn but also how we navigate this world of information that has opened up to us.

Galleries, libraries, archives, and museums (referred to as GLAMs) have come a long way in disseminating knowledge online; yet these efforts have not yet proved successful in creating engaged communities. For most cultural heritage institutions (henceforth CHIs), school and university students are the primary audience, aside from regular tourists and family visitors. A large proportion of this audience is a digital native, whose first instinct is to seek/share information “online.”

New and easier modes of digital publishing, networking, mapping, and easy-to-use multimedia tools have enabled more individuals to create and ‘distribute’ cultural content and generate new forms of information; thus encouraging new online communities.

For today’s students (school/university), the Internet is seamlessly integrated into their lives. They are able to click, edit, and upload photos and short videos, make posts on social media, geotag them and find their way around digital maps intuitively. Increasingly, school and university education is taking into account the importance of popular media tools for the creation and dissemination of knowledge; most classrooms these days attempt to use some sort of multimedia and digital tools with an aim to prepare students for the “jobs of tomorrow.” Students are encouraged to make use of the resources available on the Internet to supplement classroom learning.

It is therefore important to ask: How are CHI’s positioned to ride this wave of a participatory Internet culture and drive modes of knowledge production in a digital environment that their primary audiences are accustomed to? How can CHIs work closely with educational institutions to nurture a

future generation of cultural practitioners with adequate information literacy skills and knowledge of ethics in a digital world? How can CHIs use participatory approaches to build “an engaged community”?

In this chapter, we elaborate on participatory practices in digital humanities projects; we look at examples of in-practice projects along with the tools, platforms and modes of engagement that can be used to facilitate participatory projects inside classrooms and at GLAMs (galleries, libraries, archives, museums).

The Classroom × GLAM × Digital Connect: Heritage and History Education

Digital Practices in the Classroom

How we teach and how students learn have undergone a massive change as technology has evolved and especially during the pandemic. There is an increased focus on creating a digitally aware future-ready generation and the popularity of STEM/STEAM projects has visibly increased in private Indian schools. However, it can be said with relative certainty that “history” as a subject remains to be the most tedious in students’ perception. The subject of History, for example, comes with an association of ‘rote learning’ and one that might not have ‘use in a future career.’ So how can museum-learning complement (history) education in schools? How can museum collections provide interesting opportunities for digital learning? In a quest to find the answer, The Heritage Lab worked in schools (Punjab, Chandigarh, Delhi, Kolkata) with students of Grade 6–12 on a series of Creative and Inquiry based modules with a focus on digital outcomes.

Taking Museums Into the School Classroom to Spark “Inquiry”

These modules connect museum collections with the history curriculum and have a project based outcome. Typically, we try to choose the output to be a digital format of the students’ choice. We ask students simple-sounding questions, with a view to encouraging inquiry, collaborative learning and creation. For instance, “Who is the greatest Mughal Emperor?” or ‘Why are rivers important?’ – might sound like questions you already have an answer to, but students are encouraged to find sources (or evidence) to substantiate their answers. They need to first identify what makes a leader “great” – and then find supporting material (paintings, manuscripts, etc.) to present their choice of a Mughal King who could be called “the greatest.” While expressing their final answer, they choose between creative mediums – creating a reel/podcast, online newspaper, etc.

In effect, Inquiry modules that we conduct might have a history focus, but the skills learnt – that is, critical thinking, research, analytical thinking, information sourcing, presentation, and so on – are overarching.



Figure 12.1 A pair of wrestlers with a referee. Watercolour drawing. Wellcome Collection. Public Domain

Learning to Create a Digital Artefact

In 2021, The Heritage Lab collaborated with the M.R. Jaipuria Schools (multiple branches) to explore online meme-making and science-learning. The Heritage Lab had recently launched an Indian-art meme maker but to find art collections that were licensed for re-use and spoke to scientific themes was a challenge; this was also the first time we explored the potential of using memes in the classroom.

Why Memes? Memes have the ability to tell stories that can be understood by a diverse audience; they are a powerful tool to express satire, making audiences think critically. To think, adapt, iterate, and improvise in changing and uncertain situations, these skills are core to children's success in the future.¹

For students, creating work that is to live on the Internet not only involves learning about licenses and image rights – what images are usable for remixing, which license to apply while publishing; but also gives them a first-hand experience of supporting and engaging with other creators' works. For this project, students also learnt how to interpret an artwork and its concept, and worked on their digital aesthetic, language, and expression.

In another project, at Learning Paths School, Mohali, students of Grades 8–9 researched the history and heritage of the Grand Trunk Road. As part of the project, a group of students identified various monuments and structures located along the G.T. Road and edited/created Wikipedia pages about them. The idea that their contributions were to be published publicly encouraged

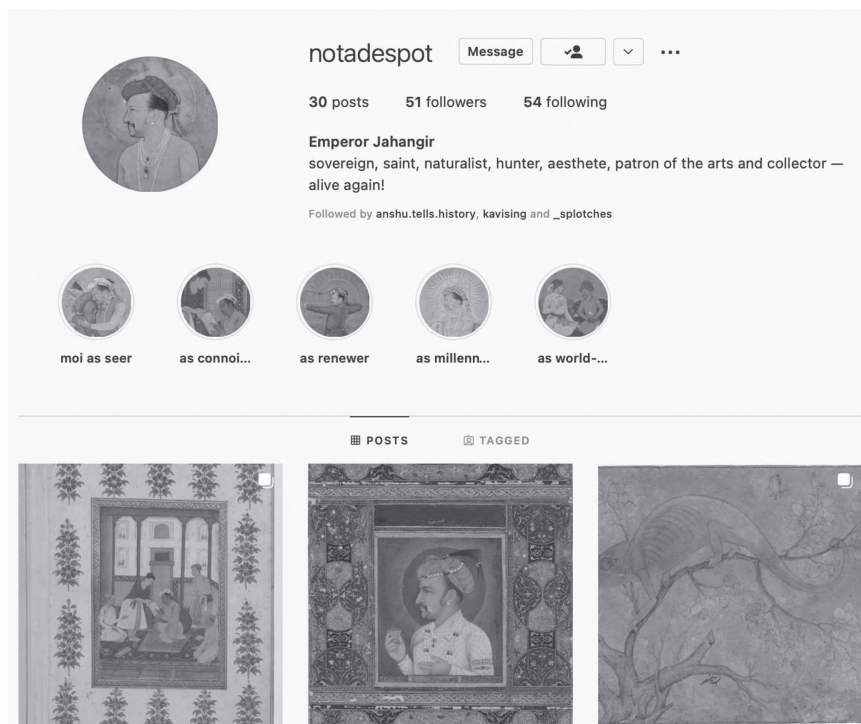


Figure 12.2 Screenshot of the Instagram page, ‘Not a despot’ created by a JNU student.

the students to push their own boundaries; they referred to books on archive.org, and used their own library resources while learning to identify reliable sources online and create citations. In doing so, not only did we achieve a piqued interest in Wikipedia editing and history topics, but teachers noticed an improvement in reading, analyzing and writing skills.

This approach of working with digital technology and museum collections is not restricted to schools alone. For the Monsoon Semester of 2021, students of JNU’s School of Arts & Aesthetics worked on creative digital projects reinterpreting museum collections and displays. Here’s an example of an Instagram page about Emperor Jahangir, created by one of the students. It is titled ‘Not a Despot’ – the objective was to share with the lay reader and public a side of the Emperor that is not common knowledge in an interesting format.

The overall aim of the project was to harness the students’ everyday engagement with digital technology; in this case Instagram as a platform offered an opportunity to explore storytelling, as well as public engagement to a student who might be a future historian/cultural professional.

As Laura McGrane, professor at Haverford College, says in an article,² “The point is to spur students to ‘think critically and differently’ about digital gateways and to ‘encourage new forms of close reading, knowledge production and interpretation’ in the context of the modern information landscape.”

Through inquiry projects, students are able to develop a first-hand understanding of mediation; assess primary sources and create a digital artefact that evidences their learning.

Of course, for Digital Humanities projects the ask is a bit different; the task has a real-world impact; the creation of the project itself is the learning process. Today, several IITs and other higher education institutions are offering courses in Digital Humanities with an aim towards creating a digitally skilled workforce.

What remains to be seen is how India’s cultural institutions make their collections usable for classrooms and how they use digital humanities skills to further the museum’s mission.

Museums and Digital Practices

Few museums in India have published a digital strategy online. This is why, there is close to no information on the formal pursuit of collaboration with digital humanities organizations or future plans of using digital methods towards the institutions’ research objectives and activities.

Museum-related professions have rapidly changed over the years. With digitization projects under way and the focus on digital outreach, curators try to find different tools to build online exhibitions or engage with audiences.

The past few years have witnessed museums tap into digital technologies to further their education mission. From YouTube videos and online courses, to social media sharing, campaigns and online challenges, there has been a visible transformation in museum learning practices. However, becoming an instrumental part of education needs museums to work on a lot of aspects. A few are as follows:

- 1 Developing meta-data standards, such that their collections (images, videos, etc.) are easily discoverable using appropriate keywords. Through (developing and) maintaining collection data online, institutions position themselves strategically to be able to provide images for learning/teaching purposes, for developing visualizations, or online exhibition and simultaneously create opportunities for an active exploration of their collection (by academic or casual visitors).
- 2 Licensing of online collections. If museums desire for their collections to reach classrooms and be part of participatory digital humanities projects, there also has to be a consolidated effort on licensing online collections, especially those in the public domain. The collaboration between GLAMs globally and Wikimedia Foundation, well known as the GLAM-WIKI movement, has helped reshape museum practices. But the movement focuses on licensed collections. Through the movement, any cultural

- institution can reach out to a Wiki community in their region to develop a project inviting volunteers to write and expand articles on Wikipedia related to their collection; or add the collection to Wikimedia Commons.
- 3 Establishing a framework of evaluating their efforts and online presence. For any cultural institution this is an affirmation of their role as knowledge providers. Whether it is disseminating the collection through Wikimedia Commons or publishing articles in a digital format, podcasts or meme-projects, institutions today have started measuring their digital efforts and the impact of their digital projects.³

For example, a 2021 report published by the National Library of the Netherlands (KB) indicates the different parameters used to evaluate their efforts across projects. Some of these are as follows:

- a The number of visits and views to collection pages
- b The number of app-installations
- c The number of unique people reached via social media
- d The number of online and print articles the KB was featured in, apart from other media highlights
- e The growth in the digital repository
- f The number of digital items added to the Wikimedia infrastructure
- g The number of requests per month for digital items via Wikimedia

Digital Participation

In August 2022, ICOM approved a new definition of the “museum” to reflect its changing purpose and relevance.

A museum is a not-for-profit, permanent institution in the service of society that researches, collects, conserves, interprets and exhibits tangible and intangible heritage. Open to the public, accessible and inclusive, museums foster diversity and sustainability. They operate and communicate ethically, professionally and with the participation of communities, offering varied experiences for education, enjoyment, reflection and knowledge sharing.⁴

While the definition itself has faced backlash, what stands out is the phrase “participation of communities.” Here’s what the old definition (for the last 50 years) was: “a nonprofit institution” that “acquires, conserves, researches, communicates, and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study, and enjoyment.”

‘Participation’ being the operative word here, we will talk about the digital nature of it.

Most young visitors to the museum today are capable of responding to the latest digital technologies. But a digital form of participation blurs geographical boundaries, widening the scope for community engagement. No

matter where they are, people can be encouraged to participate in their own time (assuming there is access to infrastructure).

According to the latest reports, 47% of India's population has access to the Internet, and spends an average of 6 hours 35 minutes online every day.⁵ This is an indication of significant exposure and access to digital technology and a high digital literacy. It therefore presents a huge opportunity for museums and cultural institutions to increase digital participation and engagement with communities.

The National Museum New Delhi's Educator Meet, held in May 2022, attempted to spotlight "digital access and education." The city's museums which reflect largely the Indian museum approach – shared how museum collections are now findable and the various digitization initiatives/educational initiatives that have been conducted. Many of these initiatives (by NGMA, IGNC, and the National Archives of India included) focused on providing online access to their collections through social media and their websites, sans a re-use license. While this itself is a huge step forward for India's museums, here's an important observation: online access does not always translate to "public engagement" and museums fall severely short of harnessing the true potential of digital platforms.

The concept of engagement "refers to both participatory activities and the dissemination of information to inform, educate, and empower the public."⁶

By now, we are all quite accustomed to seeing "a call to action" everywhere on the Internet; the prompt "like, subscribe, share" is all too familiar from a YouTube video to an email newsletter. The culture of taking action is a given. But does that constitute engagement?

In the Internet age, mostly everyone has the power to be a "creator"; they have the power of exploring a side of themselves which may be an extension of their real self or a complete antithesis. There is pride in discovering "something cool" and an inexplicable joy in being "the one who makes a difference." It is this sentiment that gives an edge to digital humanities projects as well.

If one were to look outside the cultural sector, there are adequate examples of commercial brands and platforms that are continuously pushing for a collaborative, creation/maker culture. Digital platforms such as Substack (for writers), Spotify (audio), YouTube (video) encourage their users to be involved in shaping the future of digital media production. Surrounded and encouraged by this kind of a media-culture, audiences targeted by CHIs have learnt to expect to be able to engage actively.

So How Do Cultural Institutions Create Participatory Engagement? What Kind of Tools and Platforms Can Be Used to Facilitate Participatory Projects in Classrooms and GLAMs?

Museum consultant and exhibition designer, Nina Simon, in her book "The Participatory Museum" (2010) describes a participatory cultural institution as "a place where visitors can create, share and connect with each other around content."

In that sense, participatory projects speak to the needs of both the institution and the public.

There are several modes of digital participation; for ease, we will broadly classify our examples into the following:

- 1 Initiatives that promote some kind of knowledge sharing
- 2 Creative participation initiatives that offer creative ways to interpret data and engage in idea generation
- 3 Digital initiatives that need more technical assistance for information to be transferred from one format to another

Initiatives That Promote Some Kind of Knowledge Sharing

Crowdsourcing

Most initiatives that involve knowledge sharing or crowdsourcing of information target a large number of participants. These are quite common – like Citizen Science initiatives. For instance, asking people to submit photos of a certain location or city or landmark, or stories related to the same. Institutions internationally, also engage in asking the public to engage in social tagging. The Brooklyn Museum is one such example. Anybody viewing their online collection is invited to (optionally) add a tag to the image.⁷

For a classroom being introduced to digital humanities, such projects are exciting.

Taking cue, The Heritage Lab (THL) developed a portal “THL Open” – dedicated to openly licensed Indian art. The platform aggregates paintings from institutions that have published their collections on Wikimedia Commons.

The objective is simple: under each image, you see “View Details” and “Edit on Wikipedia.” This is an attempt to enable University students, as well as high school students to make these images findable in different languages by translating; they are also able to enrich the image-description by adding notes from published books/essays; add the images to relevant categories on Wikimedia Commons, making the image findable, and usable on Wikipedia pages.

Participating using Wiki platforms is, however, not limited to editing/translating the description of an image. Participants can even add images to Wikimedia Commons independently or as part of campaigns.

In April 2022, my colleague and Wikipedia volunteer Arunesh Varade organized a WikiCommons editathon for World Heritage Day.⁸ Participants downloaded Indian monument-related images (openly licensed) from the University of Edinburgh’s online collection, the Getty collection and a few others and finally added about 1,700+ images to Wikimedia Commons. Anybody, irrespective of an ongoing campaign, can participate in an activity such as this; however, if the museum itself led such efforts (for example, by simply issuing a notification on their website/social media) it would encourage participation from around the world.



Indian. *Portrait of Raja Sansar Chand of Kangra*, ca. 1800-1810. Opaque watercolor and gold on paper, sheet: 8 3/4 x 7 1/4 in. (22.2 x 18.4 cm). Brooklyn Museum, Gift of Dr. Ananda K. Coomaraswamy, 36.243 (Photo: Brooklyn Museum, 36.243_IMLS_PS3.jpg)

[DOWNLOAD](#) ↓

Portrait of Raja Sansar Chand of Kangra

ASIAN ART

Typical Indian portrait paintings show the subject standing in profile, usually holding an emblematic object. In the Punjab Hills, a mountainous area between Delhi and the Western Himalayas, artists altered the format somewhat by depicting their rulers seated, in more casual situations, usually smoking a *huqqa*. Usually these rulers sit on carpets on the floor, but here Sansar Chand, the raja of Kangra (reigned 1775-1823) and a great patron of Indian painting, sits on a seat with a tiny footstool. He is addressed by one of his ministers while a servant uses a yak-tail fly whisk to shoo away insects. This slightly abraded work was one of the first Indian paintings to enter the Brooklyn Museum's collection, as a gift from an important scholar and collector who introduced Kangra-style paintings to the West.

CULTURE Indian

MEDIUM Opaque watercolor and gold on paper

- Place Made: Punjab Hills, India

DATES ca. 1800-1810

DIMENSIONS sheet: 8 3/4 x 7 1/4 in. (22.2 x 18.4 cm) (show scale)

COLLECTIONS Asian Art

ACCESSION NUMBER 36.243

CREDIT LINE Gift of Dr. Ananda K. Coomaraswamy

MUSEUM LOCATION This item is not on view

CAPTION Indian. *Portrait of Raja Sansar Chand of Kangra*, ca. 1800-1810. Opaque watercolor and gold on paper, sheet: 8 3/4 x 7 1/4 in. (22.2 x 18.4 cm). Brooklyn Museum, Gift of Dr. Ananda K. Coomaraswamy, 36.243 (Photo: Brooklyn Museum, 36.243_IMLS_PS3.jpg)

IMAGE overall, 36.243_IMLS_PS3.jpg. Brooklyn Museum photograph

RIGHTS STATEMENT No known copyright restrictions

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Figure 12.3 Screenshot of a web page featuring an openly licensed collection item from the Brooklyn Museum, www.brooklynmuseum.org.

Wikimedia Foundation regularly supports campaigns for crowdsourcing of photos – one of the most globally well-known ones being ‘Wiki Loves Monuments.’ In the first six years of its existence, the campaign witnessed 277,000 photo submissions from 43 countries. All campaigns are organized by volunteer groups, educational groups, and, in many cases, even individuals. These campaigns (like Wiki Loves Monuments or Wiki Loves Folklore,

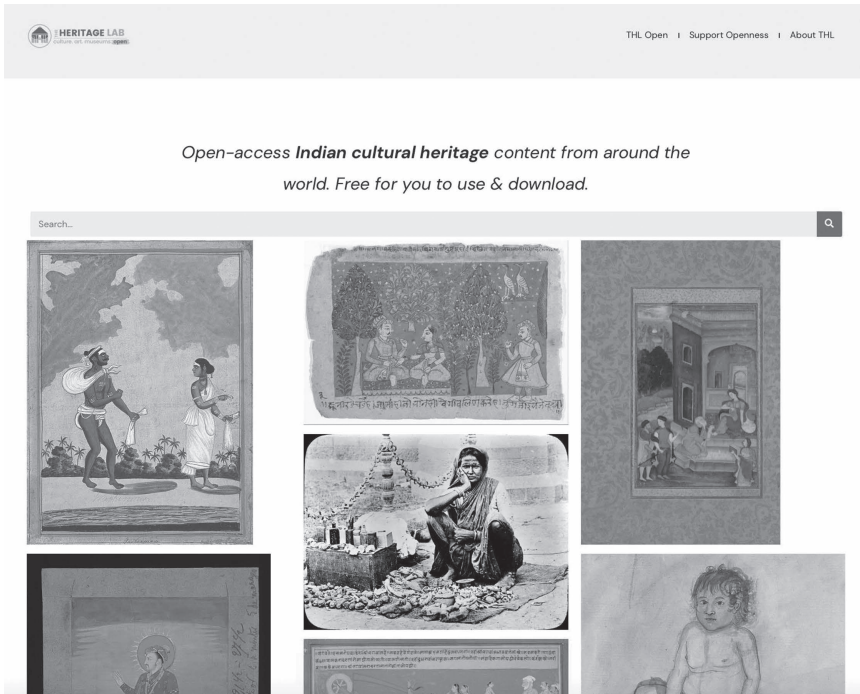


Figure 12.4 Home page of The Heritage Lab Open, <https://open.theheritagelab.in>.

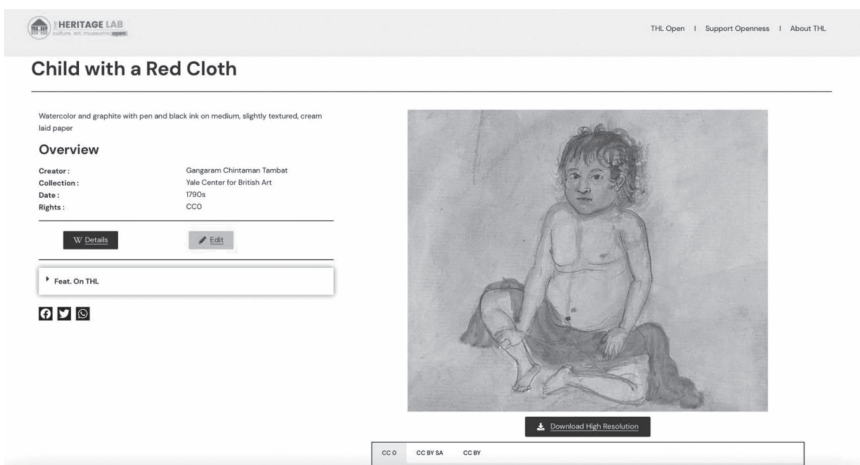


Figure 12.5 Screenshot of a page from The Heritage Lab open website featuring an openly licensed image.

or Wiki Loves Museums) seek to crowdsource images from the public. The images are then published with a re-use license.

Apart from a platform like Wiki, social media has also played a role in crowdsourcing narratives and photos. The Museum of Material Memory is one such submission-based collection. The online museum asks contributors from the Indian subcontinent to submit photos of objects (books, maps, jewellery, art, etc.) from the 1970s or earlier with a simple upload form on their website.

DAG Museums is one of the first museums in India to lead a participatory mapping exercise for their project “City as a Museum.”⁹ The project by DAG attempts to connect the museum’s collections to places and people in the city through guided, curated workshops, walks, and interactions with artists. Participants, having attended a week-long series of events, spread across Kolkata, use the map to record what DAG termed as “Field Notes.” In a similar instance, an online exhibition documenting the Koli community of Mumbai sought people’s participation in identifying key locations where coastal-pollution was evident.

In India, like in other places, the Internet might have changed how museums collect, preserve, and disseminate knowledge, but the road to becoming a “community hub” is long. For example, over the years, museums around the world have engaged in “rapid response collecting” – and especially so, during the pandemic (e.g. the Museum of London) to document people’s (or their region’s) experience.¹⁰ But this was not the first time that the museums called upon the public – museums and archives have been sourcing such

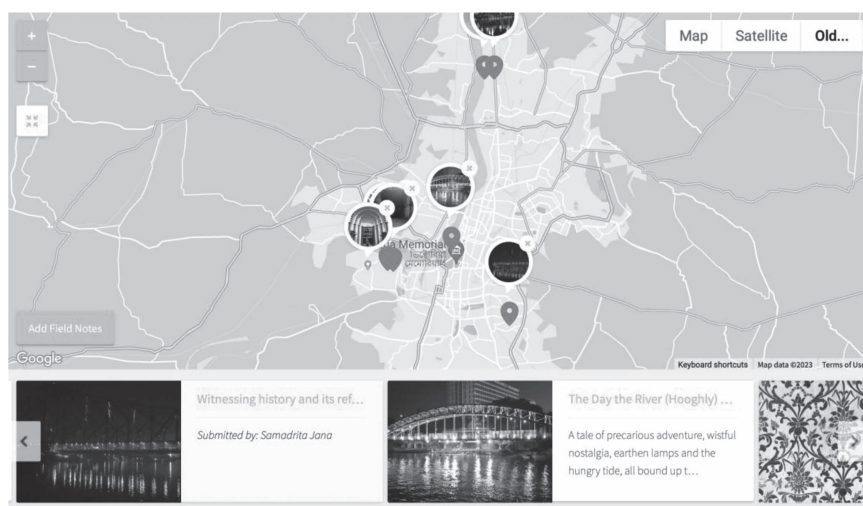


Figure 12.6 For both projects, we used an inbuilt interactive map on The Heritage Lab’s website to collect contributions based on location.

information for quite long. Within the cultural heritage sector, it has been a long standing tradition to invite the public to contribute voluntarily. A recent example is the Science Gallery in Bangalore.

Their project, Re:Collect India is a citizen archivist project that “aims to preserve our legacy by collecting stories of the first generation of free India’s scientists, engineers, and technicians about their life and work in science.” They further mention that:

This project will be led primarily by young people – to collect stories, unearth objects, and capture India’s rich history of science, technology, and engineering. It is an initiative to capture an important part of India’s scientific legacy, and an opportunity for an inter-generational conversation about science in our society.

What is yet to be seen is how these contributions feature online and the further investigations and explorations they ignite.

Digital crowdsourcing is a common participatory practice – whether it is submitting memories or images, or transcribing manuscripts, the Internet has continuously offered scope for increased public participation which places emphasis on empowering the audience.

Creative Participation Initiatives That Offer Creative Ways to Interpret Data and Engage in Idea Generation

Mapping

There are some participatory initiatives that work with “co-creators” – who could be participants with a certain skill set or interest. Co-creation projects often involve people willing to participate and improve the content by sharing their own skill/knowledge.

For example, while participatory projects can use mapping interfaces to collect data, some projects can focus on interpreting or telling digital stories with the data. At The Heritage Lab, we have experimented with using two kinds of Mapping Tools in our projects.

- 1 StoryMap JS developed by KnightLabs
- 2 A customized Mapping Tool for The Heritage Lab (which we have shared about in the earlier section)

The two mapping exercises are different in that the second one enables just about anybody to submit notes (images and text) for a certain location; it is useful for crowdsourced projects. The StoryMap JS (or even ArcGIS Story-maps) can be used for location/map based storytelling.

StoryMap JS is a free tool, with an intuitive interface. For someone familiar with making slides and presentations, this tool feels easy to use. It allows

for an iframe-embed, which means one only needs a code to add to any website to display it.

In 2016, we developed a walking tour of Pondicherry's White Town using StoryMap JS – complete with a Google Map overlay, for each point of interest, which was supplemented with an image and text. The response to the map was overwhelming – from requests to add a location, to a custom tour for groups, re-blogs, and photo submissions, the map was quite well received. This was also a time when the Internet had little information about these locations, and if you couldn't make it to a tour in person (at an allotted time), you couldn't walk a DIY route.

For cultural institutions collaborating with the public on oral history projects this is a popular approach; the tool is especially helpful in a way that it helps add researched information to a certain location.

In the past, The Heritage Lab has also used the tool in classrooms to plot 19th-century artists' journeys across sites of importance in India.

At the time of writing this chapter, we are working with students to research open-licensed artworks and portraits related to the 1857 War of Independence; hoping to use StoryMap JS to plot the events in Meerut, Delhi, and Lucknow. Of course, these kinds of projects are only possible when cultural heritage institutions have made their collections and collection-data accessible online.

Co-Producing Knowledge: Wikipedia for Collaborative Knowledge Sharing

Wikipedia is ranked 7 among the world's most visited websites. This is why it becomes an important platform for cultural heritage institutions to share their collections/knowledge on the platform.

For the purpose of this chapter, I want to spotlight a Wikipedia-based project that has the potential to bring GLAMs and Classrooms closer: Art+Feminism

Art+Feminism,¹¹ a global campaign, had its first events in India in 2017. The campaign seeks to 'close the information gaps that exist online with relation to gender, feminism and the arts' beginning with Wikipedia.

In India, not everybody has access to information about art or artists. Scholarship about art and artists is usually in English, and the books, expensive for the lay reader, are usually inaccessible for an online reading. On the Internet, thus, one would find limited information.

In the summer of 2017, The Heritage Lab partnered with a series of museums – the Government Museum & Art Gallery, (Chandigarh), National Museum (Delhi), Piramal Museum of Art (Mumbai), and educational institutions such as Miranda House, University of Delhi. At each museum, librarians and curators worked on identifying women artists in the collection who were under-represented online. Then they created a list of resources they could support with – catalogues, books, etc. for the artists. All of this information was compiled into an Excel sheet that could be shared with participants, in

a way that they knew which book/resource to refer to while working on a Wikipedia page for a particular artist.

The format and approach differed at each institution, but the outcome remained the same. At the museums, visitors, art and museum enthusiasts, students who use the museum library/those enrolled in a course at the museum – underwent a Wikipedia editing training.

They then used the resources to create pages or edit pages using the information in exhibition catalogues and books. This was an excellent opportunity for many for whom the museum's books are usually out of reach.

At the Government Museum Chandigarh, well-known artists such as Mrinalini Mukherjee (represented in the collection) and regional artists like Phulan Rani finally got their own Wikipedia pages. Later, a page was created for the artist Sunayani Devi, using resources from the Kiran Nadar Museum. Sunayani Devi, despite being from the Tagore family, had been “invisible” on the Internet. Her English Wikipedia page could only have a couple of paragraphs based on the books available at the Editathon. However, Wikipedia's community functions in a way that as soon as Sunayani Devi appeared on the list of women-artists-from-India, a subsequent editathon underway in Germany picked her up as a “page for German Wikipedia” (she was one of the artists participating in the first Bauhaus exhibition in India in 1922). It was finally the German Wikipedia page that when translated helped expand the English page. Sunayani Devi's presence on Wikipedia encouraged several Indian media outlets to tell her story – in video and other formats.

Further, participants at the National Museum supplemented their articles with pictures of women-in-history and culture from the museum and added them to Wikimedia Commons. At every editathon thus, we witnessed the scope of the project expand.

Data Visualization

Over the years, as more Indian women artists featured on Wikipedia, it became possible to lead an effort to build a timeline of women artists. While we used the JS Timeline for our initial effort, the tools provided by Wikimedia Foundation quickly became our preferred choice for creating visualizations.

Wikidata is a tool that helps centralize all of the crowdsourced information on Wikipedia. Using the data and visualization tools, one can create timelines, maps, graphs and more. Sandra Fauconnier, GLAM Strategist, Community Programs at Wikimedia Foundation has written in detail about using Wikidata tools on her quest to unearth early women-photographers and creating data visualizations about women photographers in history.¹² She writes:

Wikidata contains more than 45 million items that describe the ‘hard’ data about people, places, and concepts – information like their



Figure 12.7 Screenshot of a web page from The Heritage Lab featuring an Interactive timeline showing women artists from India.

birthday, profession, gender and nationality. This data can then be used in the fact-boxes on the side of Wikipedia articles. But because this data is stored in a structured database, you can also ask questions of that data. Moreover, like Wikipedia it's free: anyone can contribute to, and re-use, Wikidata – including website builders, software developers, and researchers around the world.

. . . I started with a straightforward example: 'give me all photographers who are female,' which produces around 3,600 results. . . . I then decided to make this query a bit more complex, so I modified it to ask for female photographers who have died before 1948 (which means that their work is very likely to be in the public domain) and who have a category of images in our media repository, Wikimedia Commons. When you also retrieve their images and birth dates, they can be shown on a timeline, with pictures.

Projects such as Art+Feminism then afford an opportunity to add collections from Indian cultural heritage institutions to Wikidata queries like the above and possibly expand the scope of co-creation and collaborative-scholarship.

Other Creative Projects: GIF Making or Hackathons

In 2020, DAG officially became the first Indian museum to be listed in the global Open GLAM survey when it released 13 digitized artworks with an

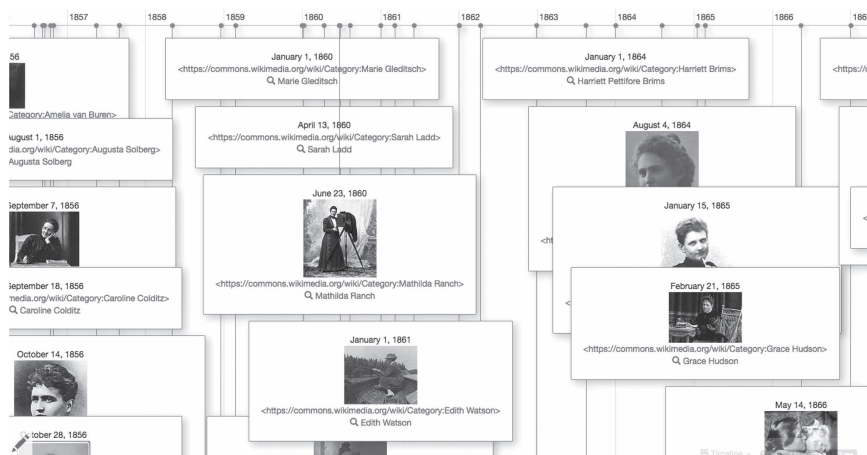


Figure 12.8 A timeline of female photographers via Wikidata’s SPARQL query engine, Sandra Fauconnier, CC BY-SA 4.0, via Wikimedia Commons.

open license. This is a tiny step, but it was adequate to demonstrate the impact open collections can have. Since 2020, DAG’s collections have been animated by enthusiasts (globally) every year. A survey we undertook after the first gif-making event highlighted the potential for GLAMs to become a digital learning and creation space; for nearly 65% of the creators, DAG’s GIF-IT-UP proved to be a digital-media skill development exercise.¹³ The other benefit of course was having a repository of more than 100 Indian art GIFs that can be used across communication channels.

For GIF making, we encouraged the use of free, open-source tools like Pixlr.com and the Giphy platform’s inbuilt creator tools.

HACKATHONS

The Coding Da Vinci Hackathon is probably one of the most popular examples of the possibilities that exist around digital cultural heritage. The German-born initiative has been an inspiration for co-creation in the cultural heritage community for a long time now. The Hackathon brings coders and the cultural sector together, and the result is a series of delightful apps or digital products year after year.

To make this possible, institutions release their collection datasets with an open license. Coders explore this data to invent new apps and products that enable users to discover cultural heritage in engaging ways. For instance, the Alt Berlin app (which was produced in a 2014 hackathon) allowed users to discover the city of Berlin interactively, comparing before-after pictures of old buildings from the Stadtmuseum Berlin collection.¹⁴

*Digital Initiatives That Need More Technical Assistance for
Information to Be Transferred From One Format to Another*

Transcribathons

Transcribathons are another popular way for cultural heritage institutions to partner with higher education or even crowdsource public effort in transforming images of manuscripts and letters to machine-readable text. The Smithsonian and the Europeana Foundation are amidst several institutions that have ongoing transcribing projects that anyone around the world can participate in.

The Partition of India has been the subject of several Oral History initiatives, including the very prominent 1947PartitionArchive; one would imagine that such projects would have opportunities to collaborate with educational institutions to develop transcribing projects in the near future.

Conclusion

Digital Humanities is an evolving area of study, offering exciting modes of learning, research, and knowledge production.

Today there is increasing access to grants that support digital humanities projects in university/higher education and so, it is a prime opportunity for museums to undertake academic and public partnerships to produce research together. It is an opportunity for cultural institutions to reinvent and reimagine their purpose of knowledge-sharing in modern society. While the possibilities are unlimited – for those who create projects and those who use the knowledge – there are also several challenges that these institutions continue to face – limited staff, a missing digital infrastructure, glaring gaps in the metadata of published digital collections to name a few. An active redressal of these immediate challenges would perhaps be the first step in closing the gaps and realizing their true potential in a digital world.

Notes

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- 6 J. M. Casello, W. Towns, J. Bélanger, and S. Kassiedass, “Public Engagement in Public Transportation Projects: Challenges and Recommendations,” *Transportation Research Record*, 2537, no. 1 (2015): 89.
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13 Archiving India Through Food

AuQ15

A Personal History of the Journal *On Eating*

Kunal Ray and Sumana Roy

* * *

Why *On Eating*?

During the long COVID-induced lockdown, as the questions of life thinned down to its basics, a lot of conversations began to naturally revolve around food. An article published on the World Economic Forum website reports,

The World Bank estimates that 71 million people will be pushed into extreme poverty across the globe as a result of the pandemic. The World Food Programme estimates that an additional 130 million people could fall into the category of “food insecure” over and above the 820 million who were classified as such by the 2019 State of Food Insecurity in the World Report.

(Bhargava and Bhargava 2021)

Millions were stuck inside their homes waiting for food while another lot was left homeless, often resorting to violent protests demanding their right to food. Many of us observed these events from the safe confines of our homes while expressing helplessness in the face of the tragedy that was unfolding outside. At the same time, we also found a section of people absorbed in online discussions about and around food and the comfort associated with it. There was nothing extravagant about the kind of food that was being discussed and showcased on these forums. These comprised relatively simple and easy-to-make home-cooked food, unlike the food that adorns food websites. Nothing complicated in its method of preparation either. In an article published in *The Hindu*, Prabalika M Borah reports that cooking became a stress-busting exercise during COVID-19 in India. In her article, Borah mentions homemaker Sarita Bhavani from Hyderabad who told her,

Preparing large-scale dishes such as rohu pulusu, rasmalai and chicken biryani is therapeutic, because it has many methodical stages and requires patience amid the noise around us. . . . Many loved ones have

been going through COVID and this is my way of counting my blessings and keeping my family healthy. Plus, I love sharing with some close friends in the building because food wastage has been a huge problem during the pandemic.

(Borah 2021)

On social media platforms, many people were found exchanging photos of what they cooked and ate. This almost became a daily Internet ritual for several who resorted to cooking to kill time and then connect with like-minded people on social media. A community of food lovers emerged on social media seeking solace through the act of cooking and sharing what they were eating. The food that was cooked and shared was essentially home meals. One must also admit that in some ways, this activity perhaps helped to take their minds off the tragedy that was all pervasive. Several also confessed of being aware of their relative privilege while indulging in this sort of an activity.

We, the founders of *On Eating*, observed this phenomenon closely owing to our interest in food and food related conversations. We too sent pictures of what we cooked and shared easy recipes with each other through private messaging. This exercise also confirmed to us what we perhaps always knew – that cooking and eating are also imbued with a degree of privacy and this exchange could only happen with another individual with whom you share a heightened feeling of intimacy. Owing to our backgrounds in teaching, reading, writing, and research, our conversation also veered towards food writing in India and the lack of intelligent and varied food writing in the public sphere. We also bemoaned how food writing in India has almost unconsciously become synonymous with food reviews, restaurant profiles, recipe books, and some academic and memory-based writing on food. In our analysis, most of this writing failed to represent people like us, who live ordinary lives and eat regular home food. Meenakshi Sharma argues,

In the context of a very large number of Indians not having the buying capacity, leisure, luxury, or exposure to need or appreciate writing on food, the genre is based on the implicit assumption of a certain class of readership and the associated exclusion of other classes. In the case of writing in English, the language itself serves to set apart certain classes in terms of access. Recipe books and food writing in English newspapers and popular magazines cater to an elite section's appetite for gourmet food and international cuisines. The representation of contemporary Indian society in this writing, however, does not acknowledge that representation as partial and specific.

(Sharma 2006, 94)

The food we consume on a regular basis is not worthy of lifestyle magazines or social media adulation but people like us also exist and we are perhaps the

majority. The majority therefore was missing or remained unrepresented in food writing in India.

Having said that we were also conscious of the fact that there is a growing interest in food writing in India which is evident through the number of publications dedicated to food every year. Besides, several English language newspapers now have dedicated pages for food or sections featuring food-based writing. While that is interesting, we also noticed a sameness in the vocabulary of writing and ways of looking at food in the writing that is coming out of Anglophone India. Sharma further states, “[T]he genre ignores the heterogeneity of Indian society as well as its own exclusivity and addresses itself to an unexamined, unqualified notion of Indianness” (Sharma 2006, 102). Many essays that we read are akin to extensions of Instagram posts – manicured and consequently lifeless. A subject such as food is, by its very nature, messy – messy in many ways, messy because of faulty and corrupt systems of distribution, of inequities in the world and the household, messy on tables and clothes and mouths. Besides, food is just not sociological. It could be used to examine several other facets of life. Anthropological discourses are helpful, but we wish that they were accessible to those that are being written about. And perhaps those that are being written about could also narrate their story on their own terms which can happen through video or visual based interventions, if not writing.

While we identified the problem, we also began thinking about our own efforts which could be helpful to remedy the situation, even though in a small way. As writers ourselves, we could have written essays about our own food journeys and the other stories known to us but that would still be insufficient in a way. What if we could invite a plethora of people from diverse cultural, social, and economic backgrounds to share their experiences, adventures, misadventures and other stories related to food? In these writings, food would also transform into a lens to examine politics, identity, ideology, spirituality, community, and personal and public history amongst other issues. It would therefore result in a collective effort, representative of the diversity that constitutes India. We further wanted to share these with a reading public beyond India interested in examining India through a fresh idiom. The idea of setting up an online journal was thus born after careful deliberations. We conceived *On Eating* as a living archive of stories about food that doesn’t merely engage with the sociological aspects of food and eating but also with its human nature. We also thought a great deal about the title or name of our endeavour and agreed upon *On Eating*, a commonplace utterance emblematic of our intentions as a journal which wants to prioritize thinking about food in the context of regular, everyday life.

India speaks in many languages and, therefore, its food stories ought to be rendered in a variety of languages. To do justice to the multilingual nature of India and the experiences of those writing for us, we decided to be multilingual. Each issue of the journal features three languages. The essay, often written in English, is translated into two other Indian languages to offer wider

reach and accessibility of the writing. In this multilingual genre-agnostic journal, we aim to feature stories about various eating cultures in India. Our aim is to create a journal of contemporary writing about eating in English and the Indian languages as well as contemporary art on the subject. Further, through translations, we were also trying to address what food writer Alicia Kennedy (2020) calls a miniscule or negligible part of food writing.

We also envisioned the journal as an inclusive space where different kinds of people could contribute. Further, we wanted to break away from the notion of the writer as someone who writes books or only engages with the act of writing. We wanted to extend writing about food beyond the writers and include many other voices whom we may not strictly identify as writers otherwise. Food, after all, is an essential ingredient of all human life. Alongside noted names from the world of letters, we have invited artists, performers, crafts historians to share their food stories with us. In future, we want to publish an issue with only children's writing written by children and not adults who write for them. Besides, it was a conscious decision to also feature art along with the writing. Art that is not illustrative but which complements the writing as an additional or parallel text. In our published essays, writers have shared photos from personal archives to further accentuate the writing and help readers connect better to the person, location or food being written about. This is the advantage of the digital medium.

Why Digital?

According to the data available on Datareportal (2022) website, India had 658 million Internet users in January 2022. India is also believed to be the second largest online market in the world. It is therefore well established that the digital platform could ensure a wide reach for our journal with very less or minimum logistics involved. Besides, the digital medium offers easy access to a large population in this country who may not otherwise afford to read food writing published in books, magazines or any other traditional media platforms which comes at a price. Since inception, essays published in *On Eating* have travelled the country and various parts of the world because of its digital presence. We regularly receive email communication about our essays being read and taught in classrooms. As curators and publishers, it is indeed a heartening feeling but this reach is also made possible by digital technology. Digital has also afforded us the opportunity to include visuals, films, music files, or hyperlinked pre-existing videos to support the writing. In many ways, these essays also turn into archives where written text interfaces with visuals and sometimes audio preserving memory, lost traditions, lesser-known food cultures, and personal stories amongst other aspects. For an essay that we recently published, we also used audio files recorded in the voice of the writer's mother who was the subject of the essay. This further amplifies the experience of reading or encountering a text for the readers.

Since the beginning, we wanted to be multilingual. Each issue comprising an essay or short fiction is published in three languages. This also gives us a wide readership beyond the narrow confines of the English speaking and reading audience in India and abroad. While English does help for the text to be read beyond the national borders, other Indian languages give us a pan Indian readership which is a significant number and most of the country.

It must also be said a digital publication involves relatively less logistics than print. We send the essay and visuals to our web team who then upload it onto the website. A proof link is shared with the editors to check before the issue is published online. Ours is a simple and functional, easy to navigate website to manoeuvre and maintain. The logistics involved in such a process is less complicated as a result. Here, we would also like to acknowledge the help and support of Takshila Educational Society in publishing our journal. A grant received from the organization helped us to begin this initiative and sustain its activities. We also receive web-based support from the same organization to publish the journal online. A small honorarium from the grant received is paid to all contributors to the journal. The grant has also helped to keep our website advertisement free. *On Eating* is available to read for free and we do not charge a subscription from our readers. This wouldn't have been possible without the support of Sanjiv Kumar, passionate educator and founder of the Takshila Education Society, who believed in our vision. Without financial assistance, we may have had to compromise on the content, primarily asking help of our friends in writing and design. The grant allows us to invite people to write for the journal as well as offer an honorarium to all those who contribute to the journal in some way or the other. The honorarium is minimal but it is a token of our appreciation and our faith that artists and writers shouldn't be asked to work for free.

Process of Curation

The first few issues published in *On Eating* were by invitation only. We wanted to set a benchmark or a standard for future writers to emulate not necessarily as imitation but to make our publication intention clear vis-a-vis what kind of food writing we want to publish, themes, ideas that interest us as curators. The opening essay by noted Dalit writer Manoranjan Byapari is subversive in many ways. Byapari talks about his life as a cook and the humiliation that he suffered during such a time. He also writes about social hierarchies through food and turning eating and cooking into resistance. Byapari's inaugural essay set the tone for the journal in terms of the rigour and honesty of expression that we expect from contributors.

As stated earlier, we wanted to bring or curate a wide range of experiences and encounters related to food in India. In the second essay that we published, we asked danseuse Leela Samson to write about food eaten by a dancer. We realized there is great curiosity about the subject but barely

any writing about the same. Fitness for a dancer is crucial because dance is primarily a visual form and the body is the main instrument for a dancer. Samson turned her essay into an autobiography of sorts glimpsing into her life through the food she has eaten. She wrote,

But while I thrived on the poriyals, saambars, rasams, kozhambus and payasams of my adopted world, no one warned me of the amount of starch I was consuming! For every one of these amazing delicacies required a dollop of rice. But by now, I was pretty deep into the poojas-shlokas-sankalpas and sampradayas of a good South Indian Hindu life, following the rationale behind marked events in the year and the periodic festivals that followed the progression of the moon, including bhajanai at the Marundeeshwara temple every Friday and yatras or excursions as we called them, to all the temple towns in Tamil Nadu, that were also significant for a dancer.

(Samson 2021)

Through the food choices made by her, she revealed the life she has lived. We couldn't think of another essay written by a dancer in India introspecting upon life through food. This is the sort of curatorial intervention that we aspired to make through *On Eating*.

In another essay, we asked crafts revivalist and founder of Dastkari Haat Samiti, Jaya Jaitly to write about her work and food eaten with the craft-people of the country for which she has had to travel the length and breadth of the country. Jaitly's essay is a fascinating account of food eaten by a class of people in India and regional delicacies available in the country. Artist N Pusamala wrote about food and performance where she focused on her food-based performance art which she created and performed as a mark of protest after the killing of activist Gauri Lankesh. Renowned Konkani author and Jnanpith Awardee Damodar Mauzo has written about the history of bread making in his native village in Goa. Journalist and activist Amandeep Sandhu wrote about food served during the recent farmers' protest and mobilization initiatives to ensure everyone at the protest was well fed. Vocalist Kalapini Komakali wrote about her legendary father, Kumar Gandharva and his love for food. Theatre veteran Neelam Mansingh wrote about performing food on stage via her production, Kitchen Katha and growing up in Amritsar. While curating and publishing the aforementioned essays, we were consciously thinking about documenting India through its people and their varied experiences in connection with food thereby acknowledging the fundamental role food plays in human life. India eats differently and we are interested in showcasing this difference to resist a single or singular narrative about food and eating in India which is also antithetical to the spirit of the country especially in our current times when increasingly majoritarian forces are pressing for homogenization in all spheres of public life.

The multilingual existence of *On Eating* seemed natural to us especially because we live in a country where people live inside more than one language. We wanted our journal to be an archive of as many kinds of eating cultures as possible – keeping it an English language journal would have restricted its scope. English India eats and writes differently from the other parts of the country. It is our ambition that the people and culture being written about should be able to read what is being written about them – and hence the natural decision to keep the writing in the language in which it has been written, along with English, and another language. We usually ask the writer what language they would like their writing to be translated into. Often the choice that the writer makes is a political one. Think of a menu card on a streetside mobile restaurant – its unique language of English, Hindi, the local languages, and their received pronunciation. The language of that menu is a living thing. We want the same for *On Eating*. So far, we have published in 14 Indian languages including Tamil, Telugu, Kannada, Marathi, Hindi, Assamese amongst others and we want to do more.

In our ambition to encourage more diversity, we have also published many new and upcoming writers. One section of the journal website is about how to submit and other specifics about the kind of writing that we want to publish. Since inception, we have published several writers whose writing may not have appeared elsewhere or who are not well-known writers. Food gives us that opportunity to include a diversity of voices. This has also opened frontiers that we didn't think about when we conceived the journal or perhaps did not know whom to ask. For instance, Kalyani Dutta sent us an essay about her mother-in-law's moulds which she had used to make Bengali sweets at home. Dutta thinks of these moulds as family heirlooms and through these moulds, she constructs a personal history of the family and her mother-in-law. Nishi Pulugurtha wrote about her mother's Telugu kitchen in Kolkata which she created after moving there post her marriage. Arathi Devandran wrote about food and illness placing her battle with illness under the magnifying glass. In a recent essay, Anshu Chhetri wrote about the sweet tooth of the Nepali diaspora in India. Her essay also turns into an archive and catalogue of food eaten by the community which many in other parts of the country may not be familiar with. We also pride ourselves for having published more women than men. Through these essays, we have been able to reflect upon memory, cooking, community eating and women in kitchen spaces amongst several other areas associated with the politics of food and eating in the subcontinent. Also, the accessibility of the writing that we publish in the journal is of great importance to us. While we have a range of contributions, we strive for clarity in expression so that even an uninitiated reader can access the writing. Even academics who write for our journal are requested to write with the lay reader in mind. Being a strictly academic journal would restrict our readership and that is perhaps not what we want. We want to be a space which respects diversity in the true sense and not conform to the hierarchies of writing or representation.

How Does the Journal Function?

On Eating is founded, edited, and curated by Sumana Roy and Kunal Ray, the writers of this chapter. All decisions pertaining to the journal are made by us. We enjoy and exercise complete autonomy in the day to day running and functioning of the journal. Being a two-member team, it goes without saying that planning, curation, editing, and communication with writers takes up a lot of our time. It also helps to resolve disputes of any kind owing to a small number of people involved in the process. However, the process has been rewarding and a learning experience for us.

We read through the submissions, notify chosen authors, and then work with them till the publication of the piece. Different essays demand different degrees of editing and collaboration. After the text is finalized, we send the piece for translation, in consultation with the author. The translator could be known to the writer or to us. We usually try to work with translators whose work is known to us or we have worked with in the past unless the author makes a special request to accommodate a new translator. Often, we are also required to discuss the essay with the translator. The translated text is shared with the author for a final approval. The translator speaks to the writer of the source text during the process of translation, in case of any queries or doubts. Depending on the nature of the essay, we either invite a visual artist to respond to the text or ask the author to offer visuals, photos, audio aids from their personal archives to support the writing. For instance, while reading artist N Pushpamala's piece, the readers can also watch her performance art videos which are linked with the piece. The readers therefore can immediately watch the performance art which the artist is referencing in her writing.

After the source and translated texts are finalized along with the visuals, the entire content is handed over to the web team. We also inform the web team where visuals should be placed and how text should be organized. Further instructions also include how the cover page for a new issue should look, which visuals to select for the home page and an excerpt from the main essay to be featured on the home page which could act as a hook for a visitor to explore the issue further. This also means that the entire design of both content and text is done by the editors while the web team supervises the transition from word files to the website after which a demo link is shared with editors and contributors to check the final copy before it is published. The Archives section on our journal website contains all old issues which any reader or visitor can access for free at any point in time. Several of these essays are now being taught in classrooms in India and abroad. Their continuous availability on the website and the digital nature of the journal is therefore crucial.

We also have a free subscription option at the bottom of our home page on the journal website. A visitor can avail free subscription by registering their name and email address. Upon successful registration, the visitor receives an email intimation about a new issue each time it is published online. *On Eating*

is a monthly journal – we publish only one issue a month owing to the nature of our full-time teaching jobs and several other academic and non-academic commitments that both of us pursue. We only publish one essay/short story/piece of writing because we want the focus to remain on one writer and the writing especially so at a time when the Internet is deluged with writing of all kinds. We want our readers to dwell on a piece, think, read, revisit, and engage for a longer time if they will. Besides, quality is of utmost concern to us. We try to publish the new issue on the last day of each month. Social media research also reveals that the engagement with content shared and available on social media is weakest during the weekend. Since we use social media extensively for the promotion of our journal and sharing the contents, we try to work with a Monday deadline with each new issue. Having said that, we are also pleased that our journal has reached a significant readership without any paid advertising on any social media or print platform. The reach has been largely through word of mouth, authors sharing their writing in their networks and circulation on Facebook, Instagram, and X (formerly Twitter). We are grateful to this invisible lot for their continued support and faith in our work.

Future Plans

On Eating will run in its present format disseminating stories about food from various corners of the country and in multiple languages. We want to accommodate more visual based stories such as photo essays and short films to also reach those who may want to engage with these conversations but not strictly through written text. Our first venture into commissioning a short film resulted in a young filmmaker, Amit Kumar, making a nearly six-minute-long film about the disappearance of the milkman from his village replaced by customized packaged milk delivery. In the film, Kumar also moans the loss of a local culture and the advent of global capitalism in his village in Haryana. *Satrangi Dastarkhwan* (Rajkamal Prakashan 2023), a collection of selected essays from *On Eating*, has also appeared as a book in Hindi. There could be similar publications resulting from our journal in future. We will continue to work steadfastly to document, preserve and highlight the diversity of India through food which makes us unique and remind ourselves and our readers that this diversity is our strength and it cannot be undermined.

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14 Digital Fever

Reflections of a Queer Archive

Siddarth S. Ganesh and Shalom Gauri

During the Supreme Court proceedings which examined the Delhi High Court judgment in *Naz Foundation v Government of NCT of Delhi*, Judge G. S. Singhvi asked, “[A]re there any homosexuals here?” At its heart this question exposed the general ignorance about queer communities and the movement in India, and their astounding absence in public history. It demanded a serious investment in the documentation and preservation of queer memories.

The QAMRA (Queer Archive for Memory, Reflection and Activism) Archival Project at NLSIU is envisioned as a physical, living archive, involved in archiving queer lives to offer different perspectives to and through the materials we are custodians of. The idea of the queer archive in India has been informed over the years by documentation projects undertaken by individuals and organizations, in response to queer activism and queer litigation. An archive of Indian queer communities and of the contemporary queer movement, our ‘archived’¹ are for the most part living people. Being an archive of living people and living communities brings with it unique challenges and perspectives, which this chapter will explore in some length.

Since our establishment in 2017, we have been grappling with dilemmas of digital archiving methodologies. The application of technology to archiving is addressed here in terms of digitization – the conversion of physical material into digital form; digitalization – the transformation of archival processes to entirely digital platforms; onlineing – the uploading of archival material for online access; and digital humanities – the use of software in the realm of research that creates a new pedagogy and means of study. The distinction between these processes informs how we envision our archives and the terms on which we navigate physical and digital spaces.

In this chapter, we explore and expand upon our positionality and approach towards archiving queer communities in a world where the first questions we get asked are ‘where are the digital collections? Why don’t you digitize? Can I have online access?’ Implied in these questions is the public perception of the Internet as a liberator of archives forgotten in dusty corners. Digital interventions in the archive have become essentialized as the modern method of preservation, to democratize access, and to prime its collections for Digital

Humanities research-projects. As university research is held accountable by Research Ethics Boards, archivists need to similarly be cognizant of the ethics involved in making material available for research in the form of digital collections and data.

In an archive of living people, digitization, digitalization and online are processes that are not restricted to archival records – they manifest repercussions for the archived. The nature and sensitivity of material often requires that the archive refrain from uploading material either online or on offline digital platforms. This allows the archive to negotiate terms of access that are informed by an active political consciousness of power and consent. This work is thus a preliminary essay at articulating a ‘pol-ethics’ of archiving which foregrounds the archived. In terms of digital methodologies, we do not suggest that there is a need for intervention only with digital archival processes, but rather that the dilemmas of digital use may serve as an entry point to the framing of ‘pol-ethics’ for archival practice as a whole.

Scholarship on Indian queers in the digital space has so far centred on queer lives and activism online. The works of Rohit K. Dasgupta,² Kareem Khubchandani,³ Pawan Dhall,⁴ Rahul Mitra, and Radhika Gajjala⁵ analyse the ways in which queers of the subcontinent have utilized and navigated spaces on the Internet. In the DH context, scholarship examines queering the field through technological innovations such as Bonnie Ruberg, Jason Boyd, and James Howes,⁶ Margaret Rhee, Fiona Barnett, Zack Blas, Micha Cárdenas, Jacob Gaboury, and Jessica Marie Johnson,⁷ and Kara Keeling.⁸ Michelle Schwartz and Constance Crompton,⁹ and Alison Hedley and Lorraine Janzen Kooistra¹⁰ write about the DH potential for queering historical narratives through their materiality. However, on the topic of queer archival politics, the literature is scant. This work is our contribution to the field of queer archiving in India. We have drawn inspiration from the trailblazing works of Michelle Moravec,¹¹ T. L. Cowan and Jasmine Rault,¹² Ann Cvetkovich,¹³ Bethany Nowviskie,¹⁴ Digital Transgender Archive,¹⁵ Tim Dean,¹⁶ Elizabeth Freeman,¹⁷ Mukurtu.org, and Pete Sigal, Zeb Tortorici, and Neil L. Whitehead.¹⁸

The archived, the archive, and the user-researcher are the three loci around which we weave our framework. Our mission is to destabilize the traditional systems of knowledge creation, curation, preservation and dissemination that tie the three loci together in the site of the archive: when and how can we privilege the power of the archived over the power of the archive? How can one decolonize the archive? What are the ways in which we can check academic exploitation?

Structured in four sections, this chapter demonstrates our critical thought around and praxis of adopting digital tools with respect to the archive and its materials. In our final section we build a theoretical framework for future conceptualization of archival policies and practices that take into account the concerns and desires laid out in this chapter.

A Defence of Material Memory

Ours is a defence of material memory – that the preservation of physical material as symbolic containers of individual and collective memories is important to the queer movement. The amnesia surrounding Indian queer (pre)history¹⁹ justifies the need to preserve. This responds to the quest – not just our own – for queer historical artefacts. Ruth Vanita and Saleem Kidwai through their book *Same Sex Love in India: Readings from Literature and History* (2000) seek to construct a sense of historical continuity bridging this amnesia for Indian queers who grew up and continue to grow in a society that believes “the myth that same-sex love is a disease imported into India.”²⁰ Extracting literary, mythological, and historical texts from ancient to the modern periods, the Indian *Public* is offered a vantage point into, and the Indian queer *public* offered a new ownership of history that features queerness.²¹

Our work as a queer archive is similar in its relationship to the *Public* and the *public*. In creating a contemporary multi-media counter-hegemonic public history of the minuscule minority, a question we ask ourselves is if in making history public, are we making private intimacies of queer lives public? One way of answering this question is to ask another – whom does this history serve? This conflict reproduces itself in the archive, arguing for a public archive freely accessible by everybody while trying to negotiate concerns over privacy, consent and access. The distinction we are making here is between free, public access and open access, the notion of the *public user* and the *Public User* key to this articulation. Through this lens, we will examine archival material and illustrate our positionality with respect to the three digital trends of digitizing, digitalizing, and onlining, which are changing archivy in our times.

We do not go misty eyed while thinking of digitization. At QAMRA, digitization is used as a tool, and is not the telos of archival preservation. Items which are at imminent risk of loss are digitized with priority while simultaneously catering to the preservation of their physical bodies. This driving force to preserve physical material can be understood through Derrida’s words, “What is no longer archived in the same way is no longer lived in the same way.”²² The materiality of our collections contributes towards a better understanding of their contexts of production.

But what does one lose when there is no interaction with the physical material and only with its digital copies? *Less Than Gay: A Citizen’s Report on the Status of Homosexuality in India*, published in 1991 by the AIDS Bhedbhav Virodhi Andolan (ABVA), was the first resource book on homosexuality to be published in the country. Today, it is out of print with few surviving copies. Of the PDFs available online,²³ only one retains an image of the distinguishing guava-pink cover. The main text of the report has been typed up and saved as a document, with scans of the actual pages of the report absent. When one holds a surviving copy of *Less Than Gay*, the first thing one notices is how small it is. Small enough that it could easily be slipped into and hidden in pockets if one did not want to be caught reading

it. Corresponding to its diminutive size, the typeface selected has a small font size. Despite this, the font used, reminiscent of vintage typewriters, is perfectly legible. This was early queer activism in action in India.

Early queer activism has left not only physical records but also digital footprints. Gay Bombay, for example, began as a notice on the early bulletin board services, establishing itself as an e-group in 1998. A network that expanded through mailing lists and yahoo chat rooms, its origin story is rooted in the digital. Similarly, networks on Myspace, Gay.com, and the Khush list for South Asian queer men was started in 1993 by two men who met at the University of Texas.²⁴ Additionally, mailing lists facilitated cross-country information sharing and political mobilization during, for instance, the Friendship Walk and Operation Sparsh in 1999, or the Global Day of Rage in 2013.

Ever since its advent in India in the 1990s, the Internet has been utilized and inhabited by queer folk in the country. Offering a sudden new space for connecting with other queers, and exploring as well as expressing one's queerness, the Internet like any other site of socio-political coexistence, has brought new kinds of freedom and fear for the community:

For many, social media is not viewed as the real world. It is a place to escape the pressure, the monotony, and the dangers of the real world. For many within the LGBT*Q+ community, social media has formed a new society. Places that allow people to be who they are and who they wish they could be. For some within the LGBT*Q+ community, their online lives are much more authentic and real than the ones they lead within the 'real' world.²⁵

Given the ever changing terrain of Internet spaces and the rate at which one mode of digital interaction is so rapidly replaced by another, it becomes increasingly pertinent for archives of contemporary history to invest in the preservation of digital content. This includes preservation of equipment necessary to read the content. In our archive alone, we have VHS tapes, floppy disks, CDs, DVDs, and pen-drives – already accessing video footage in older formats has become a monumental task.

With content born online in particular, the mere fact of being online does not ensure preservation or permanency. Deletion of content for instance, is often outside the control of users. In 2014, Facebook implemented their real name policy, posing immediate threat to the profiles of drag queens²⁶ and other queers whose online selves didn't necessarily match with their state approved identities. In 2015, Pink Nation's club on PlanetRomeo was wiped out after merely three months of inactivity. In 2018, Tumblr cleansed their site of all pornographic content, including years of carefully curated counter-hegemonic porn in a frightening kind of 'queer Fahrenheit 451.'²⁷

Moreover, PR's merging with the Guys4Men.com – a significant resource to gay Indian publics – in 2009 signals the loss of a whole

online archive, with a very different user interface from PR. Party groups such as Heatwave have been reported as offensive to Facebook; though organisers have rebuilt or renamed their pages, earlier content has been lost to public access. As Brian Herrera poignantly points out, queer sites on the internet such as Rentboy and BillyWorld are more likely to disappear without trace and documentation: ‘contrary to popular cliché, the internet is not forever.’²⁸

For those queers who lived and experienced these spaces, their materiality (interface) and content (language and culture) are accessible in recollection as well as perhaps personal inboxes or downloaded files. For younger and future generations however, accessing this material is increasingly complicated given that it was created on online platforms, many of which were semi-private spaces that are now inactive. As part of the Sangama Collection, we have an entire stack of emails that were printed out on a dot matrix printer and filed away as organizational correspondence. This includes everything from meeting minutes and details on funding to lengthy exchanges within the LGBT India mailing list on internal politics and practices of the queer rights movement. Thanks to a kind of reverse digitizing that took place, this material is now accessible to us but not for long – the ink is already fading. Digital queer content poses a challenge to archives in terms of both access and preservation.

Selective Digitalization

Standing in a photo studio, in a navy blue silk saree and a sleeveless black blouse, she spreads the pallu out to her left – showing off her impeccable fashion sense and the blood stains that run down to her knees. A hefty white gauze pad is taped around her right temple. Her eyes are tired, bloodshot, but the set of her mouth angry, teeth bared in a rictus.

On 14 May 2004, while begging in Madiwala, a mechanic assaulted her with an iron rod, leaving a deep gash above her right eyebrow that required four sutures.²⁹ A year previously, on 24 February 2003, while she was drinking water in Cubbon Park, an unidentified man threw a stone at her head, drawing blood.³⁰ These acts of violence against Neelambari³¹ were seemingly warranted by the simple fact that she is a hijra.

Photos of injury, First Information Reports (FIRs), charge sheets, testimonies, post-mortem reports, courtroom documents, ephemera, newspaper clippings, scholarly articles, organizational correspondence, video interviews, still photographs and unedited protest footage are a sample of the range of material housed at the archive.

In a time when archives are coming under increasing pressure to digitize their collections and digitalize their interface, QAMRA stands stoic in its decision to not completely digitalize. We are working towards making the catalogues of our collections available online, through ArchivesSpace, and

will upload audio files of interviews onto our website. Granting digital access to the material will be done in a tiered approach and on an as-per-needed basis. The problems with digitalization for an independent archive like ours are not merely theoretical – the inordinate cost in money and human resources required to digitize and maintain digital copies on host servers is in itself prohibitive. Additional concerns on the laws governing data protection depending on the location of the host servers makes digitalization a decision that cannot be made under any pressure. “The determination of which country’s law applies to a particular cloud situation depends on the issue about which there is concern. For each legal topic (data protection, contract, liability issues, criminal law, and so on), the answer may – unfortunately – be different.”^{32,33†}

Reverting to Neelambari, her’s is one of hundreds of cases Sangama³⁴ undertook as ‘crisis intervention’.³⁵ The Crisis Intervention series,³⁶ part of the Sangama Collection, represents a melange of public and private documents³⁷ that have not yet been digitized – the documents are in a stable condition with no risk of loss due to damage. Digitalizing and onlining the crisis files merit an astute consideration of archival laws, ethics and politics. Digitalizing the crisis files implies an onlining of the material with two variations: uploading the material onto an archival software but not granting access to it; and uploading the material onto an archival software with public access granted. While the latter is out of question for reasons we will explore momentarily, the former is problematic as well. Once data has been uploaded onto these platforms, they provide varied levels of control over the data where the archive sometimes cannot take down any material even if it has not been made publicly available. A full analysis of the limitations of these software lies outside the scope of this work.

Contrarily, digitalizing and onlining material that already exists in the public domain – our vast repository of newspaper clippings – will not induce conflicts of interest. One of the biggest advantages of digitalizing is searchability. The detailed population of metadata and enabling search engine access allow for large amounts of archival material to be filtered within seconds, for items to be instantly identified, for a much wider public to narrow down on specific archival records with just a simple Google search. Not only will it significantly cut down the painstaking labour of physically searching through collections, it facilitates for instance, data based linguistic analysis of media coverage.

Lives on the Line

The crisis files encapsulate the archive’s conundrum with onlining material – not the mere question of what the repercussions of onlining such sensitive, personal data would be, but further, whether the archive has the right to online such material. Here, we assume the archive’s right to be the custodian of said material, not its owner. This distinction serves the same purpose as

the Right to Privacy and data protection laws. One could argue the case that Sangama, as the organization which handled these crises, has the right to give us consent to make these files publicly accessible, especially so because the documents constitute a part of their organizational archives. Imagining the donor organization Sangama, as the owner of this data resembles a form of disempowerment novel to the age of the Internet – the data breach. This feeds back into the usurpatory nature of the archive, where archontic power reigns over the power of the individual. The individual becomes consigned to the position of object, forced to forgo any autonomy over their own lived experiences.

A review of past attempts to digitize and online material provides several cautionary insights. The onlineing of queer magazines from the 1970s–1990s is a recurring point of contestation between archives and the community. Primarily limited-run publications created for either private or very limited circulation, these print magazines often feature content that was never intended for the general public. Referring to the online release of the complete run of *On Our Backs*, a queer women’s erotic magazine of 1980s San Francisco, Cowan, and Rault observe:

Of course it is exciting to think that young queers might be able to access this material for the first time . . . However, *On Our Backs* features the work of people who are not “out” to everyone in their lives, whose sexual orientations, genders, names, and professions have changed since they included their work in this zine, and for whom the consequences of this kind of exposure could be extreme.³⁸

Following the online release of *Spare Rib* (1972 to 1993) by the British Library in 2013, contributor to the magazine Gillian Spraggs raised concerns about the potential of “misogynist, anti-feminist and/or anti-lesbian”³⁹ abuse and misuse, especially since the British Library chose to use a Creative Commons license rather than a more restrictive one, permitting not only reuse but also alteration of material. Again, legislature that exists to counter misuse tends to be region specific and thus fails to cover cases of misuse that occur online.⁴⁰ At QAMRA too, we have magazines like *Shamakami*, *Arambh*, *Bombay Dost*, *Trikone*, *Kush Khayal*, and *Kush Khabar*, which contain content that we may not wish to provide absolutely unmonitored access to. These same concerns hold true for unedited video footage, for recordings of closed door community consultations, for photographs from personal collections that feature individuals at private gatherings who may not have all consented to showing up in that context online.

Not only does searchability drastically increase visibility and the need for individual consent, it also runs the risk of linking individuals to identities or periods in their life which they no longer wish to publicly associate with. While manually entering metadata allows us to make informed decisions on the use and redaction of names, metadata created from OCR software is

likely to include, for example, the use of dead-names. The right to be forgotten is thus central to the politics of metadata population. In addition to its relevance in the context of evolving identities and violent pasts, it is also a means of ensuring security as it reduces the risks involved with being put on record or showing up in public search results. When we started out, our aim was simply to make invisible histories visible through preservation and a conscious expansion of history that is available to the *Public*. However, as illustrated, disregard for the *public* or even private nature of certain histories can undermine efforts towards reclaiming agency over history.

Archival Pol-ethics

By nature, queer archives are quasi-archives of trauma. Talking about how affect theory can influence our understanding of queer trauma, Heather Love says:

I think fine-grained accounts of affect are really important for addressing a whole host of non-normative and minoritarian experiences, queer, trans, and otherwise. There are a lot of precedents for contemporary affect theory in feminism, postcolonial studies, ethnic studies, and Marxism, which I think makes sense – because if you are trying to understand and address situations of injustice, it's important to be able to describe the ways that everyday experience is structured by inequality. At its best, I think affect studies can work in concert with other kinds of analyses – legal, political, economic, linguistic, etc. But without attention to affect I think it's a real struggle to articulate and explain the way that oppression registers at small scales – in everyday interactions, in gesture, tone of voice, etc.⁴¹

In queer archives, moments of historicized trauma – Chandini's murder, Kokila Crisis, Banashankari Crisis – are placed alongside everyday experiences of trauma that do not make their way into the movement's popular narrative. The affective power of the archive surfaces through re-membering memories which are more often than not, not our own. It is worth reiterating here, that the archive bears responsibility and accountability, and owes transparency to, paraphrasing Nowviski, the people whose memories have become our collections.⁴²

We recognize, in Foucault's words, that archives are “monuments to particular configurations of power.”⁴³ Underlying this is the understanding that archives are artefacts of history themselves, their creation defined by subjectivities, exclusions, and struggles for power.⁴⁴ In archiving, the archive plays the role of construal of meaning, and must be aware that, as Derrida delivers, “archivable meaning’ is also and in advance co-determined by the structure that archives.”⁴⁵ This leads us to introspect upon archives established within academic cultures. “Academic research, as a centuries-old function

of imperialist, settler colonial occupation, dehumanization, and theft, is normalised as a non-reciprocal activity that primarily benefits university research communities.”⁴⁶ As a queer archive where the archived are from communities differentially marginalized and along differing axes, the hegemony of hierarchization merits perspicacious interrogation within the archive and in its relations with academia.

Where does Neelambari stand in this academic economy? The question that we now must address concerns the politics of memory: who has the right to memory? Is accessing these alien memories a right or a privilege? Conceptualizing it thus, are we running the risk of depersonalizing the memories to an extent where the person who lived them has no control over their own embodied narrative? Underscoring our argument here is the need to remember each of these episodes of violence. From a personal, political, and historical perspective, violence against queer lives demands to be recorded, not fetishized. The risk we run here is that of replicating gross violence yet again but with academic authority, of treating individuals and their lived realities as merely intellectual and academic capital. The crux of the crisis files then becomes the onus of gathering informed consent from each of the individuals whose crises have been documented, or the removal of records from the archive when consent is not given. The quagmire drags the archive deeper when some of these individuals are no longer alive, or are untraceable after their retreat from the hyper-visibility of queer activism. A way ahead is to be forged, a way to empowerment through archivy which benefits the archived and the archive. Policies of co-ownership and community ownership of data where the archived exercise the right to control the preservation and dissemination of their data need to be established. We suggest that any capitalization of this data, as a requirement, channel back to the archived.

As we make a case for academia’s right to certain knowledge circuits, we also make a case for restricting this right. In their work with the Cabaret Commons, Cowan and Rault are ‘informed by decolonial and TFQ⁴⁷ cultural heritage models that prioritize context over exposure,’⁴⁸ having realized ‘the colonial and Western-expansionist logics and impulses underlying the push to open-access and digitization.’⁴⁹ Adopting this as a framework for not just digitizing Indian queer cultures but expanding it to the methodology of archiving and researching queer communities and their cultures in India, where laws instituted by the British Raj⁵⁰ already mark every articulation of queerness in the country with the legacy of decolonizing, enables an additional layer of decolonization – of academia and the archive.

Using the example of Mukurtu.org and their use of Traditional Knowledge Labels (TK Labels) and Cultural Protocols to restrict and contextualize cultural heritage materials of Native, First Nations, Aboriginal, and Indigenous communities, Cowan and Rault argue:

Indigenous-led efforts to limit the accessibility of digitized cultural heritage materials foster better understanding through restriction rather

than openness. Creating context and content-specific restrictions on certain materials, for certain times and certain users means prioritizing community specific values and interests rather than, say, capitalist university and platform metrics of maximum exposure and impact.⁵¹

This brings into question the notion of access. To illustrate, let us consider Hijra language, a language of hope, used to communicate ways of being ostracized by society, its power functions through restriction, not exposure. Hijra language is constructed as a secret, meaning found in closed circulation of its vocabulary within their society. Articulated in the public, the language is meant to not be understood by the uninitiated. Academia can ill afford a demand for unchecked access to such privileged knowledge. An academic and/or archival project of Hijra cultural heritage would then have to contend with issues of restricting certain epistemic rights to certain users to respect the community's values and specificities of their systems of knowledge and cultural production.

Access defines how different *Publics* and *publics* interact with each other in the archive, with the archive functioning as a “contact zone.”⁵² Historically, archives have been created by, served, and limited to the hegemonic *Public*. It has become our concern to democratize the archive to facilitate the re-investiture of power in communities, in *publics*, who have been plundered, relegated to the margins or are not present at all in the archives of the past. This informs our principles of archival activism – the archive and its knowledge as a site of reflection which guides social movements; and activism in the archive, in the way we acquire, curate and preserve.

Conclusion

The concerns and desires laid out in this chapter are not meant to suggest that maintaining entirely physical archives is the answer to all our problems, rather, that the decision not to entirely digitize, digitalize, and online our material, to maintain a conscious wariness of digital tools and their collateral damage, is a temporary solution that buys us time to figure out novel ways of negotiating these spaces. After all, the Internet is here to stay and together with advances in archiving software, it has much to offer in terms of facilitating wider access and democratization of user-ship. As Cowan and Rault say, “we might also consider shifting the ethical relations within the queer research circuit, towards what Kara Keeling calls a Queer OS (2014); this will be a collective struggle that may take more than a generation to reframe.”⁵³

Could a way to set forth on this momentous project be to look towards the ways in which the queer community itself negotiates the digital realm? Drawing from a long tradition of ephemeral expressions – be it fleeting eye-contact, use of innuendo and gossip, impromptu assertions of feminine dance moves,⁵⁴ or the ever-evolving nature of one's understanding of

self – digital queers have optimized the use of online avatars, disappearing texts, ‘view once’ photographs, and stories that last only 24 hours. Perhaps in archiving too, this may be adopted as a strategy. Conditional access that stipulates one time use per user, the disabling of Search Engine Optimization, and strict adherence to take down policies such as that of the Digital Transgender Archive⁵⁵ are some examples of strategic ephemerality that are currently being experimented with.

Another factor we have noticed as both archivists and users of archives is the value of interaction between the researcher and archivist. Michelle Moravec addresses this in their work when speaking of the need for acknowledgement of labour in digital archives: “Digital archival environments, which can increase access to materials, often simultaneously erase the labour that makes this possible. Because archives and libraries involve a great deal of feminized labour (Shirazi 2014; Dean 2015), acknowledging this ‘invisible work’ (‘Conditions of [In]Visibility’ 2016) should be viewed as part of a feminist research practice as well.”⁵⁶ With regard to sensitive, political material in particular, the archivist often plays a crucial role in providing context for the researcher, thus lessening the chance of misuse. Although the researcher will always remain independent of the archive, this allows for the archivist to at least attempt to pass on a basic ethics of research to users of the archives. Currently, digital archives circumvent this interaction entirely. Perhaps enabling conversations between archivists and researchers could help with the transmission of research ethics to safeguard the rights of those being ‘subjected’ to research.

At QAMRA, the ‘subjects’ of our archive are Indian queer communities. Part of our memory-work is to preserve collective/individual queer memories in all their multiple dynamic vitalities. Our challenge is to reproduce their interconnectedness in the archive. Metadata becomes the perfect tool for cross-referencing between material – in some cases to capture organic links and in others, to deconstruct them. Seen through legal milestones of victory and defeat alone, the history of decriminalization of homosexuality is reduced to a bland timeline. Archives have the power to open this up as a landscape of memory by bringing together the individual journeys – reflected in annotated courtroom documents, in-depth interviews with interveners, handwritten lawyers’ notes, ephemera from the streets, and footage of community consultations – that shaped this collective battle. While metadata could serve to make organic links visible, it also provides us with a means to de-link ourselves from colonial detritus. Recently, for instance, in our conversations on archives as sites of knowledge creation and curation, we decided to consciously avoid the categorization of material by language in order to incorporate a linguistic politics that does not box histories into colonially imagined linguistic hierarchies.

These experiments with metadata, the bringing back of the archivist into the digital archive, and strategic ephemerality are some of the ways in which we could possibly proceed with our project of building a queer OS

for archives. They form a nascent pol-ethics framework, thus allowing us to reimagine the ways we acquire, curate and preserve in a manner that furthers the very movement and community that we are inspired by.

Notes

- 1 Individuals who are in the archive, meaning, whose belongings and memories constitute the archive's holdings.
- 2 Rohit K. Dasgupta, *Digital Queer Cultures in India: Politics, Intimacies, and Belonging* (London: Routledge, 2017).
- 3 Kareem Khubchandani, "Cruising the Ephemeral Archives of Bangalore's Gay Nightlife," in *Queering Digital India: Activisms, Identities, Subjectivities* (Edinburgh: Edinburgh University Press, 2018).
- 4 Rohit K. Dasgupta and Pawan Dhall, "The Potential (and Limitations) of Digital Media for Sexual Health Interventions in India," *South Asia @ LSE*, July 31, 2017, <http://eprints.lse.ac.uk/83994/>
- 5 Radhika Gajjala and Rahul Mitra, "Queer Blogging in Indian Digital Diasporas: A Dialogic Encounter," *Journal of Communication Enquiry* (June 13, 2008).
- 6 Bonnie Ruberg, Jason Boyd and James Howe, "Toward a Queer Digital Humanities," in *Bodies of Information: Intersectional Feminism and Digital Humanities* (Minneapolis, MN: University of Minnesota Press, 2018).
- 7 Margaret Rhee, Fiona Barnett, Zack Blas, Micha Cárdenas, Jacob Gaboury and Jessica Marie Johnson, "QueerOS: A User's Manual," in *Debates in the Digital Humanities 2016* (Minneapolis, MN: University of Minnesota Press, 2016).
- 8 Kara Keeling, "Queer OS," *Cinema Journal* 53:2 (2014).
- 9 Michelle Schwartz and Constance Crompton, "Remaking History: Lesbian Feminist Historical Methods in the Digital Humanities," in *Bodies of Information: Intersectional Feminism and Digital Humanities* (Minneapolis, MN: University of Minnesota Press, 2018).
- 10 Alison Headley and Lorraine Janzen Kooistra, "Prototyping Personography for *The Yellow Nineties Online*: Queering and Querying History in the Digital Age," in *Bodies of Information: Intersectional Feminism and Digital Humanities* (Minneapolis, MN: University of Minnesota Press, 2018).
- 11 Michelle Moreavec, "Feminist Research Practices and Digital Archives," *Australian Feminist Studies* 32 (2017): 186–201.
- 12 T.L. Cowan and Jasmine Rault, "Onlining Queer Acts: Digital Research Ethics and Caring for Risky Archives," *Women and Performance: A Journal of Feminist Theory* 28:2 (2018): 121–142.
- 13 Ann Cvetkovich, *An Archive of Feelings: Trauma, Sexuality, and Lesbian Public Cultures* (Durham and London: Duke University Press, 2003).
- 14 Bethany Nowviskie, *Speculative Collections* (2016).
- 15 Refer to: www.digitaltransgenderarchive.net/about/policies
- 16 Tim Dean, *Unlimited Intimacy: Reflections on the Subculture of Barebacking* (Chicago and London: University of Chicago Press, 2009).
- 17 Elizabeth Freeman, *Time Binds: Queer Temporalities, Queer Histories* (Durham: Duke University Press, 2010).
- 18 Pete Sigal, Zeb Tortorici and Neil L. Whitehead, eds., *Ethnopedagogy: Sexuality, Colonialism, and Archival Knowledge* (Durham: Duke University Press, 2020).
- 19 If one were to categorize queer history into pre-history and contemporary history, with contemporary history being the subject of some documentation and archival projects.
- 20 Ruth Vanitha and Saleem Kidwai, *Same Sex Love in India: Readings from Literature and History* (New York: Palgrave, 2000), xxiv.

- 21 Ibid.
- 22 Jacques Derrida and Eric Prenowitz, "Archive Fever: A Freudian Impression," *Diacritics* 25:2 (1995): 18.
- 23 Refer to: https://docs.google.com/file/d/0BwDlipuQ0I6ZMXVmNWk0ajdqWEU/edit?pref=2&pli=1&resourcekey=0-BCJz6nCJeIVog5_mTcG9cA; <https://s3.amazonaws.com/s3.documentcloud.org/documents/1585664/less-than-gay-a-citizens-report-on-the-status-of.pdf>
- 24 Rohit K. Dasgupta, *Digital Queer Cultures in India: Politics, Intimacies, and Belonging* (London: Routledge, 2017), 1–4.
- 25 Patrick M. Johnson, *Coming Out Queer Online: Identity, Affect, and the Digital Closet* (Lanham: Lexington Books, 2020), 1–2.
- 26 Gary Kafer and Daniel Grinberg, "Queer Surveillance," *Surveillance and Society* 17:5 (2019): 592–601.
- 27 Jacob Engelberg and Gary Needham, "Purging the Queer Archive: Tumblr's Counterhegemonic Pornographies," *Porn Studies* (2019): 3.
- 28 Kareem Khubchandani, "Cruising the Ephemeral Archives of Bangalore's Gay Nightlife," in *Queering Digital India: Activisms, Identities, Subjectivities* (Edinburgh: Edinburgh University Press, 2018), 75–76.
- 29 15, Crisis Intervention, Sangama Collection. QAMRA Archival Project at NLSIU. Accessed March 12, 2022.
- 30 14, Crisis Intervention, Sangama Collection. QAMRA Archival Project at NLSIU. Accessed March 12, 2022.
- 31 Name changed.
- 32 Renzo Marchini, *Cloud Computing: A Practical Introduction* (London: BSI, 2010), 8.
- 33 Further, data protection and privacy legislations in different countries define archives and archiving efforts differently and to which extent they come under the principles of privacy by design, for example the EU's General Data Protection Regulation 2018 and India's Personal Data Protection Bill 2019.
- 34 Sangama is a human rights organization based in Bangalore that works for the rights of working class queer people, sex workers, and people living with HIV/AIDS.
- 35 "Crisis intervention" is a term borrowed from Sangama, which refers to the NGO's involvement in providing emergency aid (legal aid, assistance at police stations, protection of individuals when necessary, human rights counsel) to queer individuals who find themselves in conflict with the state, police, society, family and other individuals.
- 36 Crisis files, hereafter.
- 37 First information reports (FIRs), charge sheets, witness statements, statements by the accused, testimonies, court orders, medical certificates, photos of injury, post-mortem reports, cemetery reports, letters, police endorsements and police reports.
- 38 T.L. Cowan and Jasmine Rault, "Onlining Queer Acts: Digital Research Ethics and Caring for Risky Archives," *Women and Performance: A Journal of Feminist Theory* 28:2 (2018): 7.
- 39 Michelle Moreavec, "Feminist Research Practices and Digital Archives," *Australian Feminist Studies* 32 (2017): 188.
- 40 Ibid.
- 41 Sarah E. Chinn, "Queer Feelings/Feeling Queer: A Conversation with Heather Love About Politics, Teaching, and the 'Dark, Tender Thrills' of Affect," *Transformations: The Journal of Inclusive Scholarship and Pedagogy* 22:2 (Fall 2011–Winter 2012): 124–131.
- 42 Paraphrased from 'people whose belongings have become collections.' Bethaney Nowviski, *Speculative Collections* (2016).

- 43 Michel Foucault, "The Statement and the Archive," in *The Archaeology of Knowledge & the Discourse on Language* (New York: Pantheon Books, 1972).
- 44 Antionette Burton, *Archive Stories: Facts, Fictions, and the Writing of History* (Durham: Duke University Press Books, 2006), 6.
- 45 Jacques Derrida and Eric Prenowitz, "Archive Fever: A Freudian Impression," *Diacritics* 25:2 (1995): 18.
- 46 T.L. Cowan and Jasmine Rault, "Onlining Queer Acts: Digital Research Ethics and Caring for Risky Archives," *Women and Performance: A Journal of Feminist Theory* 28:2 (2018): 2.
- 47 Trans-Feminist-Queer.
- 48 T.L. Cowan and Jasmine Rault, "Onlining Queer Acts: Digital Research Ethics and Caring for Risky Archives," *Women and Performance: A Journal of Feminist Theory* 28:2 (2018): 7.
- 49 Ibid., 6.
- 50 The Indian Penal Code enacted in 1860 and the Criminal Tribes Act of 1871.
- 51 T.L. Cowan and Jasmine Rault, "Onlining Queer Acts: Digital Research Ethics and Caring for Risky Archives," *Women and Performance: A Journal of Feminist Theory* 28:2 (2018): 7.
- 52 Antionette Burton, *Archive Stories: Facts, Fictions, and the Writing of History* (Durham: Duke University Press Books, 2006).
- 53 Ibid., 16.
- 54 Kareem Khubchandani, "Cruising the Ephemeral Archives of Bangalore's Gay Nightlife," in *Queering Digital India: Activisms, Identities, Subjectivities* (Edinburgh: Edinburgh University Press, 2018), 87.
- 55 Refer to: www.digitaltransgenderarchive.net/about/policies
- 56 Michelle Moreavec, "Feminist Research Practices and Digital Archives," *Australian Feminist Studies* 32 (2017): 191.

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15 Jewish Calcutta, Recalled

Lessons From Building a Digital Public Memory Resource

Vinayak Das Gupta

* * *

Introduction

Sometime in 2014, through a set of serendipitous events, I came to work on a project titled *Recalling Jewish Calcutta*. The project aimed to document the lives of the Jewish people in the city of Calcutta through the creation of a digital archive. This project is an example of one of the early digital public memory projects in the country; it brought together a wide set of collaborators – independent scholars, institutions, academics, students, and, of course, the wider public. This chapter attempts to trace the development of this project and locate the pedagogical moments that I – then, a doctoral student – encountered in the production of this resource. One could identify many points of learning in a project such as this: from learning how to build and maintain digital collections (the technical aspects of creating a project such as this) to working effectively with individuals across different continents (collaboration in scholarly activity); all that may be learnt from the undertaking of this project is, perhaps, too great for the scope of a single book chapter. This chapter will, then, describe three specific moments that may illustrate some of the larger concerns and learnings from such an endeavour. The first describes the need and the value of digital collections; what I, specifically, attempt to show is a form of *openness* that may be located in such activity and how that, in itself, is a valuable lesson. The second would attempt to discuss a concern at the heart of digital humanities: in our new technological paradigms, there is a fraught relationship between the user and the maker. I will attempt to show my own transition from a user of electronic resources to the maker of digital repositories. The third locates the fragility of digital projects and the need for greater infrastructural support; while this is not a new concern, it is, nevertheless, important to underline the long-term significance of such activities. To provide a satisfactory account of these moments, it is important to describe how this project came to be, the actors involved, and the manner in which the work in the project was conducted; this should

aid the reader in understanding the specific context within which these lessons were learnt.

Background and Significance

In 2014, my doctoral supervisor, Professor Susan Schreibman, was on a visit to Calcutta for a conference at Jadavpur University. During her visit, she met Professor Amlan Das Gupta, Director of the School of Cultural Texts and Records,¹ Jadavpur University, at the time, and, after a visit to the synagogue in Calcutta, Ms. Jael Silliman, an independent scholar working on the history of the Jewish community in the city. Ms. Silliman's attempts to recover and document this history had an urgent need: at the time this project was conceived and developed, only 26 members of the community remained in the city; many had emigrated from the city leaving only traces of their presence. Professor Schreibman, a pioneer of public, digital humanities projects, encouraged Ms. Silliman to consider putting together a digital archive of objects and stories collected from the community. She felt that a digital archive had the potential to have greater reach than any other form of publication. Professor Schreibman enlisted the help of the School of Cultural Texts and Records to aid the process of archiving and digitization. She asked me to curate the digitized material and to build a repository that could store and display these objects. This was crucial learning for my doctoral work on digital collections; the work I did for this project was considered in lieu of an internship that I was required to complete as part of my structured doctoral programme at Trinity College Dublin, Ireland. Over the course of the next year, I would work closely with Ms. Silliman and a group of scholars at the School of Cultural Texts and Records. Ms. Silliman, the primary investigator in this project, collected a remarkable number of artefacts from the wider community and facilitated the recording of a wide range of material for the production of this archive. My role in this project was very specific: it involved the attribution of metadata to artefacts, to curate public-facing digital exhibits, and to build an electronic repository to house the project. After careful consideration, it was decided that the project would be built on Omeka, an open-source web publishing platform for scholarly resources.² This decision was based on ease-of-use and the long-term usability and extensibility of the project; my contribution to the project was time bound (as part of my doctoral work) and the content management system required easy upload and modification for those who would work on the project after I had left.³ Omeka, at this time, was gaining significant traction amongst the Digital Humanities community; several important, academic projects were using the Omeka platform.⁴ To create this resource and to make an informed choice, I had to study alternatives to Omeka. This process allowed me to gather an understanding of web-based publishing platforms – a crucial understanding for anyone working in the digital collections space.

Digital Collections, Openness, and Value

Recalling Jewish Calcutta was one of the early digital public memory projects in the country. However, it was by no means the first: for instance, *The 1947 Partition Archive* and the *India Memory Project* had already shown the potential of public memory projects.⁵ *Recalling Jewish Calcutta* was following in those footsteps. The formation and development of these projects signal two things: the first is the inadequacy of public memory institutions to house the kinds of material that these projects collected. Digital collections⁶ produced by scholars (independent and affiliated to academic institutions) built with artefacts that could not or would not be housed within the archives and museums of the day. Melissa Terras (2010) identifies the growing trend in the creation of amateur online museums, archives, and collections, as examples of how individual endeavour may influence traditional memory institutions in creating useful, interesting repositories. The second would be a growing interest and desire in developing thematic collections within the scholarly community for the larger public. This advent of web-publishing platforms and the need to create accessible public resources may be seen as the causes for this. Digital Humanities has also played a significant role in generating interest and expertise in this field both for scholars and for the public.⁷ As early as 2004, Carole Palmer, in her writings on thematic research collections, emphasized the importance of a coherent aggregation of digital content. While all thematic collections are digital in format, their importance may be traced to the manner in which they can be inspected, fostering better research. The finely indexed digital catalogue allows excellent search and retrieval functions, while the structured content of the digital object provides new means of investigation for the purposes of research. Thematic collections follow the basic premises of organization used by libraries, museums, and archives; however, they tend to provide more ‘specialized microcosms’ (Palmer, 2004) that are of interest particularly, to the scholarly community. The collaboration between collection professionals and scholars provides curated content that stands up to different forms of inspection (when set against traditional methods) using digital technology. The core idea behind *Recalling Jewish Calcutta* resonates strongly with both Palmer’s and Terras’ writings. The material in the thematic collection is closely tied to the process of inquiry; the methods provide a transparent view of the scholarship that is embedded within the collection.

Beyond the value of thematic, digital collections for academic and scholarly communities, it is now widely accepted that these kinds of projects have significant value for the larger public. In his study, *On the Origins of Greek Thought*, Jean-Pierre Vernant (1984) suggests that the polis existed only to the extent that a public domain had emerged, in each of the two differing but interdependent meanings of the term: an area of common interest, as opposed to private concerns, and open practices openly arrived at, as opposed to secret procedures. He invites us to view the of the formation of the polis in

terms of a new kind of openness, the state in which knowledge becomes the common property of the city, exemplified for instance in the transition from the spoken to the written forms of law, and the emergence of public forms of worship in place of the secret knowledge of cults and sacred individuals. The argument moves our attention from democracy as a system to democratic as the involvement of larger and larger populations in the knowledge economy. My engagement with *Recalling Jewish Calcutta* gave me a better sense of how this idea of disclosure, democratic knowledge, and openness operated across different spheres. The output of academic work, especially in the humanities, has traditionally been in the form of monographs and journal articles. Access to these continues to be limited creating a barrier between knowledge production and dissemination. Public-facing projects disclose material that is, perhaps, beyond the purview of public institutions and bring together the scholarly community and the wider public. The meeting of these two groups (which was and should never have been distinct or separate) creates a new sense of openness where our commitment to ‘democratic’ knowledge is renewed. We may find evidence of this in the generosity of the public in contributing to this project.⁸ Over the course of the years, this project collected hundreds of artefacts that record the Jewish history of the city. The project started with the personal collections of Rabbi Ezekiel Musleah, Ilana Sondak, and Ken Robbins – prominent members of the society. However, as a result of Ms. Silliman’s enterprise many members of the community contributed photographs, oral testimonies, and objects to the archive. This collection began to take an eclectic shape: it contained, for instance, photographs of Rachel Sofaer (better known by her screen name, Arati Devi) who acted in silent Bengali cinema. Photographs by Esmond David Ezra, paintings by Esmond Abraham, installation art by Gerry Judah, recipes by Mavis Hyman and Flower Silliman are only some of the many kinds of objects that entered this collection. The contributors were not limited to people from the city of Calcutta; members of the Jewish community from around the world began to send in their memories of the city for safekeeping in the archive.⁹ While it was a challenge to curate the number and types of objects, it truly gave a glimpse into the lives of the Baghdadi Jewish community in the city. The curatorial flexibility that is afforded to these kinds of projects allowed for all of this to be documented and stored for public consumption. My participation in this project taught me the need for public-facing scholarly work and the danger of academic silos.

Despite the relative success of this project, there was another lesson that I learnt: while this was a valuable resource for the community, it was afforded little value as a scholarly resource by academic institutions. My work in this project and other Digital Humanities projects has never really counted towards academic credit. Scholarly value in academia – I can only speak about the Humanities – is afforded to specific forms of scholarly output – the monograph and the journal article. At this time, academic institutions have no way of assessing the value and significance of projects (in a quantitative

sense) such as these. Value is attached to, perhaps, the grant that brings in a project or to the position one occupies while conducting their work; projects don't count towards scholarly output in national research frameworks. Academic Performance Indicators (API),¹⁰ as designed and institutionalized by the University Grants Commission (UGC) in India, considers research output under specific categories: publications – journal articles, book chapters, text/reference books, and subject books – are considered to be markers of academic performance (2013). The observant might notice that electronic resources are not considered as publications. Projects with specific grant values may be considered as research output; however, work on projects (where the researcher does not hold a grant, or where the grant belongs to another individual) is not considered within the purview of this framework. *Recalling Jewish Calcutta* was, initially, not funded; my work on this project does not fall under any of the categories listed under the Academic Performance Indicators. Does this mean that one shouldn't participate in this kind of collaborative work? I feel that this kind of work relies on the generosity of people. This form of altruism extends from the public who contribute digital surrogates of their artefacts to the scholars who work on these without adequate recognition for their work. The lesson here is that the production of resources such as *Recalling Jewish Calcutta* is a vital contribution but necessarily those that benefit the contributing scholar. For this kind of work to continue it is imperative for national frameworks to recognize and reward (in a quantitative sense) contributions made in this domain.

User and the Maker

The last two decades have seen exponential growth in digitization activities carried out by galleries, libraries, archives, and museums (often referred to as the GLAM sector).¹¹ This has made electronic resources available to scholars around the world, specifically to those who might not have physical access to these institutions. Scholarship, today, is largely dependent on the availability of scholarly journals, books, and other primary sources in electronic forms. South Asian scholars have benefitted from this digital turn; what was not accessible before might now be available as electronic surrogates. Scholars in the humanities have, largely, been users of these kinds of resources. The rise of digital humanities and digital collections mark a turn in the fundamental activity of the new humanities scholar; scholars working in the field have produced primary resources for scholarly engagement. This shift from the user to the maker is a journey that many of us, working in the field, have recognized. The activity, historically the domain of the GLAM sector, is now of interest to the humanities scholar, fuelled by the growing recognition that the availability of primary resources will result in excellence in humanities scholarship. Most scholars, today, are creators of electronic, scholarly objects; articles, essays, and monographs written on word processors are effectively digital artefacts. However, we might not, necessarily, think of these scholars

as digital humanists. The reason is located in the nature of the object created. My own work on *Recalling Jewish Calcutta* marks this moment in my own journey as a scholar. The world wide web provides a publishing platform that (theoretically) provides free and uninterrupted access to primary sources. This mode of self-publication is a remarkable, technological shift from earlier paradigms of publishing.¹² However, the questions of and concerns about how and what it is that one is creating, persist. In retrospect, I see my work on *Recalling Jewish Calcutta*, not as that of a technologist, but as that of a creator and a curator. This dual act – that of fabricating a resource and that of arrangement and attribution for the sake of cognizability¹³ – is, for me, at the heart of what it takes to be a maker. We are no longer mere users; we are now those who create so that others may benefit from this work. This is afforded through an understanding of the nature of digital collections, of collection as activity, and of curation as that which makes the collection accessible.

The transition from user to maker, as mentioned earlier, requires two forms of learning for the digital humanist: the first is the technical knowledge required to build these resources. This activity requires learning programming languages, understanding data structures, and working with standards and best practices. The second requires the channelling of expert knowledge – which has always been the domain of the humanities scholar – into data formats that are machine-accessible. My own transition from a user to a maker followed these learnings. While working on *Recalling Jewish Calcutta*, I had to become familiar with content management systems (CMS), and web-based programming languages like Javascript and PHP. This learning had to be done outside formal, institutional structures;¹⁴ while I had some understanding of these languages and systems, I learnt its nuances while participating in this project. Learning by doing is at the heart of this process. The curatorial aspect of this project was fuelled by my own research on digital collections, on memory projects, and memory artefacts (which would later feed into my doctoral thesis).

Fragility of the Digital

In 2021, *Recalling Jewish Calcutta* became inaccessible; the website was hacked, and the data was corrupted in the process; the recovery was unsuccessful. What you might find today, if you were to visit the website, is a static page with an index of what it once contained.¹⁵ In a moment, a decade of labour was erased from existence. This is the true danger (and perhaps the most important piece of learning for me) of producing electronic resources. The survival and longevity of these projects are some of the major challenges faced by the maker of these resources. One might be able to locate a part of this issue in funding models and funding agencies. Digital projects may be self-funded or built through public or private grants. Grants are time bound and can provide for the upkeep of a project for the duration of the grant: in

the best of circumstances, this is about five years. How does the resource survive beyond its funding years? There is no definitive answer to this question. Once again, we are faced with a question we have encountered before: was it worth the work?

If the digital project suffers from the threat of erasure, it lends itself to a remarkable range of access methods. For once, research within institutions can be disseminated to a wider audience. The manuscript, the shellac disc, the printed book, and the photographed image can finally move out of their dusty shelves and embrace a wider audience. Digital technology offers a solution to many problems of recording – in terms of affordability and reproducibility. That which is placed within the digital domain, though convenient, is in no way indestructible. In fact, its survival is threatened at a heightened form in this form. Neither the media nor the equipment used to read the media can be expected to last very long. In the last 20 years, technology has run through at least five popular storage devices – from the five-and-quarter-inch floppy disk to the compact optical disc and through to the flash memory drive. The pressure of technological advancement has also rendered obsolete most of the equipment used to read these storage media. In a relative understanding, the physical object is unchangeable, permanent. As we contemplate the future, we might be reminded of the fascinated horror of the angel of history in Walter Benjamin's famous description. 'His face is turned towards the past . . . [b]ut a storm is blowing from Paradise' (1969, p. 249) relentlessly driving him into the future so that he cannot stop and try to piece together the scattered rubble of the past. What Benjamin's angel sees is in fact the present condition: 'This storm drives him irresistibly into the future, to which his back is turned, while the pile of debris before him grows toward the sky. What we call progress is this storm' (1969, p. 249). The depressing awareness of this spectrality of being is inherently imbued within the digital domain. Though much effort, energy and money are spent on the topic of digital preservation, one only has to look at the significant body of dead archives on the Internet to realize the difficulties involved. These dead archives still exist on the Internet, but there is no access to them. The digital collection, at least the one presented with this piece of writing, is in no way a preservation project – to make such a claim would be deeply disingenuous. *Recalling Jewish Calcutta* was a memory project or, perhaps, a recovery project that did not attach itself to a single institution for safekeeping. It was a valuable, independent project that wanted to remain as one.

One might claim that if the project were to be housed in an institution, it might guarantee its survival. This claim would be false: what I am alerting the reader to is the lack of infrastructural support for digital projects in the country. If one is to continue to work in the production of these resources (which benefit a wide audience), certain safeguards are required. Institutional guarantees for the protection and preservation of digital resources need to exist if one is to value this work. No such guarantee is provided by Indian institutions. I can think of the threat of survival faced by the School

of Cultural Texts and Records despite conducting pioneering archival work over the past two decades. Their collections of digital objects are remarkable; yet they have received no institutional or state support in the recent past to continue their work. What happens to the terabytes of archival material produced by them? How do we justify the decades of labour, if only to lose them through a lack of support. Is the answer, then, to continue with a self-funding model or through contributions from the community? Or, perhaps, we might consider placing the collection behind a paywall in order to fund its upkeep. We might remember that the *1947 Partition Archive* was recently moved to the Stanford University servers and is now behind a paywall; there is no free access to this resource, now, even if it was produced through altruistic means. This is not intended as a slight on the makers of this project; rather, it is the reality of digital projects in this country.

A solution to this problem may be seen in the Digital Repository of Ireland – a state initiative to house and preserve all digital data in Ireland.¹⁶ This initiative gives the scholar confidence that their labour has both the recognition from the state and the safeguards that their work will be preserved and beyond the funding years of the project. To imagine and design such a system for India would require effort and resources: however, it is essential to have that conversation today if we are to grow the potential of humanities scholarship in the country. I am not sure that there is an easy solution to this problem; however, the concerns need to be highlighted in order to foster the environment within which problems may be addressed.

Conclusion

In my own journey, from a doctoral student to the member of the faculty at an Indian institution, *Recalling Jewish Calcutta* provided several moments of learning. Some of these lessons were learnt while engaging with the project; some became visible as I reflected on the project, many years since my participation came to an end. While I have explored three different aspects of this pedagogical journey, I am sure there are many more that could be discussed. Having had the opportunity to think about it, today, I am left with a specific lesson – one that has shaped me as a scholar. Digital collections, at least the ones that I have discussed here, are meant for the scholarly community and the wider public. To produce such a resource requires a will in the order of generosity. I, once again, return to the question of worth and value: if one receives no quantitative, academic merit and if one cannot guarantee the survival of the object, why would a rational being engage in this work? The only reason, for me, to pursue this kind of work is because I see value in it. To make primary resources available, to involve the public in (academic) discourses, and to bring forward the image of a community willing to share and learn together, are of great importance to me. If the production of knowledge is always in the service of society, projects such as these become the mirror in which we can observe the best of what human beings have to offer.

Notes

- 1 The School of Cultural Texts and Records is located within Jadavpur University, Calcutta. They have been engaged in digital archival projects since the beginning of the century. They house several important digital collections from Bengal and the rest of India. They have one of the largest collections of North Indian classical music in the world (about eight thousand hours of digitized music). They also house *Bichitra*, a variorum edition of Rabindranath Tagore's complete works. Apart from these, there is a wide range of smaller collections of endangered cultural artefacts for public viewing at the School. For more information on the collections, see School of Cultural Texts and Records (2023).
- 2 Curiously, Omeka brought together professionals from memory institutions and academics. To read about the intersection of libraries and public-facing digital collections, see Juliet L. Hardesty (2014).
- 3 On the advantages of using Omeka for digital collections, see L. Rath (2016).
- 4 In 2014, Omeka had been used in two large Digital Humanities projects in Europe: the first was *Transcribe Bentham* and the other was *Letters of 1916*. These public-facing, digital humanities projects were key in my understanding of public humanities and the importance of digital collections.
- 5 Stephen Browne (1995) defines public memory as 'a shared sense of the past, fashioned from the symbolic resources of community and subject to its particular history, hierarchies, and aspirations.'
- 6 Digital collections are the consequence of systematic digitization initiatives by libraries, museums, archives, and academic institutions. For more on the value and impact of digitization, see Hughes (2011).
- 7 It should be noted that, today, Digital Humanities includes the work done in memory institutions such as galleries, libraries, archives, and museums. The distinction that I am drawing here between academic work and memory institutions is to emphasize the historical difference between these spaces. For more on the connection between cultural heritage institutions and digital humanities, see Chris Alen Sula (2013).
- 8 I have tried, elsewhere, to gauge the reasons for public participation in these kinds of projects; while the reasons for the participation are specific to each project, an underlying spirit of generosity is observed across the entire spectrum (Schreibman et al., 2017).
- 9 One might see this as an example of crowdsourcing. For an account on crowdsourcing for cultural heritage, see Terras (2015).
- 10 Academic Performance Indicators (API) is a quantitative system used by the University Grants Commission to assess academic performance. It is used by public universities for recruitment and promotions.
- 11 The building of collections has, traditionally, been the domain of the GLAM sector. Collection professionals are trained to handle, curate, and preserve cultural heritage objects. The production of digital resources by these institutions points to the demand for accessibility.
- 12 The growth of the World Wide Web as a publishing platform has created new opportunities for scholarly work. This shift has brought with it several challenges in scholarly publishing.
- 13 The attribution of metadata is one of the fundamental tasks of the curator. This metadata allows the digital object to be visible, searchable, and accessible.
- 14 Digital humanists who have moved from traditional humanities disciplines are not, usually, formally trained in computational work; this competence is usually gathered through an interest in programming and sustained through work on projects.
- 15 The website may be accessed at <http://jewishcalcutta.in>.

- 16 The Digital Repository of Ireland (DRI) is a national digital repository for Ireland's humanities, social sciences, and cultural heritage data. For more, see www.dri.ie/.

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16 Unveiling Digital Narratives

Understanding (In)visibility and Resistance of Adivasi Women From Jharkhand

Lipi Bag

* * *

Course Correction of Representation

Anthropologists have mostly reduced the identification of tribal¹ women's work, rights, and issues to the problems of witch-hunts, socio-economic deprivation, and poverty encapsulating the vices of illiteracy. While substantial work has been done in defining the generalized role of tribal women under customary laws and their socio-economic status, very little is known about their participation in resistance struggles.

These struggles of the Adivasi community have a long history that is linked not only to the modern Indian state, which includes colonial and now national aspects, but also to the contemporary discourse of "indigeneity."

Despite their continued efforts to resuscitate their culture and participation in struggles to forge an Adivasi identity, it is this same political and social standing that Adivasi women lack within their own community and the larger nation state. Sharmila Rege, an Indian sociologist, has expressed her thoughts on women activists from the Dalit and Adivasi communities who, despite being doubly marginalized, are displaying extraordinary courage in opposing the government's unsocial and discriminatory moves against their community members. It is precisely this unwavering determination of these Adivasi women that this research argues for despite the constant invisibilisation of their work.

The objective of this chapter is to explore the reasons for Adivasi women's lack of visibility in political, social, and leadership spaces by identifying the gaps in historical documentation and the manner in which these gaps are being addressed by indigenous women participating in physical and digital resistance spaces in contemporary times.

The history of the Adivasi communities may only be remembered for three to four generations. Besides that, mythology has a tendency to consume it. Furthermore, especially for women, there are no written records. Only folklore and recollections survive as oral history for them. Political and economic history are frequently emphasized in both history and historical methodology.

An examination of gender discourse, on the other hand, is severely lacking as a method of comprehending tribal cultures. Govind Kelkar and Dev Nathan observe that the participation of tribal women in anti-colonial movements such as the Santhal Rebellion of 1857 or the Kol movement, was that of a ‘helper’ (Kelkar and Nathan 150–154) to their male counterparts. Shashank Sekhar Sinha also recalls women’s active participation in rebellions during the anti-colonial movements that swept the Chotanagpur region. However, specific gender issues appear to have been veiled in these struggles. He discusses Adivasi widows and daughters and their experience with insecure rights, which led them to challenge dominant discourses within customary law in order to obtain land rights. However, if one reads about Phulo and Jhanu’s actions during the Santhal Rebellion, one will notice that, assisting their brothers, Sidhu-Kahnu, the two sisters used arms to defend their community. According to tribal folklore, they killed 11 British soldiers during the rebellion. At about the time Britishers were establishing their rule in the Chotanagpur region, many Adivasi women from Jharkhand supported the Birsa movement, and yet in contemporary discourse only Birsa Munda is revered as an icon of resistance in the space of Jharkhand. So much so that he has even been elevated to the position of Birsa Bhagwan, Birsa the god.

Similar to this was the story of Kaligi Dai and Sanagi Dai, two brave Oraon women of the Chotanagpur plateau. Researcher, and assistant professor of history at Saint Xavier’s Ranchi, Anjum Oseema Toppo, clarifies in her interview that in her own field research, she extensively found folk narratives about the picking up of arms by women during their resistance to the Turks. This then becomes an assertion of their resisting identities.

In her essay “Jani Shikar and its Contemporary Relevance” Toppo employs the method of incorporating various folk songs and poems which express the resistance of the Oraon women. Yet Toppo also expresses that these documentations are based on suppositions. She also asserts how the celebration does not explicitly change everything for women putting them on an equal footing in all spheres to their male counterparts in terms of political or economic rights, however it does create a space for negotiation and acts as a reminder of the power of women.

Vasavi Kiro, a journalist and an Adivasi women activist, has historicized the identities of these women from Jharkhand’s historical resistance movements in the form of a booklet. However, that publication was not without its own share of injustice for Vasavi. Ramnika Gupta Foundation did not obtain her permission before publishing. Vasavi claims that she wanted to work on some minor errors in the document, but her suggestion was turned down, and the publication published it anyway. Her book, which was published without her permission, demonstrates how Adivasi women are exploited in neocolonial academic spaces for appropriating their struggles. The forward to her book was previously written by K. S. Singh. In her revised self-published edition of her book, while the cover has Singh’s foreword, Kiro herself writes the author’s introduction.

Unlike Birsa Munda, Jaipal Singh Munda, and Tilka Manjhi, on whom many books have been written, the narrative of Phulo Jhanu's resistance lacks record keeping. Kiro's work then appears to be the only documentation that bridges the gap of Adivasi women's historical invisibility. Our initial exploration itself shows us that historically women have been invisibilized under the imaginative swashbuckling of Adivasi men, which refute such assumptions. This brings us to realize that there is undoubtedly a gap in the documentation of women's active participation in struggles and resistance in larger movements, as well as in their daily lives.

In an attempt to critically evaluate this concept of this gap, especially the contemporary Adivasi politics of state of Jharkhand by interrogating the role of women activists like Dayamani Barla, Vasavi Kiro, Jacinta Kerketta, and Rajni Murmu amongst others, I will be taking the Netarhat Field Firing Range Protest in Jharkhand as a starting point of exploration, to ask the question, how the modes of resistance have been marked by a shift in modes of articulation within physical and digital spaces and whether in the larger discourse, the participation of women in the movement has since increased for these Adivasi women?

Theory

My ethnographic accounts of women leaders and activists yielded a theory of understanding feminism and how neocolonialism affects them in this post-colonial world for my analysis. The key terms which would be explored in the process are the concepts of visibility, mobilisation, and space within the social, cultural and political discourse. We will be analysing the concept of (in)visibility mostly through the paradigms of cultural invisibility and political invisibility. For analysing the digital texts on Facebook, such as posts, comments and tweets, I will be using Critical Discourse Theory as a method, and focus on the theoretical understanding of the key term context. Critical Discourse theory incorporates the idea of critical discourse analysis, which I have further used for conducting my textual analysis with reference to power relations and the usage of language for oppression. The research draws upon multiple research methods consisting of analytical reviews of published and unpublished material, available in the public domain like primary and secondary sources written by all these Adivasi women who are the 'texts' of my research, including books, interviews, newspaper reporting, pamphlets, lectures in various places, YouTube videos, social networking pages, and their blogs. Historical documents and books from Tribal Research Institute, Ranchi, Jharkhand, also provided a way for collecting accurate data concerning the various Jharkhand movements, both historical and contemporary. Adivasi communities have been subjected to multiple forces of change in recent years. In these communities, a syncretic cultural tradition has emerged, as has an interactive process of adaptation and adjustment. Without a doubt, tribes' perspectives on their ways of life are shifting. Field research allows

you to study people responding to changes from their points of view (Rajiv Gandhi University 114). I also visited the space of resistance for collecting field notes and conducting interviews with women leaders. Critical ethnography, as a method, played a significant role in conducting my research, for it allowed me to understand the space and the culture of resistance within a community with diverse perspectives which unfurled newer ideas for my understanding. My motive with its own limits of privilege, has been to step in research as a “critical ethnographer [who] also takes [the readers] beneath surface appearances, disrupts the status quo, and unsettles both neutrality and taken-for-granted assumptions by bringing to light underlying and obscure operations of power and control” (Madison 5). The ethnographic fieldwork for the exploration of women’s issues of invisibility in leadership positions or autonomy in these movements and spaces was conducted over a 10-day period primarily in Ranchi district of the Indian state of Jharkhand in east-central India through a combination of participant observation and interviews with activists – and the chapter will primarily relate its arguments and empirical findings to this geographical context.

My research stems from the positionality of a ‘non-Adivasi’ or ‘diku,’² so, it is important for me as a researcher to address my reservations while discussing Adivasi women’s issues. Through this chapter, I hope to address the pertinent issue of ‘speaking for others’ (Alcoff 1). On the one hand, my position of privilege disempowers me in ways that I have never had to go through the struggles and experiences that Adivasi women go through when negotiating with caste-based societies. Nonetheless, my position as a feminist from the state of Jharkhand empowers me to speak out about women’s issues emerging in that space. According to Linda Alcoff, a “speaker’s location (which I take here to refer to their social location, or social identity) has an epistemically significant impact on that speaker’s claims and can serve either to authorise or disauthorise one’s speech” (7). As a result, it is important to recognize one’s own location and be conscious of the power of language that one uses when speaking for others and when speaking to others. Through this research, I have attempted not to appropriate the experiences of Adivasi women, with the hope to find newer ways of understanding the nuances.

The question of accessibility of space for women in the Netarhat protest site was also a matter of lingering concern in terms of sanitation. Although the number of women participating in the resistance movement was way more than that of men, the accessibility for them in the space remained marginal. There were no toilets or bathrooms near the protest site. Each and every one was supposed to defecate in the open itself. The small school which organized the food for the protestors also did not have the bathrooms for utility. In such a scenario, senior leaders were taken to the homes of nearby local leaders, however the mass was left to fend for themselves. Defecation for men in public has always been much easier than for women. This then brings out the question of space which thereby also restricts the visibility of women in terms of participation.

In the political space of gathering or mobilisation, Adivasi women appear to be secondary citizens, as we observed through this particular exploration. Like Aloka Kujur's³ observation, Elina Horo⁴ attests to this understanding of women leadership. While they are vastly different from Dayamani Barla's assertion of the women's position, seeking the individual identity of woman's autonomy, this difference cannot be overlooked. Working in the same geographical space, does not necessarily garner the same reactions to political participation is what I as a researcher have understood. This difference between understanding of women's rights with respect to political participation, representation, and mobilisation can be read as a separate school of thoughts. Here I employ Amrita Basu's understanding which separates feminism from women's movements as oppositional articulations.

Traditional expectations in Jharkhand Adivasi communities reinforce stereotypical gender roles, which may pose as a deterrent to individuals seeking to achieve their personal aims. The concept of community as a whole then always takes precedence over a woman's individual identity. Notwithstanding, a lack of space and visibility in physical mobilisation leads to the establishment of digital spaces of representation and resistance.

Example

Understanding that there are other social and political discourses that impact upon the production, consumption and interpretation of social media, I shall explore the posts of two Adivasi women of Jharkhand who have attempted to voice their resistance by using social media as a tool, creating alternative spaces and modes of resistance for Adivasi women, in this chapter. Looking at the cultural production of resistance through the various modes of articulation through digital mode, in this case the social media, I want to bring forth the intersecting issues of criticism, domination and structural violence that Adivasi women face whilst using this tool for resistance. In addition, I will also explore the ways in which the modes of resistance changed, and what has enabled these changes. As there seems to be a certain visibilisation of marginalized communities and their issues, by the use of social media as a tool for assertion, the questions that immediately come forth as the core of such resistance are the following: (1) What drives these visibilized identities? (2) Who engages with this new form and mode of resistance discourse? (3) Does the production of content for such engagement entail works of only the marginalized groups or members? (4) How do Adivasi women emerging from gender and state oppression use social media to define, and defend their politics, developing individual identities as women and to establish their voice in the community, and the nation at large. The scholarship on resistance spaces of women have always been limited, wherefore it becomes even more important to understand the nuances of double marginalisation and visibility of Adivasi women in digital spaces, like the social media.

Adivasi women have been resisting state oppression as a community, and individual oppression in a patriarchal society. Throughout history, their role in movements, their issues, and their voices have been marginalized and invisibilized, which I shall note as double marginalisation. Their struggle of moving from an oppressed identity to defining their resistance through various modes and spaces thereby has been an uphill battle. On 7 January 2022, Rajni Murmu, assistant professor of sociology in Godda College, was sent on forced leave by the university administration. The reason for this is a Facebook post made by her, wherein she contextualized how a cultural festival Sohrai, which has roots in Adivasi rural spaces, earlier enabled Adivasi men and women to share the same space for exercising liberty. However, post-urbanisation, such festivals have now turned into spaces wherein often incidents of molestation of girls occur during the festival. In this post, she gives an example of SP College, Dumka, by sharing the photo of the invitation pamphlet of the said college. Post this, some students from SP College created a ruckus in the college campus, which made the Sido-Kanhu University administration, the university she taught in, squirm under pressure to give into the demands of the protestors, and sent Ms. Rajni on forced leave on 1 February, 2022. It has been several months since she has not been allowed to teach in college.

Social media has often been used as a means of representation. It is what Paulo Gerbaudo calls a tool for ‘citizen journalism.’ It has become a means for people to practise resistance as a collective action. Along with Rajni Murmu I will be looking at the voices of women like Jacinta Kerketta writing solidarity posts for them, and the hurdles that this particular mode of resistance faces. More often than not Adivasi women face discrimination and oppression from multiple power structures – upper caste as well as other Adivasi men. In this particular case, we see how their resistance faces criticism within their own community, especially the men. Adivasi women’s use of social media for resistance, despite its limited visibility, is taking small steps toward a larger cause. To begin to understand the social media post of Rajni Murmu as resistance to patriarchal manifestations within the community, followed by the immediate reaction that followed through, we first need to understand and establish the context of the issue within this discourse.

Context

The context is always crucial in a discourse of production and interpretation. It is on the basis of context, one determines the meaning of any texts, which leads further to decision making, and choices of support or rejection. “Considering context means that we try to understand how and why texts are produced” (Kelsey and Bennett 40), while Brown and Yule note,

The task is to determine what we can know about the meaning and context of an utterance given only the knowledge that the utterance

has occurred . . . I find that whenever I notice some sentence in context, I immediately find myself asking what the effect would have been if the context had been slightly different.

(Brown and Yule 35)

In Murmu's case we see two specific contexts through which one could look at her social media posts on Facebook – the situational context and the cultural context.

The situational context in this scenario would address why Rajni Murmu is making the post in the first place. From an initial reading, it appears that in a specific setting Murmu herself might have come across situations, or has heard of such incidents pertaining to the violation of Adivasi women. The cultural context comes into play because she uses a cultural event, an Adivasi festival to present her argument. What is most important here is that the community practising the festival would have the most intricate understanding of the references she formulates, however what we observe is her articulated speech has been extrapolated in a rather non contextual manner. If one were to read the comments on her and Jacinta's posts, we notice how removed the interpretations of the male audiences have been. The fact that Murmu speaks about a change in the execution of the festival, and does not critique the festival itself, is completely absent. The central issue of her argument, which is the harassment and discomfort that women face in such festivals, was ignored both by the protesting students and eventually by the authorities. FIRs were slapped for hurting community sentiments. Context then becomes supreme for someone outside the community reading this post, vis-a-vis the comments. The interpretation of the texts seems to be ideologically motivated too. Let us take the example of 'The Lallantop,'⁵ a contemporary Hindi news and media portal, popular for their non-conventional use of language which has covered this news. Amongst the rare sources which has given space to this issue, under their section 'OddNaari.' The Lallantop.com, one could argue, has covered all aspects, and even tried to reach out to Rajni Murmu herself. However, the context here too seems to be agenda driven, wherein the publication wants to garner more views, instead of elaborating the issue at hand. The very first line of her Facebook post, "Sohrai, the biggest Santal festival in Santal Pargana, is celebrated with distinguished splendour," itself addresses that the Sarhul festival has become a matter of controversy. The narrative gets decontextualized through the reporter who frames his news by beginning how this festival encourages such incidents, again like those accusing Murmu about demeaning the festival by commenting on her social media. This is a fine instance wherein the politics of language in a discourse is also at play. Suppression of women's voices on the one hand and suppression of cultural identity as a 'problem' of the community itself on the other is reflected in such circumstances. The post in the latter half talks about Rajni's position in the matter of harassment and is not a comment on the festival, but this seems like a deliberate attempt to begin

with maligning the community festival or at least means to divert attention from the actual issue at hand.

Power Relations Within the Discourse of Resistance

This incident throws light on the issues of power relations that appear through reading of online texts, which here have been misinterpreted because of the misreading of the social context. Some writers like Anuj Lugun, who is a popular poet from Jharkhand in their solidarity post for Rajni Murmu, on 20 January try to fill this gap by noting,

Rajni Murmu has not made any derogatory remarks about Sohrai Parab or disrespected the cultural significance of the festival. She has not said anything objectionable about the tradition of Sohrai Parab. In fact, she herself participates in that great festival. She has only questioned the criminal instincts which occur in the college in the name of organising that great festival and expressed concern over the safety of Adivasi girls.⁶

Yet this contextualisation receives minimal attention, both from the men protesting and from the institution. I only make reference to the role of men with the assumption, from the comment sections, and the statements of male students given to news channels. One of the complainants, Shyamdev Hembrom told *The Print*, Hindi,

Is it appropriate to gather applause by telling the world about the evils of our society? In such a situation, how should our society be proud of Rajni Murmu's achievements? If any such incident has happened in SP College, then they should have sat and discussed with the organisers. The respect of our community should not have been demeaned in front of the world. That's why we have demanded her dismissal.

As Fairclough suggests that the concept of critique in a discourse is to assess what exists, and what should exist on the basis of a coherent set of values (Fairclough, *Critical Discourse Analysis* 7), I look at the position of the Adivasi women Rajni Murmu and Jacinta Kerketta. The popular opinion with regard to Adivasi women is that they exercise more freedom in comparison to women from caste societies. However, the college institution exercising power to restrict her from teaching under the garb of 'forced holiday,' suggests otherwise. This then highlights the "gap between what particular societies claim to be ('fair,' 'democratic,' 'caring,' etc.) and what they are." (Fairclough, *Critical Discourse Analysis* 7)

This statement by one of the complainants given to , Hindi, also highlights the issue of whitewashing the wrongdoings of one's own community, especially those of men. It's just like families trying to protect an abusive relative

under the hush-hush, out of fear of embarrassment in society. The question that then arises is whether a woman's position even in Adivasi communities is that of an equal, as it appears to be in popular claims or writings of intellectuals and scholars.⁷ The voice of Rajni Murmu here seems to have irked many, which resulted in people protesting against her. This common-sense assumption of the male students, and men commenting on Murmu's post is defined by particularities of ideological choices.

Language of Abuse and Violence

The power within the structure is reflected in the use of language as a mode of violence against the Adivasi women. The online trolling, bullying, and name calling of Rajni Murmu, and to some extent of Jacinta, can be looked at as forces used to stop women from giving opinions, by labelling them as 'pseudo feminists' or 'trying to fetch some limelight.' (Some of the comments by men on each of their posts read in the same manner.) Jacinta clearly conveys this bias within Adivasi society through her solidarity post for Murmu. She writes,

Her remarks have pricked the core of the patriarchal society. Young student leaders from Santhal community want to make sure that women like Rajni Murmu should never dare to criticise henceforth, so they are strongly demanding her removal from the job. This is for every woman who has her own point of view and who wants to speak her mind . . . The Adivasi society has not learnt to take criticism.⁸

Jacinta, Facebook

She also addresses the issue of gendered reactions to Murmu's post. She asserts that had it been for any Adivasi man speaking about the same issue, in the same manner, the Adivasi society would have praised them for their wisdom, and support.

Meanwhile, the resistance to the call for dismissal, and solidarity posts for Rajni Murmu is a marker of "critical consciousness of domination and its modalities" (Fairclough, *Language and Power* 4). Murmu also has given some interviews to various digital media sources wherein she asserts her position, while at the same time noting how her co-workers have also questioned her morality in an abusive demeanour. On the other hand, the power at display by the official institutions is more coercive in nature. The disciplinary power exercised on Murmu by making her sign the document speaks volumes about the nature of this power. This helps us to consciously understand this relational aspect of language and power, and "particularly of how language contributes to the domination some people by others" (Fairclough, *Language and Power* 4). This 'unequal encounter' wherein Murmu and the institution are presented as opponents is pertinent to the discussion of power relation.

The Digital Witch-Hunt

Adivasi women have often been labelled as witches in physical resistance spaces. There have been many cases which were observed wherein Adivasi women have been subjected to oppression and violence, which have been severe like lynching. Rajni Murmu's post also has enabled trolls and mostly men, with whom the post has not gone well, and they have restored to calling her a 'dayan' or a witch as we popularly understand the term. Responding to this, Murmu after a few days posted newspaper cuttings⁹ of cases of witch-hunting within Jharkhand, addressing the seriousness of such terms. To understand this phenomenon of name calling, one has to dive deeper into the history of silencing of women with such labels. It is not an isolated event wherein Rajni Murmu is subjected to such structural oppression. The word 'witch' has many cultural connotations, which have concerning implications. So even in a modern context, and technologically advanced social media channels, this regressive violence through language is rooted in ideas of women oppression. Here again, the theory of context can be used to look at the idea of such labels. Murmu has also been targeted by some people who have urged for her 'samajik bahishkar.'¹⁰ This phenomenon of oppressing women by attacking the societal relationship she shares in a social pace through this digital attack with use of structural violence reflects almost the never-ending cycle of patriarchy. Women in such situations are assumed to be easy targets, as noted by Jacinta. Interestingly, many YouTube channels have posted catchy phrases to attract attention to the language used for suppressing these women. The usage of words like witch, indecency, and illegitimate in the captions of these YouTube channels are inspired from the language usually by used local folks against women voicing their opinions within the community. Additionally, when Murmu's unsuccessful appeal to the institution, with her written apology, did not deter the institution from removing her, she took her apology back. This has then garnered considerable support from other women, and men, including lawyers who are ready to fight her case. She reposted the content as a mark of dissent on 2nd February. #WestandwithRajniMurmu got some attention, at least in the Facebook circle. "Resistance will always entail dissent, and thus this element of solidarity, although dissent need not always entail resistance; they are entwined, if not identical" (Hands 14). We witness the sense of this solidarity through the supportive comments and posts by women on the Facebook profile of

AuQ16 Murmu. Anjun Lugun, Jacinta Kerketta, –

This solidarity also highlights how the community is looking itself within the age of digital resistance. Had this text been circulated in print, or had been opined in physical resistance space, it would not have garnered such attention, within a short span of time. One can effectively understand that social media can help garner attention to the causes, because mainstream media ignores the issues of the Adivasi folks. Even though new English channels haven't covered it, Hindi news portal, YouTube videos by people from

the community and outside have amassed traction in digital footprint. Every single reposts from any member of the community, especially that of women with minor or no following suggests that they believe in their voices to be heard. In some sense, these are instances of personal documentation, which is reaching wider spaces in the digital world. This then becomes a scope for marginalized voices to be at the forefront. This paved the way for online forums within the community circle for conducting sessions on Adivasi women's position in Adivasi society. This also had been shared by Murmu on her timeline (only one report)¹¹ Earlier it might have taken days for the coverage, especially of such resistance which the mainstream English media always happens to marginalize, but the digital world is indeed providing space for the marginalized Adivasi women's voices.

Jacinta Kerketta: Posting Resistance

Jacinta Kerketta today stands as one of the most vocal and determined women from Jharkhand, who not just uses her power of poetry, but also her digital wall of Facebook to put across her unpopular opinions which does not always sit well with many in the community. At the same time, her popularity because of her social media tractions too surprises other leaders. In the Netarhat Protest, one male leader sarcastically questioned her about how she garners so many likes on her social media posts and even though they too articulate well on social media, they are not as popular. "We are sometimes jealous."¹² To this Kerketta, in a light-hearted manner, replied, "Oh I hope you are always envious. This will help me write better and grow!"

Perhaps, the conversation in and of itself is just another humorous exchange, however, in between these lines lives a tone of surprise and astonishment. The sheer surprise is because no one in the community perhaps had expected a woman poet to have such larger-than-life digital presence. This very divergence of Kerketta away from the normal is what makes her social media posts an object of scrutiny. However, Jacinta's approach to writing the unpopular is poetic. If one were to read her real-life experience within the community, where she faces regular challenges for thinking or articulating differently, one would find a sense of critique which provides a scope for improvement, and not just sheer criticism.

In one of her Facebook posts dated 15 January 2022, Jacinta opines how the politics of religion ruins villages, and the people come to realisation only when it is too late. Her articulation could be interpreted as a direct strike on religion, highlighting the issues that it propagates, but there is some essence of feminine understanding of solidarity that she expresses within that post. Her depiction of female resistance through the concept of laughter is peculiarly unique. She writes,

How religious politics destroys villages, people do not understand right away. However, time teaches everything. . . . A village where there is

a remembrance of tragedy, but also life and women's laughter. The stove still has a glowing remnant of fire. They are gathering them in an attempt to save heat in their lives. People say that just as rain water does not survive on the mountain, neither does grief in the lives of the forest and mountain dwellers. Women laugh at their sorrows and embrace the everyday battle of life.¹³

It is rather courageous of how she deals with such a sensitive topic like religion, and moulds it into an evocative piece which speaks volumes about women's solidarity in smaller village circles. Her penning down of life narrative and experiences give hope to an entire upcoming generation of women who wish to be vocal about issues pertaining to their community, whilst forging a sense of solidarity in the same breath.

Conclusion

The analysis and interpretation of this study through the contexts of visibility, space, and mobilisation reveal that, while some of the gaps in representation of Adivasi women have been filled by activists on the ground and on social media, cultural hegemony and media scrutiny continue to have a strong impact on reinforcing stereotypical gender dynamics for these women. Men continue to dominate political spaces, while women remain in the crowd for support. We also observe that when some Adivasi women take it upon themselves to resist patriarchal custom and male dominance by voicing their opinions, they face severe backlash and criticism within the community itself. "[I]nterests and identities themselves are formed within structural, political, and cultural contexts, and their mobilisation occurs in reaction to and is facilitated by these (pre)conditions" (Ray and Korteweg 52).

On the other hand, as the research unfurled, we noted that other women activists like Aloka Kujur, Rajni Murmu, and Jacinta Kerketta highlighted and spoke about the gap of representation, and the struggles of Adivasi women within the community. They stand in their own individual capacity trying to assert their right within the collective of the community. One of the arguments which comes forth from such deliberation is also that the Adivasi community too has been impacted by the neo-colonial discourse, and capitalism. This reality is different from their imaginations of the Adivasi community which previously existed.

Appendix: An Interview With the poet Jacinta Kerketta¹⁴

Having analysed the poems of Jacinta Kerketta in the personal capacity of looking at the double marginalisation of Adivasi women, their struggle for recognition, and language as a tool for expression of their resistance, I wanted to take a step ahead and also include the perspective of one of the poets whose poems I have worked on. The poems were referred from

the book ‘Angor’ published by Adivaani Prakashan, Kolkata. This interview brought forth a new light for looking at the poems. I am extremely grateful to Jacinta Kerketta for taking time out for this email interview.¹⁵

Interviewer: “To begin with, I wish to understand your views from the perspective of an Adivasi woman poet. Do you feel that you view things differently than other male poets or writers?”

Jacinta: “As an Adivasi woman, there’s surely a difference in the writing. The sentimental perspective of a woman, when looking at everything, is what makes her writing different. Even a man has the power of looking from the viewpoint of a woman that exists within them, but that depends on their experience, vision and emotions that they go through in life. Oftentimes, a man does not fully understand a woman. They have a specific gaze, and that gaze is limited by the conditioning of a patriarchal society. Therefore, that gaze is prominent in their work. In such a scenario, a woman’s plight, their pain, their strength, their vision, eludes those male writers because of that very lack of experience. This is why when a woman writes, she unfurls new ideas, new viewpoints and a new world, which provides a certain depth to her work. Hence, it is important for women to write.

Being an Adivasi woman, I feel that my work definitely provides something varied, new and from a different perspective for the readers, which is different from those of what Adivasi men write. I feel the woman’s story, without looking at the world from her viewpoint or understanding the world around; will not do justice to the work. It would be difficult to maintain consistency. For achieving the purest emotions, male writers need the gaze of a woman, which is why in my other collection, ‘Jaado ki zameen,’ I have written a poem, “half woman,” wherein I have illustrated and spoken of the existence of half woman inside a man. If the existence of a woman inside a man is missing, then they can never be allies in the woman’s resistance, and their struggle. Those that have the half woman remaining in themselves can participate in the assertion of the rights of women, and support them in their fight by pushing their male identity behind, thereby creating space for women to progress. I look at it this way.”

Interviewer: “Looking at your poems, “Band Darwaze” (closed doors), “Jamuni Tum Ho Kaun” (Jamuni, who are you?), it feels as if, even inside the Adivasi community a woman is forced to occupy the marginalized position, and is a victim of excessive anguish and pain. Are there any such personal experiences, which your poems are reflective of?”

Jacinta: “Many Adivasi communities are patriarchal in nature. You should know this. Even in matriarchal societies, somewhere it is mostly the men who have the last word. Despite the women being strong, the men try to keep the reins of control in their hands, is what I have come across in conversations with women from matriarchal set up. Inside Adivasi societies, though the Adivasi women seem to be more independent than most alleged mainstream women folks, this independence however, rather becomes a constraint. Agriculture in fields is not possible without the women folk. Carrying woods from the forest, grazing the goats and of course the household work; none of them is possible without them. Stepping out from the boundaries of home may seem liberating at a distance but this too is their compulsion. And there is no compromise here.”

“Without doing these chores, the house wouldn’t run, the stomachs would not be fed. The oppression and pain of the alleged mainstream women finds its place with poignancy on television, radio and newspapers, but the society which considers a woman a second class citizen, they don’t seem to recognize or want any social change or progress. That is how the beauty and pain of these women is used to run the market, the benefits are drawn. The poem, “Jamuni tum kaun?” addresses the core of this social mindset and mentality. Who is that woman who appears in newspapers and television? Is she the same Jamuni that she appears to be in the real world? Are her problems really being addressed in existing life, as it is being shown on the television? Who is she exactly? This poem is not just a personal anecdote about me or some individual woman. This is the life lived by all women is what I have felt. As a woman myself, I have indeed experienced it myself. Does a woman’s personal life ever remain her own? It becomes the life of many women, their lives, pain, stories which merge.”

Interviewer: “In your poems, there’s a vivid description of the oppression against Adivasi women. In the poems like ‘Sirhane ka Suraj’ and ‘Sindoor ka Rishta,’ one finds you questioning the Adivasi society as well as the Dikus⁵. Can you elaborate a little on that?”

Jacinta: “As a poet, my primary lens might be that of an Adivasi society, but my poems are about all human beings. As a poet my background may be from an Adivasi society but all my poems are about humans/people. My poems include not only Adivasis but all types of people. Patriarchal roots are embedded in Adivasi communities also. Condition of women in the non-Adivasi community is far worse. In the poem ‘Sirhane mein Suraj’ or ‘The sun rising by the bedside’ it is explained how when an

Adivasi person becomes a part of a market learns its trickery/ploy. A Pahadiya Adivasi person, after learning about his daughter's illness, comes down to the market and asks his relatives for money. As soon as he gets money, he turns towards a liquor kiln. This is degradation of values among Adivasi communities. When Adivasi women come down from the mountain to the market, they are victims of rape. However, if they are ill among their people, they are left helpless. Financial constraints also make people harsh."

"In the poem 'Sindoor ka Rishta' or 'The Vermilion Bond' the life of women between relationships are depicted. The social structure regarding marriage. No matter how much rot there is in it, a woman keeps showing her marriage as a happy married life by applying vermilion on the outside. She keeps proving her matrimonial relationship with a man who violates her, inflicts violence on her, and exploits her in marital life. But a woman is never able to get out of this social structure of marriage. She quietly maintains the illusion of everything being fine by applying vermilion and accepting her situation. It is the compulsion within her. There are many forms and dimensions in which women are exploited in patriarchal society. The same forms are discussed in the poems."

Interviewer: "Apart from resistance for water, forest and land there is an illustration of Adivasi women's revolution in your poems like 'Mere Haatho ke Hathiyaar.' Can you throw some light on this?"

Jacinta: "In Adivasi communities, Adivasi women take active part in campaigns to save their water, forest, land. Whenever there is dislocation most affected groups are women and children. Adivasi women take a firm stance along with their children in these movements. Sometimes you may find them carrying their child on their backs into these movements. While women are away fighting for their own and their younger generation's rights their children take good care of their homes. They grow up seeing their mothers, sisters, going away to fight for their rights. Moreover, one day they too are able to understand the intention, motive, and cause behind those movements. They realize the struggle they face as an Adivasi community. This is a story of many children who have grown up watching their mother struggle for their rights in and out of their home. This poem brings alive their reminiscence. In Adivasi communities, women are deeply attached to their land because they are closely related to forest and agriculture. She is engaged in agriculture throughout her life for food and maintenance of her family. That is why whenever there is even a hint of destroying

them all, she plays a very powerful role in those movements. This brings out their strong personality. These women talk to their children about their struggle and its importance. She speaks about the struggle of her ancestors and narrates the children about their responsibility in the coming times.”

Interviewer: “In your poetry book, *Angor*, published by Adivaani, which poem is the best commentary on the struggle and resistance of women? Is oppression and political identification an important aspect for writing such profound poems or is imagination enough for achieving that depth?”

Jacinta: “The poem, ‘Mere Haatho ke Hathiyar’ is the most empowering which portrays the role of women in protest poetry. ‘Jamuni Tum Ho Kaun’ talks about the oppression and exploitation of women in the market from a far-off country to within one’s own. I think that a woman poet should have as much political understanding as a man does. She just cannot remain lost in the world of imagination and her dreams for writing poetry. On the surface of reality, a woman’s life is a victim of the political decisions of men. Patriarchy is strengthened by both the state and religion. Politics also maintains a patriarchal framework. All these also become weapons for exploitation in the life of a woman, so a deep understanding of politics is necessary. Women are not allowed to understand all this. Be it by deprivation of education or in many other ways. As a result, women also play their part in maintaining the patriarchal society. To break this, a political understanding is necessary even within women to write is what I believe.”

Interviewer: “Finally, here is my last question. In your poetry, what is that thing about the language use, which distinctly distinguishes it from the non-Adivasi poets who also write on the Adivasis?”

Jacinta: “Reading my poems, the mainstream poets and writers always ask one question, “In your poetry, one is not able to guess the gender. You write as both a man and a woman. Why is it so?” In my understanding, no poet is bound by one single gender. One can express oneself through any form. However, my mother tongue Kurukh’s speciality is that in it, women can converse like both a man and a woman. This factor unexpectedly comes into play even in my use of Hindi language. For using Hindi as a medium, this is new information and with this their understanding and knowledge about Adivasi grows better. These are the few things, which make my poem different. Hindi has words from Kurukh language. For example, ‘Angor’ is a word from Kurukh. Additionally, these usages reflect a glimpse of Adivasi society. The Adivasi lifestyle, understanding and perspective then works itself into Hindi poetry. All of

these aspects of Adivasis weave into Hindi poems. This further evolves Hindi into a richer and fuller language. This is what I think.”

The interview helped understand the position of an Adivasi woman writer and her context of focus, which is primarily that of oppression against women, not just what is visible in mainstream media, but also those which are rarely spoken about. One of the most interesting takeaways was this popular image and notion of liberated Adivasi women working alongside a man. Jacinta has succinctly subverted this idea, and brings forth the core issues of the Adivasi women surviving under the umbrella of patriarchy.

Notes

- 1 I will be using the terms “tribal,” “Adivasi,” and “indigenous” interchangeably. I will be using “Adivasi” in more contemporary analysis. Though there are contradictions over the aforementioned terms, for the sake of understanding, I will be using the terms without delving into the politics behind them.
- 2 Diku in this context is an outsider, a non-Adivasi person.
- 3 Adivasi women activist from Ranchi.
- 4 Co-ordinator of Adivasi Women’s Network, Ranchi.
- 5 The *Lallantop* is Hindi news and media web portal funded by the India Today Group. Saurabh Dwivedi is the editor of this portal.
- 6 Translated by the author of this chapter.
- 7 For more information refer to ‘Women and Gender in the Study of Tribes in India’ by Virginius Xaxa.
- 8 *ibid.*
- 9 www.facebook.com/photo/?fbid=1081336709355011&set=a.355355001953189.
- 10 Social exclusion or ostracization.
- 11 www.facebook.com/sakhua.tribalwomen/videos/997179080876112.
- 12 I as a researcher was standing with Kerketta for tea when this exchange happened.
- 13 Originally the text is written in Hindi, which I have translated myself.
- 14 The interview was originally conducted in Hindi, which is the language fervently used by the interviewee, and was later translated by the author.
- 15 Interviewed and translated by Lipi, the author of this chapter.

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