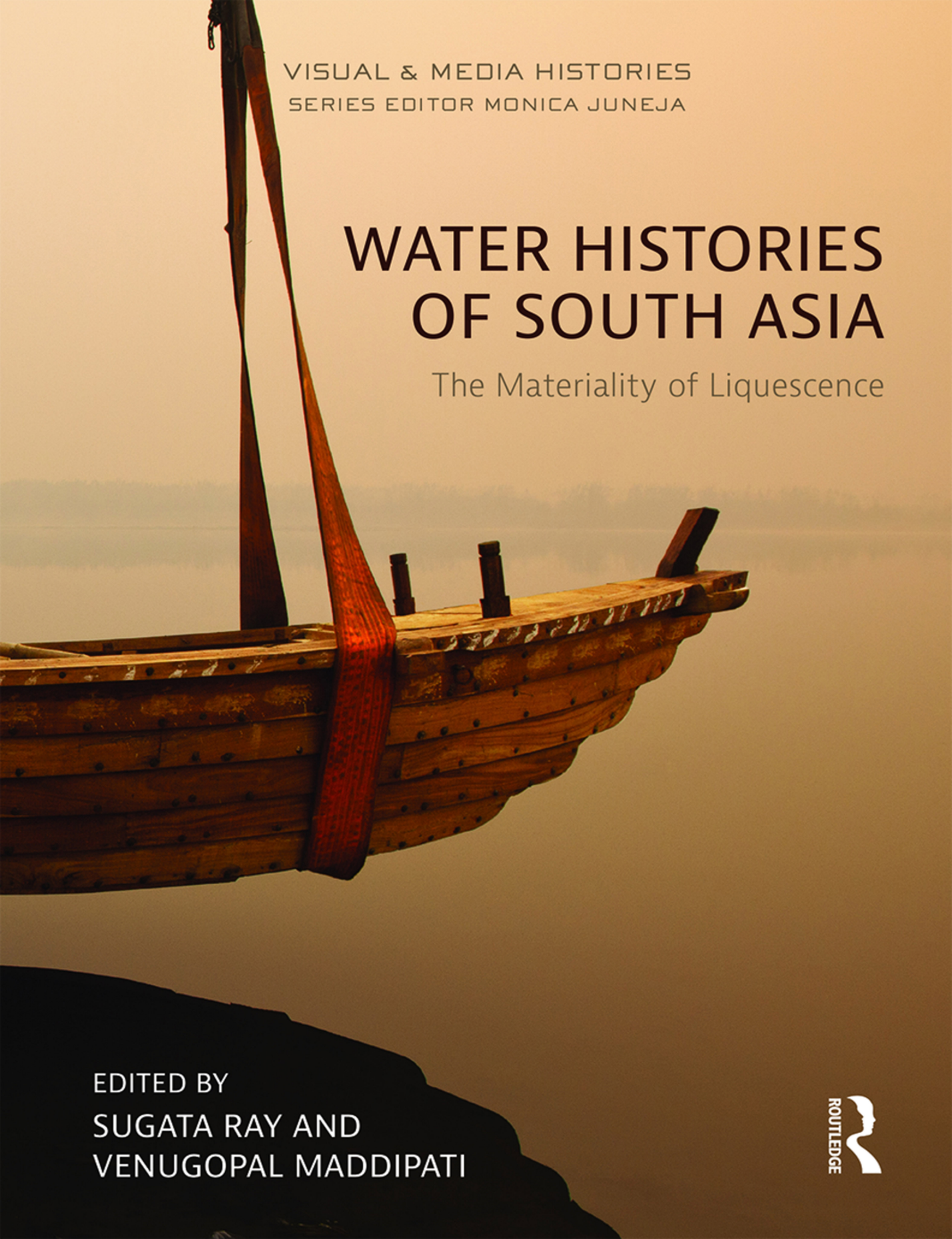
VISUAL & MEDIA HISTORIES
SERIES EDITOR MONICA JUNEJA
WATER HISTORIES OF SOUTH ASIA
The Materiality of Liquescence
EDITED BY
SUGATA RAY AND
VENUGOPAL MADDIPATI
ROUTLEDGE

Water Histories of South Asia

'This eclectic collection of essays attempts to capture an ineffable quality of waterscapes: that they shape imaginations and actions in ways both fluid and enduring. At a time when the challenge of climate change calls for creative cultural politics, this exploration of ways of seeing and being is all the more valuable.'

Amita Baviskar, Professor of Sociology, Institute of Economic Growth, Delhi

This book surveys the intersections between water systems and the phenomenology of visual cultures in early modern, colonial and contemporary South Asia. Bringing together contributions by eminent artists, architects, curators and scholars who explore the connections between the environmental and the cultural, the volume situates water in an expansive relational domain. It covers disciplines as diverse as literary studies, environmental humanities, sustainable design, urban planning and media studies. The chapters explore the ways in which material cultures of water generate technological and aesthetic acts of envisioning geographies, and make an intervention within political, social and cultural discourses. A critical interjection in the sociologies of water in the subcontinent, the book brings art history into conversation with current debates on climate change by examining water's artistic, architectural, engineering, religious, scientific and environmental facets from the 16th century to the present.

This is one of the first books on South Asia's art, architecture and visual history to interweave the ecological with the aesthetic under the emerging field of eco art history. The volume will be of interest to scholars and general readers of art history, Islamic studies, South Asian studies, urban studies, architecture, geography, history and environmental studies. It will also appeal to activists, curators, art critics and those interested in water management.

Sugata Ray is Associate Professor in the History of Art Department at the University of California, Berkeley, USA. His research focuses on the intersections among early modern and colonial artistic cultures, transterritorial ecologies and the natural environment. His publications include *Climate Change and the Art of Devotion: Geoaesthetics in the Land of Krishna, 1550–1850* (2019); *Ecologies, Aesthetics and Histories of Art* (coedited, 2019); and essays in journals such as *The Art Bulletin*, *Art History* and *South Asia: Journal of South Asian Studies*.

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Visual and Media Histories

Series Editor: Monica Juneja, Heidelberg University

This series takes as its starting point notions of the visual, and of vision, as central in producing meanings, maintaining aesthetic values and relations of power. Through individual studies, it hopes to chart the trajectories of the visual as an activating principle of history. An important premise here is the conviction that the making, theorising and historicising of images do not exist in exclusive distinction of one another.

Opening up the field of vision as an arena in which meanings get constituted simultaneously anchors vision to other media such as audio, spatial and the dynamics of spectatorship. It calls for closer attention to inter-textual and inter-pictorial relationships through which ever-accruing layers of readings and responses are brought alive.

Through its regional focus on South Asia, the series locates itself within a prolific field of writing on non-Western cultures which have opened the way to pluralise iconographies and to perceive temporalities as scrambled and palimpsestic. These studies, it is hoped, will continue to reframe debates and conceptual categories in visual histories. The importance attached here to investigating the historical dimensions of visual practice implies close attention to specific local contexts which intersect and negotiate with the global, and can re-constitute it. Examining the ways in which different media are to be read onto and through one another would extend the thematic range of the subjects to be addressed by the series to include those which cross the boundaries that once separated the privileged subjects of art historical scholarship – sculpture, painting and monumental architecture – from other media: studies of film, photography and prints on the one hand, advertising, television, posters, calendars, comics, buildings and cityscapes on the other.

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Edited by Sugata Ray and Venugopal Maddipati

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Water Histories of South Asia

The Materiality of Liquescence

Edited by Sugata Ray and Venugopal Maddipati

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Foreword

In December 2008, when the city of Delhi came alive during the public art festival *48°Celsius Public.Art.Ecology*, the artist Sheba Chhachhi re-opened a long-neglected basement of the Delhi Public Library, making it public once more in the *Gestalt* of her work *The Water Diviner*. The immersive installation transformed the dark, dusty, damp space, once a colonial swimming pool and now a dump for broken furniture and stacks of unwanted books, into an imaginary underwater theatre that would trace the memory of water in the city back to premodern and colonial times. Descending into the darkness towards the sound of running water, the visitor entered an environment of oceanic blue light and black water pouring through the head of a sandstone lion fountain at the top of the stairs. Spots of light shining through screens illuminated open books and projected digitally reworked images from early modern manuscript folios, evoking a lost world of gardens irrigated by water channels, or of *gopis* bathing in a river. *The Water Diviner* tells a liquid tale of the Yamuna, imagined as a beautiful, sensual goddess that today lives on, in the words of the artist, as "a wounded female form";[1] the piles of books reaching up to the ceiling evoke a multi-layered way of thinking about the river – a goddess to be worshipped and a problem to be managed, a source of life and a repository of urban waste. Water has become a commodity in crisis. Can we recover personal and social ways of relating to it, as Chhachhi's practice does, by recuperating ancient iconography, myth and history to calibrate an enquiry into contemporary issues?

Water Histories of South Asia: The Materiality of Liquescence is an enterprise of a team of scholars, a curator and two artists that sets out to address these and more questions while probing the sedimentation of time and cultural memory through the medium of water. Water – life giving, elemental, with the force to devastate, vulnerable to death by industrial poisoning, a material to be managed, owned and regulated – has multiple faces, inconsistent moods and unstable textures that the authors delve into as they engage with a range of human practices that ascribed meanings to water and valorised its material and sensorial qualities. The contributions investigate those ordering activities of humans that make up the broad realm of "water management" in the past and present – hydrological engineering, riparian architecture, claims to own, harness or detoxify water as resource. In addition, they draw our attention to its incarnations as affective vision and sacred site, its power to make place, to solder citizen solidarities, to maintain a cosmological equilibrium, to prescribe an ethics of the everyday and the perennial human need to uncover its submerged, neglected wisdom. Both scholarship and art practice, in their connected yet distinct paths to creating knowledge, share a desire to recover a mythopoetics of water that appears magical in an age of looming anthropogenic disaster and in the process grapple with the unresolved questions that such an act of resignification of "nature" brings forth.

The editors of *Water Histories of South Asia* consciously locate the book in the emergent field of eco art history, whose contours the chapters they have assembled intend to sharpen. Eco art history is a sub-domain of eco-aesthetics, inspired by the philosophical currents of new or radical materialism, which argues for the agential quality of matter in a move to challenge the Enlightenment ontologies separating nature and culture. Taking its impulse from contemporary art, eco-aesthetics positions itself at the intersection of art production, politico-ecological theory and environmental activism. Driven by discourses of the Anthropocene, it promises new and radical ways of comprehending ourselves in relation to the more-than-human world. The call issued by the visual theorist T. J. Demos to "decolonize nature"[2] entails transcending human exceptionalism and viewing nature no longer as a source of endless bounty to be exploited, rather as a conjoined actor and producer of a shared world. Studies positioned in the scholarly domain of eco art history address the aesthetic strategies and the creative responses in artistic practice that ensue from such a perspective. How might "critical art" and the scholarly domain built around it contribute to fostering an alternative imagination of ecology that considers nonhuman agency?

The project of subjecting existing art historical methods and framing units to non-anthropocentric realignments challenges a discipline premised on the modernist ideal of artistic autonomy, one that valorises the agency of the patron or of the individual artist as the pinnacle of creativity. Such an undertaking is caught in a methodological paradox: given that artistic production is intrinsically anthropocentric, our access to the natural world, the domain of the nonhuman, takes place through a humanly configured medium and is governed by its protocols and conventions. The contributors to this volume respond to this challenge by seeking to enter this medium in ways that would enable questioning the grain of the discipline's explicit programme and undermining its modernist teleologies. The chapters all focus on sites in South Asia, a regional anchor that accounts for an eschewal of issues centring on Bruno Latour's eco-philosophy questioning a concept of the "natural" premised on Cartesian dualism.[3] Using water as a lens, they instead direct attention towards questions of justice, rights and political-cum-historical responsibility. By placing water at the unstable intersection of materiality and aesthetics, the chapters make it possible for environmentally animated artistic practice to relinquish an autonomous and exceptionalist positioning, and widen its parameters to encompass a broader notion of visual culture, together with forms of participation, phenomenology of sites and approaches culled from alternate archives and vernacular memories.

A further methodological challenge that the authors of *Water Histories of South Asia* grapple with is the matter of juggling time scales. The unmeasurable time of the Anthropocene can no longer be reconciled with the human-scale time; its planetarity is inappropriate for the study of artistic articulations. The editors of this collection posit the deep moving geographical time of Braudel's *histoire immobile* as a backdrop against which human time that structures the dynamics of empires, modernisation and mobility of people, commodities and capital unfolds. The individual case studies engage with the connectivity and relationality of the geological, vegetal and human in conjunction with other time scales – the social, historical, mythological, theological, political and, finally, microscales of the everyday.

The age of the Anthropocene is both a place of ecological foreboding and a site of memory nurtured by imaginaries of suppressed cosmologies. It can be represented only by evoking the now effaced pre-capitalist past that preceded it. In artistic memory, this past becomes an archive and a resource. Idyllic and pastoral waterscapes, now ravaged by modernity and uncontrolled urbanisation, come to stand for the destruction of locality, the loss of familiar cultural referents. How do we assess and recuperate this past, its narratives, its innumerable negotiations of the volatile divide between the human and nonhuman domains, while taking care to avoid the trap of a romantic, transcendentalist primordialism? An important contribution of this volume is its privileging of a *longue durée* that allows for a historical unravelling of systemic dimensions of pre-and early modern formations and their modalities of living with the instability, vulnerability, unpredictability of the biosphere. The chapters give us access to ontologies that preceded or bypassed those of the European Enlightenment, to their strategies of (re-)signifying and sacralising nature and place, of creating an ethics of the everyday – aspects that were all imbricated in issues of power, access to resources, conquest, migration in the labour of transforming barren land into habitable place and quotidian experiences of feudal/colonial/postcolonial servitude, compliance, sociability, solidarity and resistance.

Water Histories of South Asia provides many impulses to rethink the pedagogy of a discipline that has remained riveted for too long on the persona of the artist/patron as the sole source of agency and intentionality. Through the lens of water – as material and liquescence – it urges us to pay attention to contingency and instability as factors that make the essentially anthropocentric act of creating – images, buildings, narratives – an act of co-production.

Monica Juneja

Notes

1 Sheba Chhachhi, 'A River of Memories', *ArtAsiaPacific*, Issue 77, November 2011, http://artasiapacific.com/Magazine/77/ARiverOfMemoriesShebaChhachhi, accessed on 8 August 2018.
2 T. J. Demos, *Decolonizing Nature: Contemporary Art and the Politics of Ecology*, Berlin: Sternberg Press, 2016.
3 Bruno Latour, *Politics of Nature: How to Bring the Sciences into Democracy*, Cambridge, MA: Harvard University Press, 2004.

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This volume would not have been possible without the generous support of the Nehru Memorial Museum and Library, New Delhi, where the editors convened a conference titled Spaces of Water: New Paradigms in Ecocritical Enquiry in July 2014. We are greatly indebted to the community at Nehru Memorial, especially Indira Vancheswer and Nisar Kizhakkayil for their help in organising the conference. Our heartfelt thanks to the participants in the conference: Catherine B. Asher, Hannah Baader, Amita Baviskar, Atul Bhalla, Dipti Khera, Rila Mukherjee, Vasudha Pande, Suhas Paranjape, Madhav Raman, Gopa Samanta, Tamara I. Sears, Kavita Singh, James L. Wescoat Jr. and Tripta Wahi. Many of the participants in the Nehru Memorial conference contributed to this volume. Natasha Eaton, Malay Ganguli, Bishnupriya Ghosh, Atreyee Gupta, Padma D. Maitland and Partha Mitter responded to our invitation to contribute essays with enthusiasm. Our sincerest gratitude.

Over the two days of the Nehru Memorial conference, conversations continued over magnificent dinners hosted by Anagram Architects and Parul Dave-Mukherji. We are grateful to Madhav Raman of Anagram Architects and Dave-Mukherji for warmly opening their homes to us. For his generous help in organising the conference and for opening the conversation, we express our deepest gratitude to Mahesh Rangarajan, former director of the Nehru Memorial Museum and Library. We would also like to thank faculty at the School of Design, Ambedkar University Delhi, especially Jatin Bhatt, Jogi Panghaal, Suchitra Balasubrahmanyan and Abeer Gupta for their unstinting support. Monica Juneja, editor of the Routledge Visual and Media Histories Series, offered substantive encouragement and helped shape the contours of the book. Our sincere thanks also to Shoma Choudhury and Rimina Mohapatra at Routledge India for seeing the project to completion.

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1 Introduction

The materiality of liquescence

Sugata Ray and Venugopal Maddipati

The 18th-century textile reproduced in this book belongs, as it were, to an art history of movement, mercantilism and global commodity cultures produced and sustained by the flow of objects across vast bodies of water (Plate 1.1). Presently housed in the collection of the Victoria and Albert Museum, London, the intricately painted and dyed palampore would have been crafted between 1725 and 1750 in the Coromandel coast of south-eastern India to fulfil an escalating European demand for cotton.[1] The textile, however, was fundamentally transformed by water stains accrued over time. The exact words used in the museum's catalogue entry is "water damage".[2] Following its corporeal and chemical logic of flow, permeation and immersion, water, in other words, has left its obdurate trace on a textile that is all too often valued as a paradigmatic artefact of early modern maritime trade. Certainly, the museum is not wrong to record the fabric's structural transformation through material contact with water as "damage". Indeed, most often, we recognise such traces as flaws that somehow detract from or reduce an object's intrinsic value.

Yet, such traces, one could contend, also fall within the purview of art history. For even as maritime trade shaped the production of the textile in the 18th century, intractable interactions with a chemical compound of oxygen and hydrogen conditioned its subsequent material transformation. Can objects such as these then allow us to comprehend aesthetic systems and water systems as coterminous and intersectional? As a discipline, art history, of course, takes objects, structures and artistic representations produced by the human species as its principal archive and locus of analysis. Consequently, artists, their patrons and their audiences emerge as the primary agents in this history. But, might a renewed alertness to the natural environment, water accretions in this particular instance, realign the methods and methodologies of art history? What do we stand to gain from this realignment?

These questions are neither polemical nor fortuitous. Water, after all, has increasingly become a locus of political action in its own right. By 2008, water was already a global commodity with an emerging class of exchange-traded funds and water utilities stocks.[3] As the book was being conceptualised by the editors, over 100,000 low-income residents of Flint, Michigan, were exposed to high levels of lead in their drinking water due to deficient water treatment. By December 2015, Flint had declared a state of emergency. In the same year, farmers in Madhya Pradesh effected by the submerging of land due to an increase in the height of the Omkareshwar Dam launched a Jal

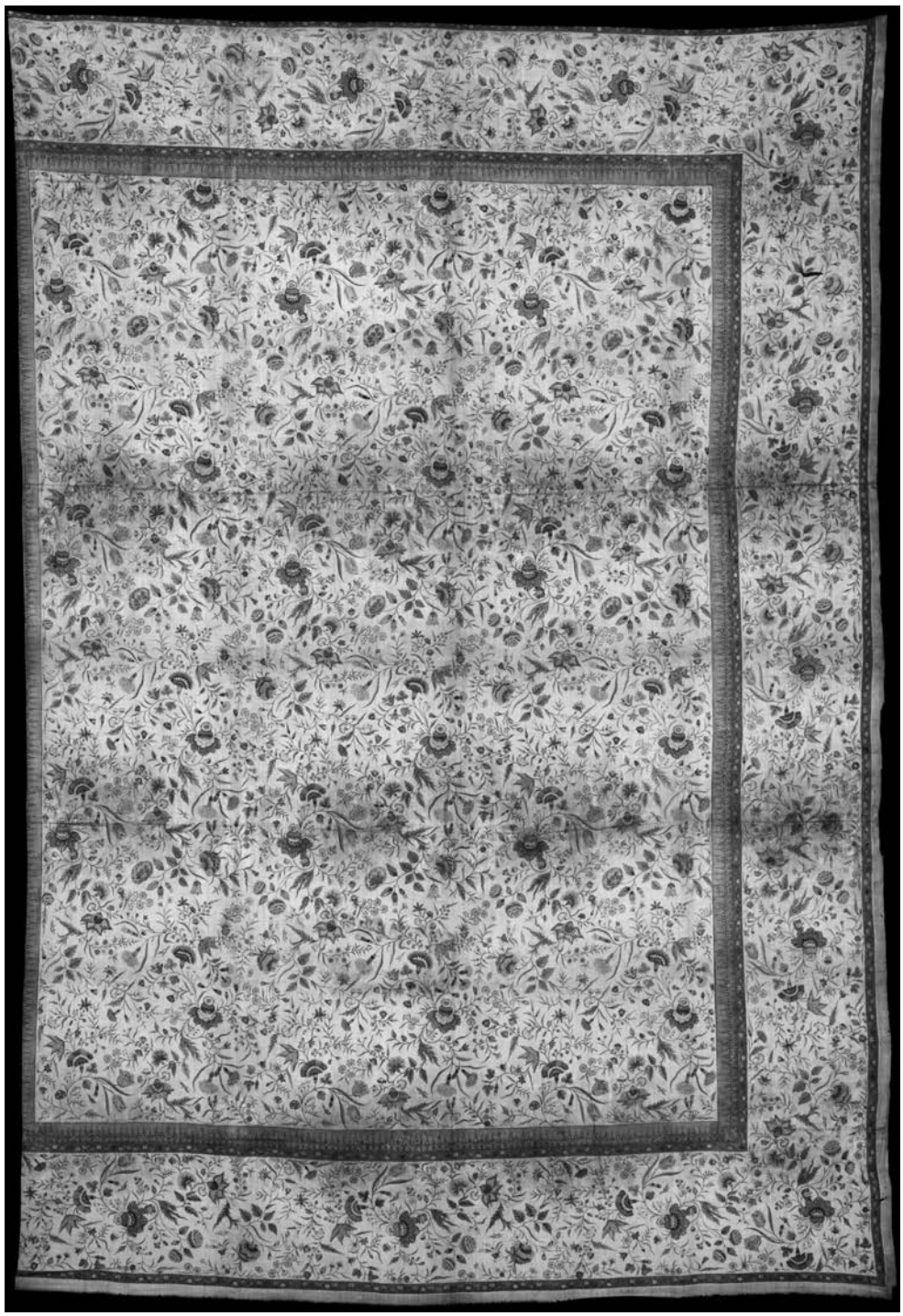

Plate 1.1 Palampore from the Coromandel coast, India, ca. 1725–50. Painted and dyed cotton chintz, 329 × 224.8 cm.
Source: Photograph © Victoria and Albert Museum, London, Acc. No. IS.33–1950

Satyagraha (non-violent resistance relating to water) by standing in waist-deep water for over a month.[4] As "water wars", to use the ecologist Vandana Shiva's words, erupted in India and the United States, among other locations, the United Nations declared that the world might only have 40% of its required water by 2030.[5] Environmental think tanks, non-profit organisations, activists and scientists have already begun to address the "water wars" that continue to rage in dispersed parts of the world.[6]

As we confront cataclysmic climate change and large-scale environmental degradation, artists too have engaged with the political ecologies of water. In the recent past, art projects such as *48°C Public.Art.Ecology* (12–21 December 2008), for instance, have sought to mediate in New Delhi's embattled ecological present through public installations spread across the city.[7] Rather than maintaining distinctions between the political, the environmental and the artistic, such interventions have offered ways of imagining the imbrications among the ecologies of the natural environment, human subjectivity and social relationships. What has come forth are new organisational systems that place water in an intrinsically interconnected field linked through an interweaving of the ecological and the aesthetic. By emphasising the materiality of liquescence, this volume aims to bring the emerging field of eco art history into the conversation.[8]

The book highlights the importance of water and its ecologies in the visual and spatial cultures of South Asia from the early modern period to the present. Put differently, the book addresses the centrality of material practices and aesthetic systems related to water in writing art and architectural histories of the subcontinent. While, at first glance, it might seem unfeasible, even incongruous, to link histories of the natural environment with histories of art and architecture, the book suggests that an eco art history becomes operative when phenomenological approaches can be reconciled with the material force of water. In turn, presenting water as a substance that is shaped by its contingent movement and ever-accruing integration into different experiences in different spaces and registers of the imagination can have significant implications on how we engage with the materiality of art and architecture.

Within the arena of water histories, the thrust of scholarship thus far has been directed towards an engagement with water as a product and effect of environmental governance.[9] But water also seeps into our cultural memory, historical consciousness and visual and material practices to fundamentally structure how we see, touch, feel, ingest and comprehend its form. Water, in short, is affected by the phenomenal world. Taking affect seriously, then, allows us to recognise the constitutive role played by performative cultures, spectatorial regimes and the materiality of objects and built spaces in shaping water histories. Taking affect seriously also allows us to return to the 18th-century Coromandel coast textile and (re)read it as fundamentally shaped by water. The palampore was indubitably an artefact of Indian Ocean trade, but one whose ensuing life was also materially shaped by water spilt on it. From the macrostructures of global trade spanning vast oceanic spaces to the microhistories of consumption, water, in all its messiness, leaks onto the textile, bringing together seemingly unconnected histories of production, circulation and use. Far exceeding its own physical confines, water, consequently, opens up diverse indexes of both the phenomenal and the noumenal in South Asia and beyond.

Liquid worlds

As a vital natural resource, water has always been intimately linked to political, cultural and aesthetic practices integral to sustaining life. We know that water connects oceanic littorals. But what forms of innovative practices did these connections engender inland, at a considerable remove from the ocean? We know that lakes and river systems connect land and water. But in what ways did the mobility of riverine flows impact the optics of riparian architecture? How were lakes suffused with cultural and political metaphors? These are only some of the questions that the book takes up. What comes forth from the chapters is an attempt to rethink both physical and representational waterscapes by excavating their often-neglected aesthetic dimensions. This, in turn, highlights questions of seeing, regimes of visibility, contested environments, the ethics of ritual practices and themes of purity and pollution, bringing to the fore new methodological possibilities that conjoin the environmental with material, visual and architecture practices. Despite the diverse themes, contexts and temporal periods addressed in the book, it is an engagement with the fluidity and flux of liquid worlds that shapes the intellectual focus of the volume.

Undoubtedly, there is a political urgency in writing such new histories. We only have to return to 17 May 2014. After a landslide electoral victory, the prime minister of India, Narendra Modi, stood by the river Ganga in the pilgrimage centre of Varanasi, Uttar Pradesh, to celebrate his success. "I will represent Varanasi in Lok Sabha & I look forward to this wonderful opportunity to serve Ganga Maa & work for Varanasi's development", Modi tweeted.[10] Surrounded by the media and zealous supporters, the Hindu nationalist demagogue co-opted the river's mythopoetic form as a goddess to shape a new iconography of right-wing conservative ecological discourse.[11] This was a carefully orchestrated visual spectacle to emphasise the Bharatiya Janata Party's purported custodianship of India's ecology and natural resources, drained here of density and reduced solely to the epistemology of a Hindu sacred landscape. Moving beyond such conservative and nostalgic fetishising of the natural environment, *Water Histories of South Asia: The Materiality of Liquescence* underscores how liquid worlds can never be contained within homogenous constructions of nature, culture or geoterrains.

The multiple frameworks and conceptual paradigms adopted by the authors reflect the multiple disciplines that the book also connects. This, for the editors, was a strategic decision and is of some significance today, when ecological thinking increasingly demands that the idea of nature itself be extracted from any stable transcendent concretisation.[12] In a time of anthropogenic climate change and massive human intrusions into our very conception of natural history, nature can no longer be visualised as a pure autonomous entity. Perhaps, it never was. The chapters in the book demonstrate that water both disperses and is made recognisable through an infinite array of perceptual, affective and material systems and registers. As Catherine B. Asher notes in her deliberations on water cultures in Muslim shrines in Chapter 8, until recently, water carriers in Delhi specialised in drawing water from particular wells in the city. Families would tell by taste from which well water was drawn and would only purchase their preferred liquid. It is necessary to be attentive to such gustatory distinctions. For they offer an understanding of water, and the natural environment more broadly, as variably construed through cultural, social and aesthetic

systems. An alertness to the inconsistent epistemologies of water, then, deracinates any attempt to contain it within singular ideological frameworks, nationalist or otherwise.

This volume is the first of its kind to foreground such strikingly inconsistent epistemologies of water. Previous efforts at historicising water systems, particularly from within the discipline of art and architecture history, have all too often given primacy to the essential elementality of water that ostensibly remains consistent in spite of its peregrination through diverse spatial, representational and conceptual environments over time. Rather than emphasising water as a transcendental and unchanging natural element, *Water Histories of South Asia* brings together case studies in which water is marked by its contingent movement through divergent imaginaries. At the same time, the transmediatic focus through case studies ranging from architecture, urban practices, painting, travel narratives, advertising and photography to geological imaginaries, oral histories and contemporary performance art further allows for a destabilising of the ontological solidity of water.

Tracing Liquescence

In the recent past, the development of a distinct field of environmental humanities has led to a significant body of scholarship that focuses on the ecological footprint of social, cultural and political practices in South Asia.[13] Much has also been written on water from disciplines such as history, sociology, environmental sciences, geography and political science. Scholars have investigated water infrastructure and access, governance and development, sustainability and hydro-engineering, public health and hygiene, among other themes.[14] But, arguably, a certain hydrothinking was internal to the disciplinary formation of the art and architectural history of South Asia. To recover the contours of this thought, one could perhaps begin in a transversal mode with the writings of Charles Lyell, the foremost geologist of the mid-19th century. In his influential *Principles of Geology*, Lyell drew attention to the manner in which "Oriental Cosmogony"– that is, narratives of genesis that the geologist traced back to the Vedas (ca. 1500–300 BCE) – could be reconciled with actual evidence of prehistoric floods.[15] As a geologist, Lyell's conviction in the palaeontological evidence of flooding emboldened him to bring together narratives of the creation of the universe from the cosmic water with the material world of accretion and deposits. "The remains of marine animals imbedded in the solid strata are so abundant", Lyell observed

> that they may be expected to force themselves on the attention of every people who have made some progress in refinement; and especially where one class of men are expressly set apart from the rest, like the ancient priesthoods of India and Egypt, for study and contemplation. [. . .] Those modern writers, who are disposed to disparage the former intellectual advancement and civilization of Eastern nations, may concede some foundation of observed facts for the curious theories now under consideration, without indulging in exaggerated opinions of the progress of science; especially as universal catastrophes of the world, and exterminations of organic beings, in the sense in which they were understood by the Brahmins, are untenable doctrines.[16]

Using William Jones' 1794 translation of the *Laws of Manu* (*Manusmṛti*; ca. 200 BCE–ca. 100 CE) as a foundation for his deliberations, Lyell identified Indic myths of the "submersion of land beneath the waters of a universal ocean" as the Oriental Cosmogony.[17] A geological and

palaeontological understanding of catastrophes related to water, then, became the means to speculatively corroborate the historicity of a cosmogonic knowledge of the natural environment. If, in the 19th century, the primacy of palaeontological evidence of water's peregrinations fomented conjectural forays into the historicity of an Oriental Cosmogony, an anti-colonial impulse governed intellectual departures in the early 20th century. Enter Ananda K. Coomaraswamy.

After graduating from the University College, London, with a degree in geology, Coomaraswamy's career began in the Mineralogical Survey of Ceylon in 1903. By 1905, his interest in mineralogy had been supplanted by a discontent with the rapid loss of indigenous cultures under colonial rule.[18] This discontent may have sparked an analogous interest in Indic cosmology and the place of water in it. About a decade later, Coomaraswamy, now an art savant, philosopher and a curator at the Boston Museum of Fine Arts, published *Yakṣas: Essays on the Water Cosmology*, a book that, in retrospect, becomes formative in the historiography of water symbolism in South Asian art and architecture.[19] Writing by the Back Bay Fens in Boston, Coomaraswamy presented a hydrogeological ground for the emergence of religious architecture in *Yakṣas*, a text that explored the allegories, philosophies and mythologies surrounding water through ornamental motifs, iconographic conventions and religious treatises.

What function did the *Yakṣas* serve within the terse terrains of the colonial world? Placing Coomaraswamy's 1928 volume within a larger intellectual history of thinking about water and architecture might be fruitful. The colonial archive, of course, is replete with administrative accounts, reports and writings that deliberate on hydraulics and architecture.[20] In stark contrast, Coomaraswamy traced the phrase "water cosmology", as opposed to what ought to have been more appropriately referred to as water cosmogony, to Robert E. Hume's 1921 *The Thirteen Principal Upanishads*.[21] In particular, he drew attention to references to the genesis of life in water in Hume's translation of the sacred treatises that had been compiled approximately between the 7th century BCE and the early centuries of the Common Era. More significantly, while delving into philosophical allusions to the pelagic origins of life, Coomaraswamy traced the concurrent emergence of this concept in the hydroagricultural communities of late Neolithic Egypt, the ancient Mediterranean and, of course, South Asia. Coomaraswamy's proposition, however tenuous, had a markedly anti-colonial tenor. On the one hand, the author established a deep history of philosophical thinking in the colony by underscoring conceptualisations of water cosmology that persisted in Vedic and post-Vedic literature. On the other hand, a comparativist lens allowed Coomaraswamy to link South Asia to other ancient civilisations to emphasise shared worldly affinities that were in place, he argued, before the advent of the British Empire.

Explorations of genesis myths related to water continued to animate the field of South Asian art history well into the mid-decades of the 20th century, drawing to the fore consanguinities between architectural and territorial imaginations. John Irwin, Keeper of the Indian Section, Victoria and Albert Museum, London, for instance, delivered the Lowell Institute Lectures at the Museum of Fine Arts, Boston in 1973, where he explored the origins of ca. 3rd-century-BCE monumental lithic pillars at Buddhist sites such as Sankisa, Rampurva, Kosam and Vaishali.[22] Why, Irwin wondered, had "giant monoliths weighing up to 40,000 kilos" been "erected in heavily waterlogged subsoils" without the benefit of supportive placement stones beneath them? This

line of enquiry led him to look beyond technical and processual systems. Irwin explored the necessity of the presence of water in the foundations of the pillars from the vantage of a cosmogony in which the universe was created through a separation of heaven and earth in an ocean with a lump of solid matter floating on it. The apparatus separating heaven and earth, in such a perspective, was a tree, pillar or mountain, Irwin observed. Irwin read the cosmogonic iconography of these pillars through conceptions of sovereignty and kingship. The king, Irwin thus observed, "acquires sovereign power by virtue of his identification with the *axis mundi*".[23]

While architecture served as a fulcrum between sacred geographies of water and hydrogeologies of land for Ananda Coomaraswamy and John Irwin, the recent past has seen a range of scholarship that have attempted to reconcile the natural environment with built spaces, design and the circulation of objects through oceanic trade. Jutta Jain-Neubauer's study on stepwells, Michael Willis and Julia Shaw's analyses of water management at particular archaeological sites, Amita Sinha and D. Fairchild Ruggles' examination of riparian architecture, Julia A. B. Hegewald's research on the typologies of water architecture and Partha Mitter and Finbarr Barry Flood's explorations of the material culture of oceanic trade are but few recent engagements with water and the art and architecture of South Asia.[24] However, it is Mughal water gardens, reservoirs and canals that have received the most sustained attention over the last century. Beginning with Constance Mary Villiers-Stuart's early 20th-century account to more recent scholarship by James L. Wescoat Jr., Elizabeth B. Moynihan, Catherine B. Asher, Ebba Koch and Perween Hasan, among others, much has been written on Mughal hydrocultures from art and architecture history.[25] *Water Histories of South Asia* builds on this rich historiography. Indeed, a number of scholars cited here are contributors to the volume, enriching the book immeasurably in the process.

The book

The liquescent materiality of water is the locus of enquiry in this book. This, in itself, precipitates a significant shift. On the one hand, the volume explores the manner in which water was, and continues to be, constituted through perceptual fields emerging from prevailing engineering, landscaping, representational and geological discourses. On the other hand, the volume explores how water itself is shaped in, and by, an expanded field of hydrological thinking. This expanded field, which we annotate as eco art history, overflows the boundaries of the natural ecosystem encompassing imaginative practices emerging from artistic, architectural and spatial formations. *Water Histories of South Asia* thus brings to the forefront the intersections between water systems and the phenomenology of material culture in early modern, colonial, early post-colonial and contemporary South Asia.

Our choice of an expanded temporal frame is deliberate. By leading the reader from the early modern to the contemporary, the volume seeks to make visible South Asian water systems as a palimpsest of technological improvisations and creative acts of imagining space. In the 16th century, emperors such as Zahir al-Din Muhammad Babur, the founder of the Mughal dynasty, had commissioned gardens, water pavilions and reservoirs to both conserve and manage water but also to embellish imperial land. Much later, the colonial British government began

restoring and reusing Mughal waterworks to enable agriculture, facilitate riverine transport and supply drinking water to urban centres.[26] In 1817, the British, for instance, repaired the Delhi Branch Canal constructed by the Mughal emperor Shah Jahan in 1626. Under British governance, the canal now provided water to the Mughal capital in Delhi while also irrigating agricultural land around the city.[27] After India's independence in 1947, the post-colonial state took it upon itself to further develop and maintain the colonial irrigation network built by the British on an earlier Mughal grid. Thus, by privileging a *longue durée* approach that extends from the 16th century to contemporary times, the book follows Fernand Braudel's magisterial *La Méditerranée* to make a case for excavating long-term arrangements as crucial to comprehending eco art histories of water in South Asia.[28]

Accordingly, we begin *Part I* with a large lake that the first Mughal emperor Babur saw in January 1528 during his campaign to take control of the Chanderi fortress at the eastern edge of the Malwa plateau. Babur's interest in water systems has, by now, received significant scholarly attention. The *chaharbagh* or fourfold garden, a Timurid garden typology with symmetrically divided enclosures, elevated paths and water channels, was introduced in South Asia by Babur. Scholars have suggested that Mughal gardens in South Asia were both metaphors of paradisiacal imaginaries and a symbolic attempt by the emperor to make visible his control over nature.[29] Describing his renovations to watercourses in an imperial garden in Istalif near Kabul, Babur thus noted, "A one-mill stream flows constantly from the middle of the garden. [. . .] The stream used to run higgledy-piggledly until I ordered it to be straightened. Now it is a beautiful place".[30] The garden, with its streams, was thus a visual manifestation of Babur's power and authority mapped out, quite literally, onto the very land controlled by the emperor. In this book, Tamara I. Sears argues for the role of seeing water in writing histories of architecture and the built environment using survey analysis, Geographic Information Systems technology and a careful reading of texts such as the *Baburnama*, Babur's personal memoirs. Sears takes up the relationship between architectural production and water landscapes in central India to highlight intersections among architecture and travel narratives.

The question of seeing water is further developed by Sugata Ray in his chapter on 17th-century riverine architecture in Braj, the primary pilgrimage site in north India where the god Krishna is believed to have spent his youth. Ray argues that pilgrims and devotees in Braj mobilised architecture to delineate the moral horizon of beholding sacred water in an era of cataclysmic global droughts. Reading Hindu architecture practices in relation to Mughal visualities allows Ray to problematise contemporary conservative fetishising of a pristine Hinduism that can be accessed, as it is often argued, through its material culture. The next chapter in *Part I* further delineates practices of looking, here associated with pleasure, through an analysis of lakes and lake-palaces in 18th-century Udaipur in western India. Dipti Khera suggests that Udaipur's painters, poets, courtly patrons and audiences construed the celebrated Jagniwas lake-palace as a heterotopia that operationalised imaginaries of idealised worlds of pleasure and power. Looking at lakes and looking from lake-palaces, thus, provides Khera with a spatial lens to demarcate pleasure as an aesthetic topoi and communal political practice in mid-18th-century South Asia. In effect, all three chapters develop a critical lens to bring together questions of vision, power and spatial practices in the early modern period.

In *Part II*, we move to the colonial period, ca. 1750–1950. The three chapters in this section broadly coalesce around questions of water's surface and depth. Natasha Eaton's chapter on pearl

fisheries in the Gulf of Manaar takes the British subjugation of the region in 1796 as a point of departure to reflect on the materiality of pearls, photographs and *chunam* or building material prepared with shell lime, egg white, sugar and coconut shells. Photos of the ocean by the Sri Lanka–based photographer Lionel Wendt, together with a history of pearl fishing, provides Eaton with an archive to reflect on the power of liquidity and the function of surfaces – the surface of the sea, the surface of photographs and the glimmering surface of pearls – in creating a liquescent modernity. While Eaton defines modernity as surface, Venugopal Maddipati takes us to the depths of the earth. Late 19th-century debates on a large freshwater lake dating to the Eocene period provides Maddipati with a frame to analyse the nature of colonial geology. His chapter examines the ways in which geological evidence of the existence of Eocenic freshwater deposits in the hill known as Girar produced a transregional geological history. At the same time, Maddipati complicates easy histories of colonial scientificism by highlighting local narratives that situated geological formations within a sacred realm. Maddipati's chapter, then, takes up deep time as it was imagined in colonial South Asia by both state and non-state actors to bring out diverging notions of prehistoric water.

How do streams become sewers? Arguing for a broader socio-hydrologic approach to water management, James L. Wescoat Jr. provides a comparative study of water systems in India and the United States. Beginning with the etymology of the word *nallah*, he shows how streams such as the Barapullah Nallah in New Delhi became sewers over time. Following a different strand, Wescoat then brings in the Muddy River Back Bay Fens restoration project in Boston to compare current efforts to redesign both of these systems at the watershed, riparian corridor and site scales. In the process, Wescoat's chapter offers a new methodology in comparative hydrohistories.

Part III focuses on the materiality of infrastructure in the post-colonial period. The section begins with Catherine B. Asher's chapter on shrines associated with water and its curative powers. Asher explores popular religious sentiments about water through studying the shrines of Shah al-Hamid Nagori in south India and Nizam al-Din Auliya in New Delhi. She places special emphasis on recent restorations undertaken by the Aga Khan Trust for Culture to highlight questions of access to water, community formation and the role of religious spaces in an urban metropolis. Turning to the centrality of vision in the making of a post-colonial waterscape, Atreyee Gupta's chapter engages with the Swiss architect Le Corbusier's interventions in the aestheticisation of the Bhakra hydro-engineering project, Sunil Janah's photographs of infrastructure and the Indian atomic scientist Meghnad Saha's involvement with the Damodar Valley Corporation. Bringing together a disparate cast of characters, Gupta shows how, in each case, the attempt was to shape "development's ocular modality". The chapter, then, offers a new schematic to rethink the place and space of hydro-infrastructure in a post-colonial world.

Gopa Samanta and Malay Ganguli take us to post-2000s Chandernagore in the state of West Bengal in eastern India. Through a close anthropology of water governance in the city, the authors provide a microstudy of different modalities of managing water. Samanta and Ganguli analyse how water policies and practices in non-metropolitan contexts depend on a number of social, cultural and political factors. Notably, they place equal emphasis on geographic environments and geological formations to explore solutions to Chandernagore's current water crisis. Bishnupriya Ghosh's chapter, too, takes up current water crises. Ghosh, however, engages the logic of quantity/drought (popular struggles

against Coca-Cola), quality/pollution (pollution from tanneries) and directionality/flood (the Narmada Bachao Andolan's mobilisation against dams on the Narmada River) to examine three iconic instances of the struggle for safe and sufficient water. In each instance, Ghosh reads photographs that highlight how popular struggles are contested at the level of the visual. For Ghosh, then, "water democracies", as it is produced through mediatic interjections, can generate new systems of political mobilisations under the sign of an environmental imaginary.

This environmental imaginary is further developed in the last part of the book. Highlighting experimental ecological practices today, *Part IV* includes interventions by contemporary artists and architects, and an interview with a water priest. Padma D. Maitland's conversation with Pandit Premchand Sharma, general secretary of the Yamuna Ghat Panda Association and a hereditary water priest by profession, attempts to comprehend the quotidian nature of everyday life by water. Sharma underscores the role of the routine and the ordinary in hydrocultures that corresponds with the ebb and flow of the river. Yet, 78-year-old Sharma barely ekes out a living by a river that, as he also acknowledges, has drastically changed physically, symbolically and socially within his lifetime. Artist-architect Asim Waqif turns to traditional rainwater harvesting systems in western India that he had examined during a recent project for the Global Rainwater Harvesting Collective. The project led Waqif to develop a sustainable approach to urban water management based on indigenous technologies that are still in place in non-metropolitan contexts. Drawing on this research, his chapter offers some preliminary observations on revitalising local water management systems.

We return to the Yamuna in New Delhi with the last *mediation*. Atul Bhalla's photo-performance alongside the river Yamuna provides the core for his experimental chapter on water and embodiment. The project reproduced in this book had emerged from a five-day walk by Bhalla along the Yamuna that engaged natural and constructed environments in New Delhi. As neoliberal economic pressure continues to devastate the Yamuna and its catchment area in India's capital city, Pandit Premchand Sharma's testament bears witness to the threat to everyday life that the death of a river can cause. This threat undoubtedly revolves around access to safe water. But the threat is also to the liquescent materiality of water and the sociabilities it engenders. As Sharma wistfully notes, "These days, people drink distilled water. Our water is in bottles. Before, in different places people would build *piaos* [places for the public dispensation of water] as a religious act. Now it is a business and people sell water". In the end, Partha Mitter offers some afterthoughts by way of returning to our current environmental crisis. As the Sixth Extinction or the Anthropocene Extinction, now underway, radically alters how we conceive our-both human and nonhuman-place on the planet, the question of water takes on a renewed urgency, Mitter notes. *Mni*/water, as the Lakota expression goes, is *wiconi*/life.[31]

Notes

1 For a recent analysis of early modern textile trade, see Amelia Peck (ed.), *Interwoven Globe: The Worldwide Textile Trade, 1500–1800*, New York: Metropolitan Museum of Art, 2013.

2 The Victoria and Albert Museum's catalogue states, "The flowers on this chintz hanging or bed-cover are extremely finely drawn, with very delicate shading on the petals of the carnations, for example. The

guard border is of a type more often seen on chintzes for the Southeast Asian market, particularly Thailand, but the rest of the design is typical of western-market chintz of the period. One border has been cut off, and the whole piece has unfortunately suffered badly from water damage". http://collections.vam.ac.uk/item/O141128/palampore-unknown/, accessed on 10 July 2017.

3 Ambrose Evans-Pritchard, 'Water Crisis to Be Biggest World Risk', *The Telegraph*, 5 June 2008, www.telegraph.co.uk/finance/newsbysector/utilities/2791116/Water-crisis-to-be-biggest-world-risk.html, accessed on 23 September 2017.

4 See Chapter 11 for a discussion on the protests surrounding the Omkareshwar Dam.

5 United Nations World Water Assessment Programme, *The United Nations World Water Development Report 2015: Water for a Sustainable World*, Paris: The United Nations Educational, Scientific and Cultural Organization, 2015, p. 11.

6 Vandana Shiva, *Water Wars: Privatization, Pollution, and Profit*, London: Pluto Press, 2002.

7 For *48°C Public.Art.Ecology*, see Christiane Brosius, 'Emplacing and Excavating the City: Art, Ecology and Public Space in New Delhi', *Journal of Transcultural Studies*, vol. 1, 2015, pp. 75–125.

8 Recent scholarship from the emerging field of eco art history include James Nisbet, *Ecologies, Environments, and Energy Systems in Art of the 1960s and 1970s*, Cambridge, MA: MIT Press, 2014); Alan C. Braddock and Christoph Irmscher (eds.), *A Keener Perception: Ecocritical Studies in American Art History*, Tuscaloosa: University of Alabama Press, 2009; T. J. Demos, *Decolonizing Nature: Contemporary Art and the Politics of Ecology*, Berlin: Sternberg Press, 2016; Nicholas Mirzoeff, 'Visualizing the Anthropocene', *Public Culture*, vol. 26, no. 2, 2014, pp. 213–32. From South Asian art and architecture history, see Venugopal Maddipati, 'Water in the Expanded Field: Art, Thought and Immersion in the Yamuna River: 2005–2011', in Deborah S. Hutton and Rebecca M. Brown (eds.), *Rethinking Place in South Asian and Islamic Art, 1500–Present*, New York: Routledge, 2016, pp. 60–77 and Sugata Ray, 'Hydroaesthetics in the Little Ice Age: Theology, Artistic Cultures, and Environmental Transformation in Early Modern Braj, ca. 1560–70', *South Asia: Journal of South Asian Studies*, vol. 40, no. 1, March 2017, pp. 1–23.

9 See, for instance, David Mosse, *The Rule of Water: Statecraft, Ecology, and Collective Action in South India*, New Delhi: Oxford University Press, 2003 and Anne M. Rademacher, *Reigning the River: Urban Ecologies and Political Transformation in Kathmandu*, Durham: Duke University Press, 2011.

10 Narendra Modi (narendramodi), "I Will Represent Varanasi in Lok Sabha & I Look Forward to This Wonderful Opportunity to Serve Ganga Maa & Work for Varanasi's Development", 29 May 2014, 4:28 AM. Tweet.

11 For the Bharatiya Janata Party's environmental politics, see Emma Mawdsley, 'Hindu Nationalism, Neo-Traditionalism and Environmental Discourses in India', *Geoforum*, vol. 37, no. 3, 2006, pp. 380–90.

12 See, for instance, Timothy Morton, *Ecology without Nature: Rethinking Environmental Aesthetics*, Cambridge, MA: Harvard University Press, 2009.

13 The foundational works that led to the creation of the field of an environmental humanities of South Asia in the 1990s include Ramachandra Guha, *The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya*, Berkeley: University of California Press, 1989; Madhav Gadgil and Ramachandra Guha, *This Fissured Land: An Ecological History of India*, Berkeley: University of California Press, 1992; Richard H. Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism 1600–1860*, Cambridge: Cambridge University Press, 1995; David Arnold and Ramachandra Guha (eds.), *Nature, Culture, Imperialism: Essays on the Environmental History of South Asia*, New Delhi: Oxford University Press, 1995; Amita Baviskar, *In the Belly of the River: Tribal Conflicts over Development in the Narmada Valley*, New Delhi: Oxford University Press, 1995; Richard H. Grove, Vinita Damodaran, and Satpal Sangwan (eds.), *Nature and the Orient: The Environmental History of South and Southeast Asia*, New Delhi: Oxford University Press, 1998; and Kalyanakrishnan Sivaramakrishnan, *Modern Forests: Statemaking and Environmental Change in Colonial Eastern India*, Stanford: Stanford University Press,

1999, among others. For a review of this now vast literature, see Mahesh Rangarajan, 'Environmental Histories of South Asia: A Review Essay', *Environment and History*, vol. 2, no. 2, 1996, pp. 129–44 and Rohan D'Souza, 'Nature, Conservation and Environmental History: A Review of Some Recent Environmental Writings on South Asia', *Conservation and Society*, vol. 1, no. 2, 2003, pp. 117–32.

14 Recent scholarship includes Rohan D'Souza, *Drowned and Dammed: Colonial Capitalism and Flood Control in Eastern India (1803–1946)*, New Delhi: Oxford University Press, 2006; Amita Baviskar (ed.), *Waterscapes: The Cultural Politics of a Natural Resource*, New Delhi: Permanent Black, 2007; Matthew Gandy, *The Fabric of Space: Water, Modernity, and the Urban Imagination*, Cambridge, MA: MIT Press, 2014; and David Gilmartin, *Blood and Water: The Indus River Basin in Modern History*, Berkeley: University of California Press, 2015, among others.

15 Charles Lyell, *Principles of Geology: Or, the Modern Changes of the Earth and Its Inhabitants Considered as Illustrative of Geology*, London: John Murray, 1853 [9th Edition], pp. 4–8.

16 *Ibid.*, p. 6.

17 *Ibid.*, p. 5.

18 In 1905, Coomaraswamy condemned the adoption of European clothes in early 20th-century Sri Lanka as indicative of the "destruction of national character" under colonial rule. A 7-page essay published by the aesthete, appropriately titled *Borrowed Plumes*, led to the formation of the Ceylon Social Reform Society, an organisation devoted to the preservation and revival of traditional arts and crafts in the very next year. Ananda K. Coomaraswamy, *Borrowed Plumes*, Kandy: Industrial School, 1905.

19 Ananda K. Coomaraswamy, *Yakṣas: Essays on the Water Cosmology*, Washington, DC: Smithsonian Institution, 1928. See Chapter 7 in this volume for a discussion of the text.

20 For instance, the noted engineer William Willcocks, best known as the chief designer of the Old Aswan Dam, spent time in Bengal in the 1920s studying the pre-colonial irrigation system in the region. The report was published in 1930. William Willcocks, *Lectures on the Ancient System of Irrigation in Bengal and Its Applications to Modern Problems*, Calcutta: University of Calcutta, 1930. See Rohan D'Souza, 'Water in British India: The Making of "Colonial Hydrology"', *History Compass*, vol. 4, no. 4, 2006, pp. 621–8 for a history of imperial water governance.

21 Robert E. Hume, *The Thirteen Principal Upanishads*, London: Oxford University Press, 1921.

22 Irwin's lectures were subsequently published as a series of essays in four successive issues of the *Burlington Magazine*. John Irwin, '"Aśokan" Pillars: A Reassessment of the Evidence', *Burlington Magazine*, vol. 115, no. 4, November 1973, pp. 706–20; Irwin, '"Aśokan" Pillars: A Reassessment of the Evidence II: Structure', *Burlington Magazine*, vol. 116, no. 4, December 1974, pp. 712–27; Irwin, '"Aśokan" Pillars: A Reassessment of the Evidence III: Capitals', *Burlington Magazine*, vol. 117, no. 4, October 1975, pp. 631–43; and Irwin, '"Aśokan" Pillars: A Reassessment of the Evidence IV: Symbolism', *Burlington Magazine*, vol. 118, no. 4, November 1976, pp. 734–53.

23 Irwin, 'IV: Symbolism', p. 749.

24 Jutta Jain-Neubauer, *The Stepwells of Gujarat in Art-Historical Perspective*, New Delhi: Abhinav Publications, 1981; Michael Willis, *The Archaeology of Hindu Ritual: Temples and the Establishment of the Gods*, Cambridge: Cambridge University Press, 2009; Julia Shaw, *Buddhist Landscapes in Central India: Sanchi Hill and Archaeologies of Religious and Social Change, c. Third Century B.C. to Fifth Century A.D.*, London: The British Association for South Asian Studies, 2007; Amita Sinha and D. Fairchild Ruggles, 'The Yamuna Riverfront, India: A Comparative Study of Islamic and Hindu Traditions in Cultural Landscapes', *Landscape Journal*, vol. 23, no. 2, 2004, pp. 141–52; Julia A. B. Hegewald, *Water Architecture in South Asia: A Study of Types Developments and Meanings*, Leiden: Brill, 2002; Partha Mitter, 'The Early British Port Cities of India: Their Planning and Architecture Circa 1640–1757', *Journal of the Society of Architectural Historians*, vol. 45, no. 2, June 1986, pp. 95–114; Finbarr Barry Flood, *Objects of Translation: Material Culture and Medieval "Hindu-Muslim" Encounter*, Princeton: Princeton University Press, 2009.

25 Constance M. Villiers-Stuart, *Gardens of the Great Mughals*, London: Adam and Charles Black, 1913; James L. Wescoat, Jr., 'Early Water Systems in Mughal India', *Environmental Design: Journal of the Islamic Environmental Design Research Centre*, vol. 2, 1985, pp. 51–7; Elizabeth B. Moynihan, 'The Lotus Garden Palace of Zahir Al-din Muhammad Babur', *Muqarnas*, vol. 5, 1988, pp. 135–52; Catherine B. Asher, 'Babur and Timurid Char Bagh: Use and Meaning', *Environmental Design: Journal of the Islamic Environmental Design Research Centre*, vol. 1–2, 1991, pp. 46–55; Ebba Koch, 'Mughal Palace Gardens from Babur to Shah Jahan (1526–1648)', *Muqarnas*, vol. 14, 1997, pp. 143–65; Perween Hasan, 'Paradise Flooded: Water and Architecture in Bangladesh', in Sheila Blair and Jonathan Bloom (eds.), *Rivers of Paradise: Water in Islamic Art and Culture*, New Haven: Yale University Press, 2009, pp. 292–313.

26 For a history of colonial appropriations of pre-existing Mughal water systems, see George W. Macgeorge, *Ways and Works in India, Being an Account of the Public Works in That Country from the Earliest Times Up to the Present Day*, Westminster: Archibald Constable and Co., 1894.

27 *Ibid.*, p. 136.

28 Fernand Braudel, *La Méditerranée et le monde méditerranéen à l'époque de Philippe II*, Paris: Armand Colin, 1949.

29 See, for instance, essays in James L. Wescoat Jr. and Joachim Wolschke-Bulmahn (eds.), *Mughal Gardens: Sources, Places, Representations, and Prospects*, Washington, DC: Dumbarton Oaks Research Library and Collection, 1996.

30 Zahir al-Din Muhammad Babur, *Baburnāma*, trans. by Wheeler M. Thackston as *The Baburnama: Memoirs of Babur, Prince and Emperor*, Washington, DC: Freer Gallery of Art and Arthur M. Sackler Gallery, Smithsonian Institution, 1996; reprint, New York: Modern Library, 2002, p. 162.

31 During the 2016 protests against the Dakota Access Pipeline, the term *mni wiconi* (water is life) was mobilised by Water Protectors in North Dakota to enunciate a perception of vital water beyond its characterisation as solely a natural resource.

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Part I

Vision and space, ca. 1500–1750