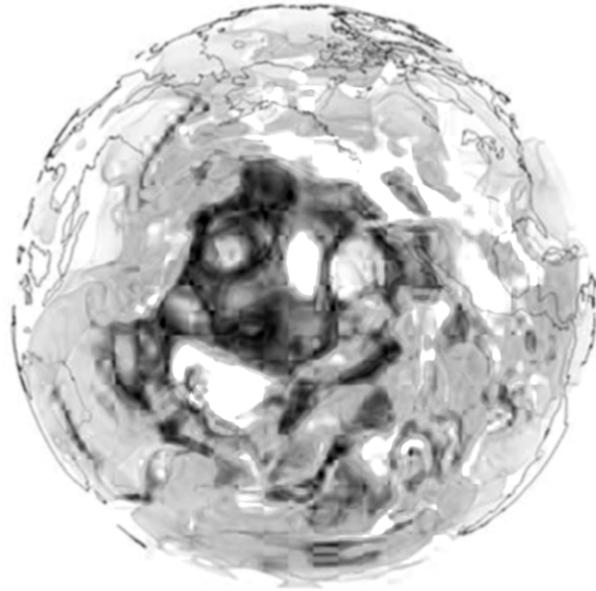


MONSOON
[+OTHER]
GROUNDS

UNIVERSITY OF WESTMINSTER
21-22 MARCH 2019



Seismic Wave Model of the Earth
Darker Shades Indicate Increased Seismic Movement
University of Sophie Antipolis

MONSOON [+OTHER] GROUNDS

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PROGRAMME

THURSDAY 21 MARCH

- 15:30** **REGISTRATION / TEA**
- 15:45** **WELCOME + INTRODUCTION**
Simon Joss, University of Glasgow
- 16:00 – 17:00** **EXHIBITION WALK-ABOUT**
Led by John Cook
- Exhibitors
Alexandra Arenes, Matt Barlow, Blue Temple, Hari Byles,
Corinna Dean + Duarte Santo, Eric Guibert, Tumpa Fellows,
DS18 Students, Ben Pollock & MONASS
- 17:00 – 18:00** **[MULTI] GROUNDS**
Chair : Ed Wall, University of Greenwich
- Lindsay Bremner, MONASS
On Sediment as Method
- Ifor Duncan, Goldsmiths, University of London
Sedimentary Witness
- 18.30** **KEYNOTE : WHAT ON EARTH IS THE GROUND?**
Chair: Lindsay Bremner
- Tim Ingold, University of Aberdeen
Introduced by Beth Cullen

FRIDAY 22 MARCH

- 09.45** **REGISTRATION / COFFEE**
- 10.00** **WELCOME**
Lindsay Bremner
- 10.15 – 11:30** **[OVER] GROUND MATTERS**
Chair: Godofredo Pereira, Royal College of Art
- Alexandra Arenes, University of Manchester
Mapping the Critical Zones
- Christina Leigh Geros, MONASS
Here be Dragons
- Avi Varma, Goldsmiths College
Unjust Intonations
- 11.30 - 11.45** **TEA**

- 11.45 - 13.00** **[INTER] GROUND MATTERS**
Chair: Kirsten Hastrup, University of Copenhagen
- Owain Jones, Bath Spa University
Monsoon + Tide
- Jonathan Cane, University of the Witwatersrand
Permeability, Ocean, Concrete
- 13.00 - 14.00** **LUNCH**
Convivial Soils
- 14.00 - 15.00** **[UNDER] GROUND MATTERS**
Chair: Tim Waterman, The Bartlett UCL
- Anthony Powis, MONASS
The Materiality of Groundwater: Leaking, Seeping, Swelling,
Cracking
- Matt Barlow, University of Adelaide
Floating (under) Ground
- 15.00 - 16.00** **[IN] GROUND MATTERS**
Chair: Jose Alfredo Ramirez, AA
- Eric Guibert, University of Westminster
Architectural Soils
- Harshavardhan Bhat, MONASS
About a Monsoon Forest
- 16.00 - 16.15** **TEA**
- 16.15 - 17.30** **[WITH] GROUND MATTERS**
Chair: Radha D'Souza, University of Westminster
- Naiza Khan, Goldsmiths, University of London
Sticky Rice and Other Stories
- Beth Cullen, MONASS
Brick: Cycles Of Making And Unmaking Monsoon Grounds
- Labib Hossain, Cornell University
Wetness and the City: A Critical Reading of the Dry and Permanent
Ground Through the Practice of Muslin Weaving in Bengal
- 17:30 - 17.45** **CLOSING REMARKS**
David Chandler
- 17.45** **DRINKS**

BETH CULLEN CHRISTINA LEIGH GEROS (Conveners)

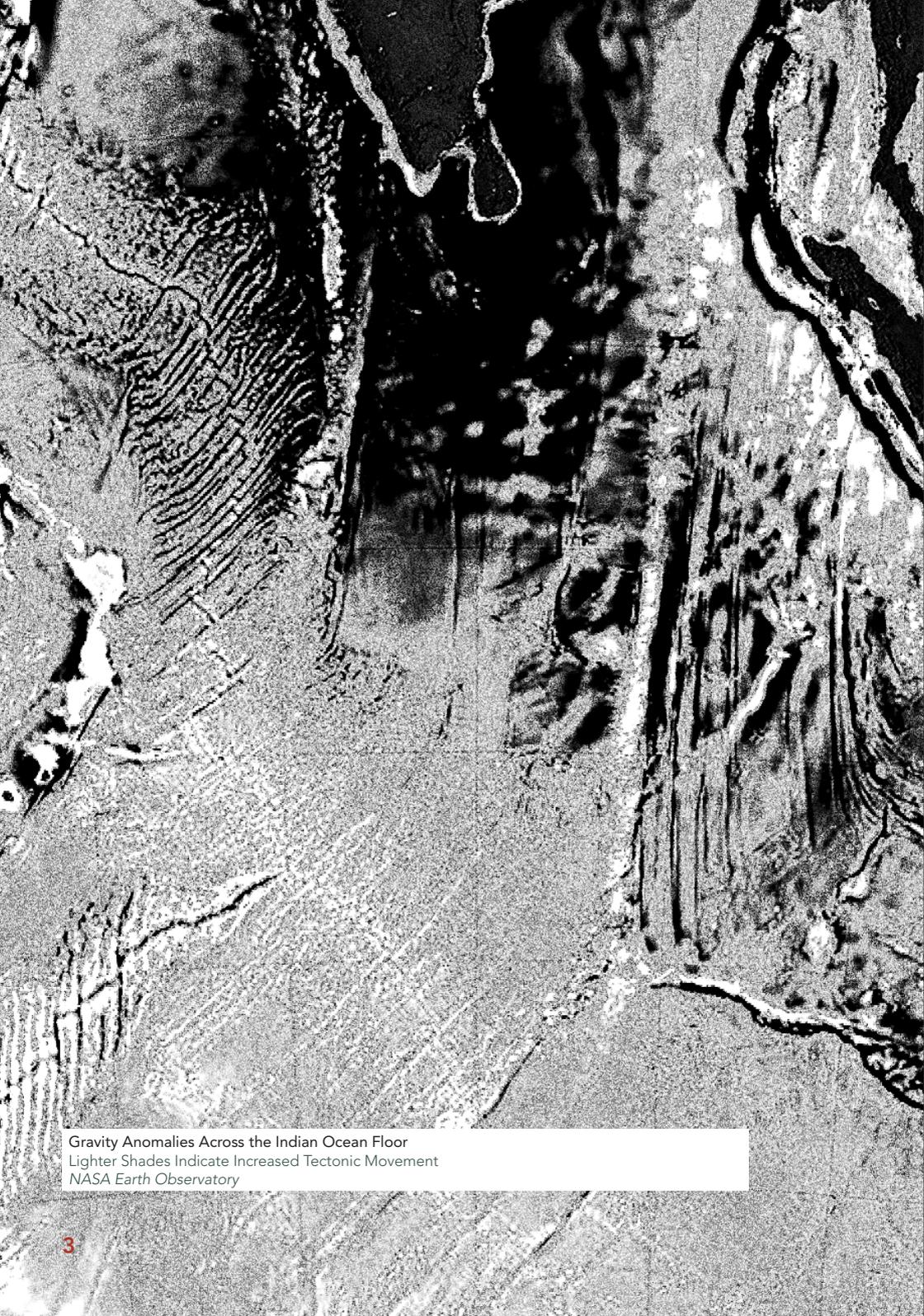
Monsoon [+other] Grounds has been convened by MONASS Research Fellows Beth Cullen and Christina Geros and Research Associate John Cook, assisted by Aisha Forde.

MONSOON ASSEMBLAGES

This ERC funded research project is investigating the monsoon as a global weather system, working in to the scale of the south Asian continent and reaching across the Bay of Bengal to Myanmar. It was prompted by the monsoon's unpredictability and the disinterest of the neoliberal development models being followed in this region to its ways. To counter this, the project is undertaking research into multiple already-existing entanglements of the monsoon in urban and more-than-urban life. Framed by the operative concept of 'monsoon assemblages,' an interdisciplinary team of researchers from the spatial design disciplines and the environmental humanities has developed a methodology that follows the monsoon along a number of its material and temporal registers. These include air, groundwater, salt, sediment and seasonality. Using ethnography, drawing, mapping, photography, video and writing, the project is producing a series of visual and audio-visual works that track these monsoonal registers and the entanglement of human and non-human lives with them. Towards the end of the project, the project team will exhibit these works in Chennai, Dhaka and Yangon and use them to engage with citizens, designers and policy makers. In doing so, it aims to re-instate the monsoon in the imaginaries of citizens, designers and policy makers and experiment with ways of co-designing cities that respect its ways.

MONSOON [+ OTHER] GROUNDS

Monsoon [+ other] Grounds is the third in a series of symposia convened by the Monsoon Assemblages project. It comprises a key-note address, inter-disciplinary panels, and an exhibition. The event brings together scholars and practitioners from a range of disciplines to engage in conversations about geologies, soils, histories, spatialities, and modifications of monsoon [+ other] grounds



Gravity Anomalies Across the Indian Ocean Floor
Lighter Shades Indicate Increased Tectonic Movement
NASA Earth Observatory

SIMON JOSS

Welcome + Introduction

Simon Joss is Professor of Urban Futures at the University of Glasgow and co-founder of the International Eco-Cities Initiative. He is currently the associate director of the ERC funded Urban Big Data Centre. Simon gained his PhD from Imperial College (University of London) in the field of science and technology studies. His research focuses on the governance of urban innovation, with special interest in the role of emergent urban technologies and related questions of social resonance and public accountability.

EXHIBITION WALK-ABOUT

16.00 – 17.00

Thursday 21 March

The programme of talks is accompanied by an exhibition, featuring work contributed by speakers, as well as by:

JOHN COOK

(Lead)

John Cook is an architect and co-tutor of the MArch design studio, DS18, at the University of Westminster, London. He has recently joined the Monsoon Assemblages research team, exploring visual methods to investigate and communicate the monsoon through a range of spatial and temporal scales.

ALEXANDRA ARENES

Alexandra Arènes is an architect and co-founder of SOC (s-o-c.fr), which produces cartographic tools for the arts and sciences. She collaborates on exhibitions, theatre and publication projects. She is pursuing a PhD at the University of Manchester on the theme "*Architectural Design at the Time of Anthropocene: A Gaia-graphic Approach to the Critical Zones*".

MATT BARLOW

Matt Barlow is a musician, photographer, and an anthropology PhD student. His work is mostly concerned with human-environment relationships. He is currently exploring the environmental, social, and political challenges facing the industrialising delta city of Kochi, in India's south west state of Kerala, with regards to waste management, environmental stewardship, and development.

HARI BYLES

Hari Byles is a researcher and compostist whose focus is on accessibility, sustainability, soil and alternative sanitation. They have worked for a number of food growing projects across London through which they aim to bring ecological and social justice together through everyday actions and inventive methods. Currently they are studying soil microbiology and microscopy with Dr Elaine Ingham, and developing a soil care and alternative sanitation practice based at Bethnal Green Nature Reserve.

CORINNA DEAN

Corinna Dean is an experienced teacher, critical urbanist and curator who looks at a semiotic reading of the urbanscape, she is driven by an interest in how the urban is communicated, experienced and lived out across cultures. She holds a PhD from the LSE Cities Programme which was a collaborative doctoral award with Tate Modern and is currently a Lecturer at the University of Westminster.

TUMPA HUSNA YASMIN FELLOWS

Tumpa Fellows has acquired over ten years' experience working for London-based practices, before co-founding the inter-disciplinary practice called Our Building Design and the charity Mannan Foundation Trust. She was awarded the Royal Institute of British Architects (RIBA) Rising Star Award, 2017. She is a senior lecturer at the University of Westminster where she is also a PhD researcher; exploring a practice-based research on architectural response to climate change.

ERIC GUIBERT

Eric Guibert is a gardener architect. His research through reflective practice investigates ways of designing and being with the emergent quality of ecosystems, with their natures, to nurture and express their resilience, their biological and cultural diversity. It is located in the overlap between built and grown architecture and art, and it connects ecological, animistic, and Taoist ontologies.

MONASS

A selection of experimental drawings by Christina Leigh Geros and John Cook, as part of the Monsoon Assemblages research project, focusing on the Indian monsoon at both a global and sub-continental scale. These drawings are currently on display at The XXII Triennale di Milano, *Broken Nature: Design Takes on Human Survival*, till September 1st 2019.

BEN POLLOCK

Ben Pollock is an architect at Jestico + Whiles and a design tutor for the master studio, DS18, at Westminster University, London. He also co-leads an independent research initiative, 4D Island, which investigates how computational design can address the threats of climate change and unsustainable urbanisation in the Maldives.

DS18 STUDENTS

Raymond Bieler, Fiona Grieve, James Purchon, Charlotte Grasselli, Aimée Daniels, Dagmara Dwyer, Sara Kosanovic and Ionna Ungureanu are members of 'Cosmopolitical Design in a Monsoonal River Basin'— the final of three design studios associated with the Monsoon Assemblages project to be undertaken by Design Studio 18 (DS18) in the MArch programme at the University of Westminster, taught by Lindsay Bremner, John Cook and Ben Pollock.

BLUE TEMPLE

Blue Temple is an architectural design company based in Yangon which focuses on innovative public space design. Through participatory processes with local Architecture University Departments and local communities, they strive to innovate new socially responsible architectural forms intended for local community development. Working in low-income neighbourhoods in Yangon, Mandalay, and Myitkyina, their projects propose incremental upgrades based on an understanding of site and context, exploring how architecture can have a positive impact and serve local communities.

ED WALL (Chair)

Ed Wall is Academic Leader Landscape at the University of Greenwich and Visiting Professor at Politecnico di Milano. He has a PhD from the Cities Programme (London School of Economics). In 2017, Ed was City of Vienna Visiting Professor: Urban culture, public space and the future – Urban equity and the global agenda (TU Wien/SKuOR). He is currently guest-editing a future landscape issue of *Architectural Design* (Wiley 2020).

[MULTI] GROUNDS

17.00 – 18.00

Thursday 21 March

LINDSAY BREMNER On Sediment as Method

Lindsay Bremner is a Professor of Architecture at the University of Westminster and the Principal Investigator of *Monsoon Assemblages*. She is an award-winning architect and writer on Johannesburg, whose book *Writing the City into Being: Essays on Johannesburg 1998 – 2008* (2010). won the Jane Jacobs Book Award in 2011.. Before *Monsoon Assemblages*, her research explored socio-spatial transformations in the Indian Ocean world framed by the idea of *Folded Ocean* (2011-2016). She was formerly the head of architecture departments in Philadelphia (USA) and Johannesburg (South Africa). She holds a DScArchitecture from the University of the Witwatersrand in Johannesburg.

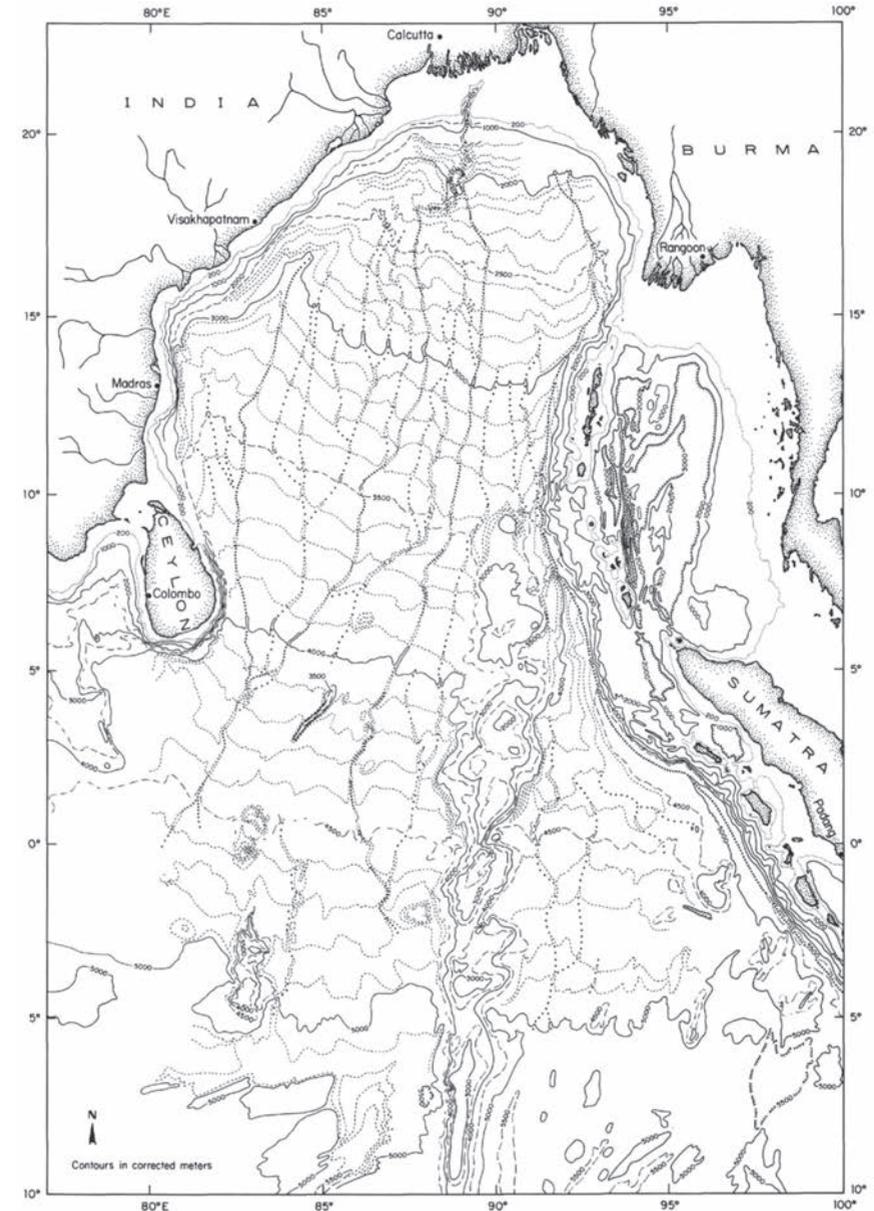
In this presentation, I will attempt to think with sediment as monsoonal method and political technology lying somewhere between meteorology, hydrology, geology and politics. As sediment, the monsoon brings together tectonic, hydrological atmospheric and anthropocenic time. It works through weathering, erosion, suspension and deposition and unsettles stable notions of both territory and politics. The presentation will tease out a range of methodological and theoretical approaches to a material politics of monsoon terrain by tracking how sediments are formed, travel and settle in concert with earthly and monsoonal forces (heating and cooling, gravity, rains, winds, flows, currents), human infrastructures (dams and embankments), land practices (dredging and sand filling), and geopolitics.

IFOR DUNCAN

Sedimentary Witness

Ifor Duncan is a London-based writer and researcher, and currently PhD candidate at the Centre for Research Architecture, Goldsmiths, University of London. His current research concerns memory and climate politics with a specific focus on the complex relationships between political violence and watery spaces. In particular the ways hydrologic properties are conceptualized, instrumentalised and weaponised as border regimes, through extraction, and as technologies of obfuscation.

In the summer of 2015 central Europe experienced a drought that led major rivers, including the Wisła in Poland, to recede to their lowest levels for centuries. In line with 60-year trends in lowering summer river levels, the drought performed an unexpected archaeology. This paper will consider how the traces from the crematoria of Auschwitz-Birkenau, scattered by the Sonderkommando into the Wisła and Soła rivers encounter the shifting materialities of the riverine site. In the reduction of remains to ash, and the pulverisation of bone and scattering the very sedimentary processes of the river were mimetically appropriated in the obfuscation of the remains of genocide. In the Wisła's fluvial processes these culturally and politically sensitive traces were, and are, confluent with the chemical and heavy metal pollutants entering the industrialised upper Wisła river valley. Where Astrida Neimanis has written about the complex archival qualities of water bodies as 'memory-keeper[s] or archive[s]' (storing flotsam, chemicals, detritus, sunken treasure, culture, stories, histories), ('Water and Knowledge' in *Downstream: Reimagining Water* (2017), p.54) and Matthew Edgeworth has described rivers as 'cultural artefacts' (*Fluid Pasts*, 2011, p.18.), this paper approaches these mobile traces through the context of what Susan Schuppli calls 'Material Witness'. Drawing on a diverse range of disciplines, literature and media: from fiction, film, and photography to forensic archaeological study of submergence and taphonomy, this paper offers alternative ecological and hydrologic perspectives on the mnemonic politics of Holocaust sites of memory: asking how can we remember through the saltation, transportation, and deposition of sediments?



Bathymetric Chart of the Bay of Bengal
Stratigraphic-Seismic Section Correlations and Implications to Bengal Fan History
David G. Moore & Joseph R. Curry

KEYNOTE LECTURE

18.30

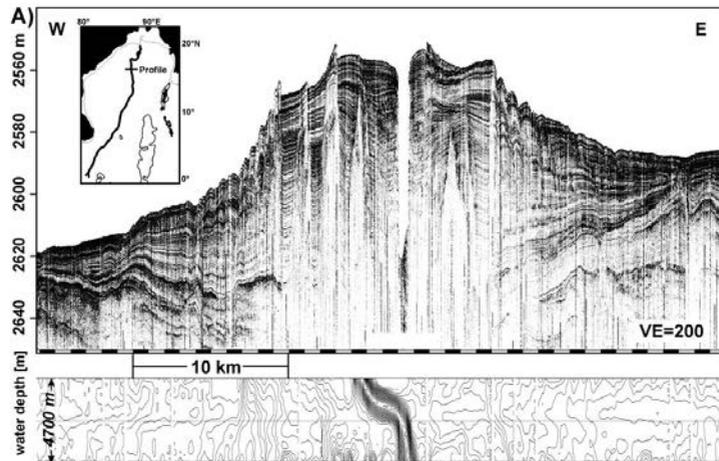
Thursday 21 March

TIM INGOLD

What on Earth is the Ground?

Tim Ingold is Emeritus Professor of Social Anthropology at the University of Aberdeen, and a Fellow of the British Academy and the Royal Society of Edinburgh. Following 25 years at the University of Manchester, Ingold moved in 1999 to Aberdeen, where he established the UK's newest Department of Anthropology. Ingold has carried out fieldwork among Saami and Finnish people in Lapland, and has written on environment, technology and social organisation in the circumpolar North, the role of animals in human society, issues in human ecology, and evolutionary theory in anthropology, biology and history. In more recent work, he has explored the links between environmental perception and skilled practice. Ingold is currently working on the interface between anthropology, art and architecture. His books include *The Perception of the Environment* (2000), *Lines* (2007), *Being Alive* (2011), *Making* (2013) *The Life of Lines* (2015), *Anthropology and/as Education* (2017) and *Anthropology: Why it Matters* (2018).

The ground is a surface, says the dictionary, upon which things or persons stand or move. But this leaves many questions unanswered. What kind of surface is this? Does it have one side or two? Does it cover the earth or cover it up? Can you roll it, fold it, cut it or make holes in it? What lies above, and what beneath? In seeking to answer these questions, I shall argue that the ground is caught in a double movement, of opening up and closing off, formation and encrustation, thanks to which its inhabitants are at once confidently supported and precariously afloat.



Seismic Survey Through Accumulated Sedimentary Layers in the Bengal Fan at 16°50'N.
Summary on the Bengal Fan : Drilling Proposal (March 2000)

GODOFREDO PEREIRA (Chair)

Godofredo Enes Pereira is the course leader for the MA in Environmental Architecture at the Royal College of Art, where he also teaches ADS7 Ecologies of Existing design studio and leads the Architecture and Social Movements Research group. He was a member of Forensic Architecture where he led the Atacama Desert project.

[OVER] GROUND MATTERS

10.15 – 11.30

Friday 22 March

ALEXANDRA ARENES Mapping the Critical Zones

Alexandra Arènes is an architect and co-founder of SOC (s-o-c.fr), which produces cartographic tools for the arts and sciences. She collaborates on exhibitions, theatre and publication projects. She is pursuing a PhD at the University of Manchester on the theme *“Architectural Design at the Time of Anthropocene: A Gaia-graphic Approach to the Critical Zones”*.

The Critical Zone is a term coined by geoscientists (hydrologists, soil scientists, geochemists, etc.) who collectively attempt to understand the Earth's responses to climate change through the study of biogeochemical cycles. Unlike the globe, which offers a view from nowhere, the Critical Zone is located and corresponds to the thin layer of the planet where life has proliferated from the top of the canopy to the deep rocks below. It corresponds to an animated Earth, Gaia, as a result of the terraforming of living beings. However, according to scientists, this point of view is poorly represented. That is why we have undertaken interdisciplinary work to build a new model, which was published last year. The model is an experiment to think of a territory in terms of terrestrial cycles. It therefore aims to share a sensitivity to the Critical Zone with its complex processes, dynamics and phenomena, while reconceptualising its space. It gives more space to the description of the constituents of the soil, the ground that living things inhabit, while giving it more depth. First drawn on CZ Observatories, the model could be applied to other sites where the important challenge is to visualise a territory through cycles and no longer from the traditional grid system (longitude-latitude). Indeed, the Anthropocene asks us to rethink our tools and conceptual frameworks (Nature) to understand the impact of man-industry on the atmosphere, soil and rocks. Thus, the model could be applied to a range of different sites from industries to urban areas, including those whose climate is particularly sensitive to disturbances. For the monsoon symposium, I propose to present further researches on the Critical Zone, by visualising the water found there (rivers, groundwater, clouds).

CHRISTINA LEIGH GEROS

Here be Dragons: *Grounds and Groundings of our Atmospheric Belonging*

Christina Leigh Geros is an architect, landscape architect, and urban designer specialising in conducting and designing research about the intricate relationships between urbanism, ecology, and politics. Currently a research fellow with Monsoon Assemblages and a studio tutor in the MA Environmental Architecture Programme at the Royal College of Art, her previous work with an exact office and PetaBencana.id in Jakarta, Indonesia informs her current practice of designing engagements, implementations, and interfaces of investigation that bridge across platform, scope, and inquiry.

Graphic representation of things, concepts, conditions, processes, and events as spatial representations of the human world have always been challenged by limited readings of volume and scale. The flattening of volumetric currents containing microscopic biological lifeforms and processes passing through the spatially static and bi-dimensional, requires a reconstruction of the world through a particular set of lenses based on exclusionary practices of understanding and representation. To do so, certain datums have been drawn either as baseline registrations or markers of surfaces or points of reference. One such datum is the line of 'mean sea level'. For both marine and avionic navigation, this static vertical datum—registered in the x, y, z axes—is representative of an averaged measurement of continual movement between land, sea, and air. Historically—and in both horizontal and vertical planes—this line has determined what is seen and counted. Depicted as if land were not a continual assembling of the conditions or processes outside of and above the line, the volumetric bodies of air and water have been either omitted or *othered*. Taking the monsoon as both a site and a lens for an investigation of living ecologies and urbanism requires us to take into account the many narratives of global energetics, local physics, and multi-species experiences. To draw, much less to *draw out* these dynamics requires a rethinking of datums, reference points, and perspectives.

AVI VARMA

Unjust Intonations

Avi Varma is an artist, researcher and Master's Candidate at the Center for Research Architecture, Goldsmiths, University of London. His research is focused on environmental violence in West Texas. His background is in sound art and experimental music as a former student of La Monte Young and Marian Zazeela.

The conjunction of ecocide and epistemic violence has been a central research topic at the Center for Research Architecture in the work of Susan Schuppli, Paolo Tavares, and Anne-Sophie Springer. Building upon this previous body of work, and using anthropologist Eduardo Kohn's theory of nonhuman semiotics, I propose a paper for Monsoon [+ Other] Grounds that investigates how specific cultural ecologies associated with monsoon in India embody political and environmental transformations as much as does the built environment. In the North Indian Classical Music system, Raga Mian Ki Malhar is the monsoon raga, sung during the rainy season, characterized by an extraordinarily unique movement around the third scale degree, "ga," representing rain falling on the earth. Yet, with the introduction of the harmonium, the western, equal-tempered tuning system was overlaid on top of the traditional forms of intonation used in raga, creating epistemic dissonances within the very materiality of sound itself. In fact, All India Radio banned the use of the harmonium from 1940-1971. In this context, the monsoon culture embodied in raga becomes itself an interscalar vehicle; its material changes register broader shifts in colonial politics, environmental transformation and art practices. I argue that in this period, in Delhi, one can trace the convergence of ecocide and epistemic violence through the dis-assembly of a non-western aesthetic form (raga) that previously had been co-produced by monsoons and human artists.

KIRSTEN HASTRUP (Chair)

Kirsten Hastrup is Professor of Anthropology at the University of Copenhagen. She has done substantial research on Icelandic history and society; on human rights and legal language; on theatre and social action; and on the beginnings of Danish anthropology in early polar expedition. In addition to these more specialised fields, she has published critical explorations of the philosophical and epistemological foundations of anthropology, text-books in anthropology, and general introductions to the history of the human sciences and their contributions to society. In recent years, Kirsten's research interest has centred on the environmental and social changes in the Arctic, notably in Greenland, where she has started a series of fieldworks in a small hunting community with the aim of studying local perceptions of threats and opportunities over a five-year period.

[INTER] GROUND MATTERS

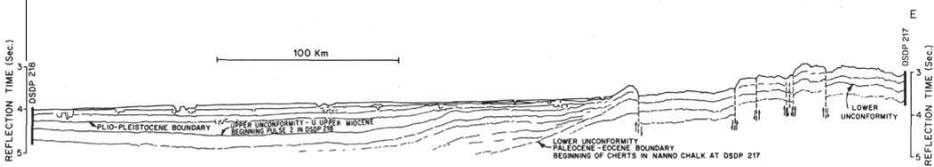
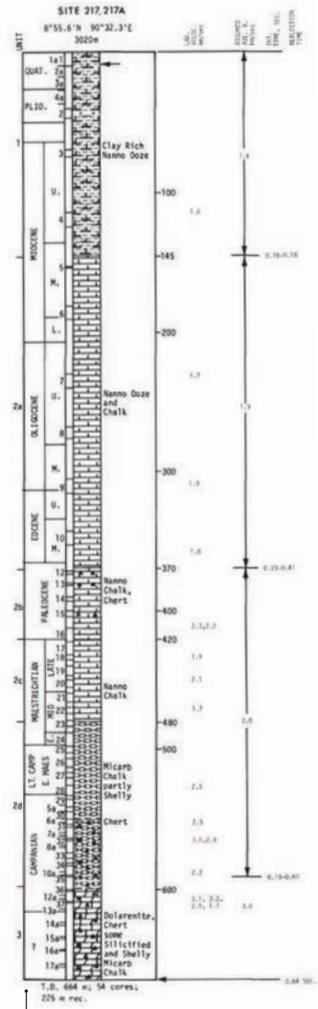
11.45 – 13.00

Friday 22 March

OWAIN JONES Monsoon + Tide

Owain Jones is a cultural geographer and became the first Professor of Environmental Humanities in the UK in 2014 at Bath Spa University, and is now deputy director of the newly formed Research Centre for the Environmental Humanities at Bath Spa. He has published over 80 scholarly articles and four books. He recently led a £1.5 million Arts and Humanities Research Council Connected Communities project into water and community with eight UK universities, community partners and artists in four UK case study areas. He is supervising four Environmental Humanities PhDs with art practice.

Monsoons are cyclical rhythms of the atmosphere, which bring a series of atmospheric variations to locations. Being highly complex, vivid and volatile phenomena of air, precipitation and pressure, within their overall cyclicity, there is huge variation and uncertainty. Monsoons make, and meet, all kind of social rhythms. These are complex enough scenarios in themselves, and become even more so with the uncertainties of climate change. Here I begin to look at where monsoon cycles meet other profound geophysical cyclical forces - that of the tides - which also operate in multi-cycles of rhythms and regional and local variations. Where monsoons meet tides, complexity compounds complexity, uncertainty, risk and drama are amplified. Rhythm overlays rhythm. Flooding is one key and obvious interaction. The Hindustan Times publishes a list of Monsoon high tide times, warning that, "in 2017, eight people died in the deluge that followed a downpour during a high tide. The corporation has appealed the people to stay indoors in case a downpour coincides with one of the high tide dates." In the *Hungry Tide*, Amitav Ghosh builds a narrative of the precarious lives lived in the 'immense labyrinth of tiny islands known as the Sundarbans.' 'What [] were the physiological mechanisms that attuned the animals to the flow of the tides? It could not be their circadian rhythms since the timing of the tides changed from day to day. What happened in the monsoon, when the flow of fresh water increased and the balance of salinity changed? Was the daily cycle of migration inscribed upon the palimpsest of a longer seasonal rhythm?' Tides are complex and vary according to many spatio-temporal local factors, but their expected levels are predictable enough for highly accurate tide tables to be published all around the world. Amazing mechanical tide prediction machines were constructed, which predicted tides for individual ports in the British Empire, each varying factor having its own cog. It is difficult to imagine such a machine for the Monsoon as they operate to differing factors of complexity.



Top. Stratigraphic Log of Bay of Bengal Drilling Hole 217
 Bottom. Line Drawing Of Geo Mar Challenger Seismic Reflection Section Between Holes 217 And 218
 Stratigraphic-Seismic Section Correlations and Implications to Bengal Fan History
 David G. Moore & Joseph R. Curry

JONATHAN CANE

Permeability, Ocean, Concrete

Jonathan Cane is a Mellon Postdoctoral Fellow in Ocean Humanities for the Global South at the University of the Witwatersrand. He received his Bachelor of Arts (Hons) from the Centre for African Studies, University of Cape Town and his PhD in Art History from the University of the Witwatersrand. He is the author of *Civilising Grass: The Art of the Lawn on the South African Highveld* (2019). His research interests are landscape art, architectural modernism, postcolonialism and urban queer studies.

This proposed paper extends my current research on concrete and the notion of permeability. Taking up a new postdoctoral fellowship in oceanic humanities I am interested in asking how a queer-ecological and postcolonial approach to building materials and construction methods might suggest ways of thinking differently about the ocean. For this presentation, I propose examining the 'dolos' or 'tetrapod' which since the 1950s has become an international standard form of breakwater. Made of (generally unreinforced) concrete, these interlocking components are part of a 'hard coastal stabilisation' and work by attenuating the force of waves. The energy dissipating blocks are conceptually understood to be 'armour', working 'against' water, to 'protect' coastlines. Apart from the brutal beauty of tetrapod structures, they are generative for shifting thinking towards assemblages, processes and interconnection rather than binary terms. How might we think of waves as not 'against' land? What could the tetrapod and its relation to the tide open up in our consideration of the monsoon?

TIM WATERMAN (Chair)

Tim Waterman is Senior Lecturer in Landscape Architecture History and Theory at the Bartlett School of Architecture, UCL. He is at work on the book *Landscape Citizenships* and has recently edited two others: *Landscape and Agency: Critical Essays* with Ed Wall and the *Routledge Handbook of Landscape and Food* with Joshua Zeunert.

[UNDER] GROUND MATTERS

14.00 – 15.00

Friday 22 March

ANTHONY POWIS

The Materiality of Groundwater: Leaking, Seeping, Swelling, Cracking

Anthony Powis is an architect, design tutor in the Department of Architecture (University of Westminster), and PhD researcher as part of Monsoon Assemblages. He previously led public space projects with muf architecture/art in London, and has been an associate member of Architecture Sans Frontieres-UK. His master's-level dissertation investigated the production of space in the student protests in London during 2010 and 2011.

The (under)ground or (sub)terranean environment is a thick and complex, three-dimensional space of 'nothing but change', but whose utility is essential to sustaining urban life above it.

This presentation looks at the multiple, specific, and contradictory ways in which the materiality of groundwater is understood and intervened in—using the case of the ongoing Chennai Metro Rail construction project to bring attention to the ground, and its waters, as a series of strata, a composite, a system in both balance and unrest, and an active, vital component of the city.

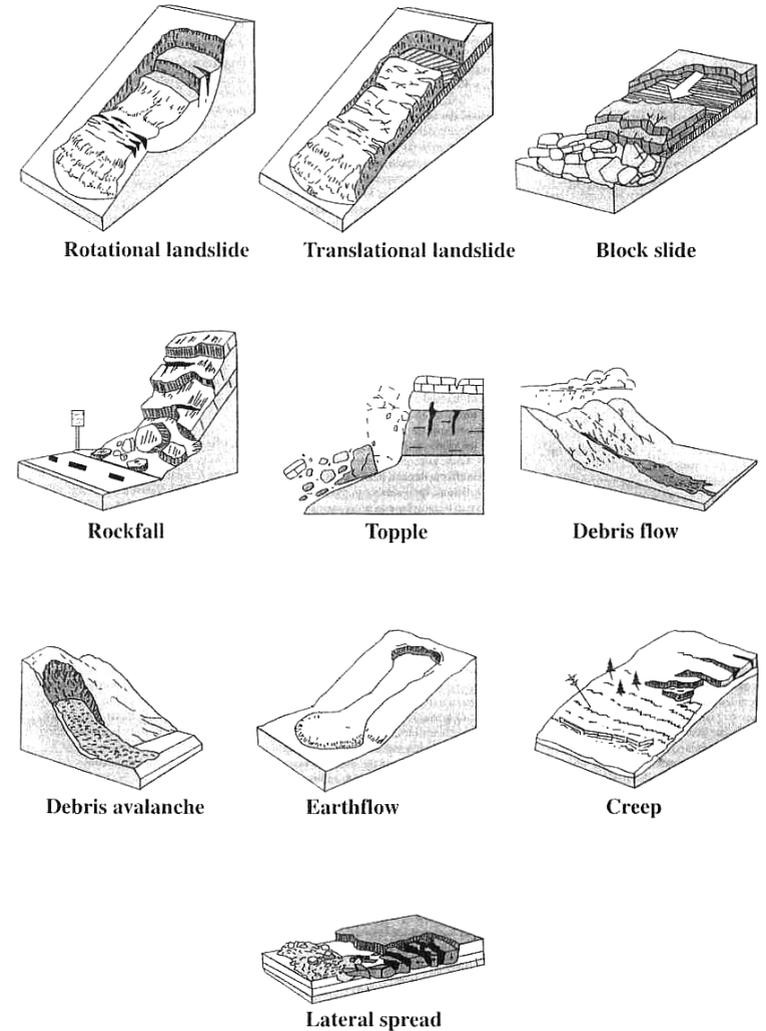
Through unpacking key concepts such as porosity, pressure, and flow, I will cast groundwater not as an objective fact, always pictured by, and relative to, a human subject, but as an 'actual being' which we (and other things beyond us) perceive, relate to, and come into contact with

MATT BARLOW

Floating (under) Ground

Matt Barlow is a musician, photographer, and an anthropology PhD student. His work is mostly concerned with human-environment relationships. He is currently exploring the environmental, social, and political challenges facing the industrialising delta city of Kochi, in India's south west state of Kerala, with regards to waste management, environmental stewardship, and development

Kochi, on the west coast of South India, is more a series of marshy islands than any cohesive landmass. The landscape is enmeshed with canals, rivers, lakes, and eventually, the encroaching Arabian Sea. In this multimedia presentation, I express the idea that Kochi itself is floating on the monsoon. I argue that what is happening beneath the ground, is as crucial to life in the city as what is happening above, and that what is happening beneath the ground is also tied to global systems of extraction, pollution, climatic variation, urbanization, and the intrusion of minerals, such as salt, in the urban aquifer. Rapid commercial and industrial development has left this dynamic monsoon (under)ground, and its terrestrial inhabitants, increasingly vulnerable not only to climate change but also contamination and water scarcity. By looking down rather than looking up, we can better understand the challenging problems of water security and wastewater management in one of the wettest places in India. Embracing a condition of suspension might here be understood as an act of caring for the monsoon, an act that might lead to less precarious futures for all.



JOSE ALFREDO RAMÍREZ (Chair)

Jose Alfredo Ramírez is an architect co-founder and director of Groundlab and co-director of the Landscape urbanism MA at the Architectural Association. Alfredo has worked and developed projects at the junction of architecture, landscape and urbanism in a variety of contexts such as China, Mexico, Spain, Chile among others. He has lectured on the topic of Landscape Urbanism and the work of Groundlab worldwide.

[IN] GROUND MATTERS

15.00 – 16.00

Friday 22 March

ERIC GUIBERT Architectural Soils

Eric Guibert is a gardener architect. His research through reflective practice investigates ways of designing and being with the emergent quality of ecosystems, with their natures, to nurture and express their resilience, their biological and cultural diversity. It is located in the overlap between built and grown architecture and art, and it connects ecological, animistic, and Taoist ontologies.

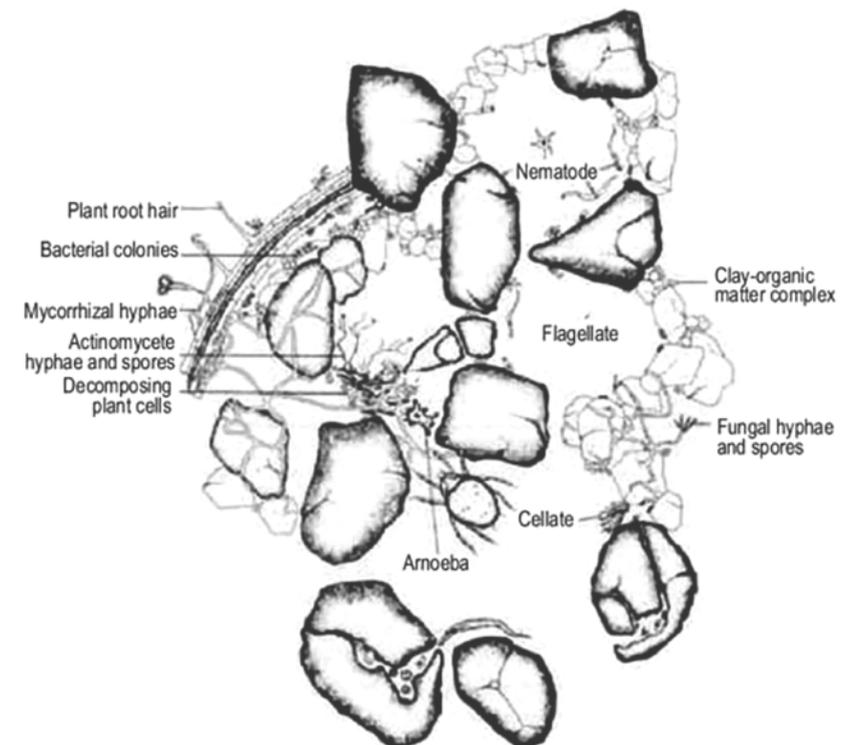
In my practice and recently completed PhD, I have been investigating possible relationships between humans and their ecosystems that nurture the resilience of both, with a specific focus on plant communities. The methodology is a reflective process integrated within the practice of built and grown architectures. It defined an ecological practice as a secular form of architectural animism that conceives of places as beings with agency, that we garden with. Soils, although not in the foreground, were regularly mentioned for the definition of a site's propensity through defining the levels of nutrients and water, and structural capacity... This proposal is to reflect on a selection of the same case studies but this time from the point of view of soils. Soils will be analysed as characters, persons, connecting the life and rhythms of humans, as well as other animals and plants, to geological and climatic temporalities. Of particular interest is how we can transfer to the future the varied forms of heritage embedded in the rituals of soil care, the biological (genetic), the ecological, the cultural. Simultaneously, the lens of "new materialism" will be applied on this practice. The fields previously connected in the research were other architectural and art practices, ecology, landscape conservation, systems theory, as well as Taoist and Zen philosophies. The form of this reflection will be a weave of multiple narratives – some literary, some theoretical – within which artefacts are embedded. It is conceived as much as a work of art as an academic piece of writing.

HARSHAVARDHAN BHAT

About a Monsoon Forest

Harshavardhan Bhat is a doctoral researcher with the Monsoon Assemblages project. His doctoral work is an experiment in the development of a monsoon air methodology, attuned with the Delhi region and some of its material monsoon airs. Harsh is alumni of the 15/16 Strelka Institute post-graduate programme on 'the city', holds an MSc in Comparative Politics (Conflict Studies) from the London School of Economics and a Bachelors in Business Management from Christ College (Autonomous).

How is one to tell monsoon stories in a world that chooses to uproot monsoonal life? Drawing from transformations in the Aravalli and the Delhi ridge, I try and think with the disappearance and transition of the conceptual, material and metaphorical 'monsoon forest' (Krishen, 2006). I engage with recent political developments in land regulation in the region and attempt entangling it with the continuing (post)colonial fantasy of afforestation. In developing these stories as ruptures/blasts that speak to the air and the uprooting of monsoon forests for other emergent (Kirsky, 2015), intentional and unintentional (Tsing, 2018) transformations - I argue that there is no escape from monsoonal figuring. As the so called 'pre-monsoon' dust storm enters a monsoonal timeline and the species of afforestation adapt with monsoonal energies in rapidly changing ground - we begin to perhaps see a different kind of emergence and trouble. Do stories die with the anthropogenic uprooting of monsoonal life and if they do, what else transitions with them?



The Soil Environment and Organisms
The Importance of Soil Organic Matter
Image by S. Rose and E.T. Elliott

RADHA D'SOUZA (Chair)

Radha D'Souza is a Reader in Law at the University of Westminster. Radha practiced as a barrister in the High Court of Bombay and taught at the Universities of Auckland and Waikato In New Zealand before coming to Westminster. She is an interdisciplinary scholar whose work straddles legal and development studies and sociology, human geography and social theory focusing on South Asia. As a social justice activist, she has worked with labour movements and democratic rights movements, as well as acting as a writer, critic and commentator.

[WITH] GROUND MATTERS

16.15 – 17.30

Friday 22 March

NAIZA KHAN Sticky Rice and Other Stories

Naiza Khan is a visual artist who works between London and Karachi. She set up the Vasl Artists' Collective (2000) to support artists' exchange within the region and beyond. She has exhibited widely, and in 2013 received the Prince Claus Award for her initiatives in art and culture, in Pakistan. She is currently an MA candidate at the Centre for Research Architecture, Goldsmiths, University of London.

The New Silk Road (NSR) infrastructure in Pakistan maps new grids to create movement of goods across different ecologies and geographic terrains. This body of research looks at the aggressive reorganization of spatial flows of movement across the country for a deepening of capital flows. It is reminiscent of the floods that submerged one fifth of Pakistan in 2010; the result of heavy monsoon rains, which affected the infrastructure, economy and impacted 20 million people.

As the NSR infrastructure maps new grids to create seamless *'modes for organizing social and spatial life* [it is also] *reshaping patterns of inequality, undermining labor power, and transforming strategies of governance'* (Charmaine Chua). It is difficult to predict what kinds of local frictions it will produce and what new imaginaries and lived experiences can be created in this exchange. It is also important to see what form of resistance will take shape to counteract this movement. The vulnerability of this region, its histories of recent war and conflict and the different forms of imperialism that have marked this land will play a role in new formations.

My long-term engagement with the material culture of the city [of Karachi] and the Island of Manora has been pivotal to this current research. In the ruins of the 19C Manora Observatory, I found archival documents of *Storms and Cyclones in the Indian Ocean 1939*, records kept by the British colonial administration, evidence of a previous map of similar aspirations.

BETH CULLEN

Brick: Cycles of Making and Unmaking Monsoon Grounds

Beth Cullen is an anthropologist and research fellow with Monsoon Assemblages at the University of Westminster. Her work focuses on human-environmental relations using ethnographic and participatory visual and spatial research methods. Following her PhD research with semi-nomadic pastoralists in the Rift Valley she spent three years working on applied natural resource management projects in the Ethiopian highlands.

Fired clay bricks are the dominant construction material in Bangladesh. Within this alluvial terrain where stone is scarce, bricks become the raw material for roads and infrastructure as well as buildings. Brick production is increasing due to rapid urbanisation with brick-fields mushrooming across the country. Made from clay during the dry season and transported to urban centres during the wet season, brick making operates around a monsoonal cycle. The making and consumption of this simple yet versatile material creates complex entanglements between human and more-than-human forces, with far reaching consequences. Brick kilns pull migrant labourers from rural areas, degrade fertile agricultural soils and pollute urban atmospheres. For this presentation, I will use visual and ethnographic storytelling to trace the life-course of the brick, from sediment to clay, from clay to brick and from brick to road. By highlighting the intersecting cycles and rhythms embodied within the brick I hope to illustrate the multiple ways in which the monsoon is enmeshed within lived environments.

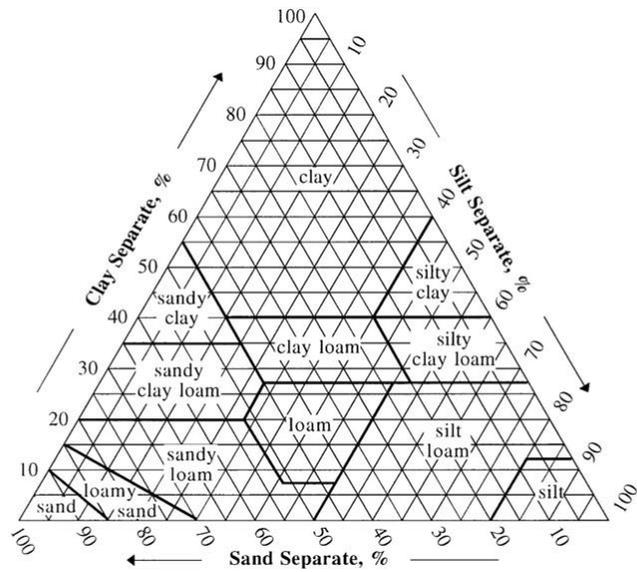
LABIB HOSSAIN

A Critical Reading of the Dry and Permanent Ground through the Practice of Muslin Weaving in Bengal (Dhaka)

Labib Hossain is a PhD student in History of Architecture and Urban Development at Cornell University. His research is focused on the traditional practices in monsoon landscape that can offer an alternative reading of human habitation, one that challenges the dry/permanent ground. Hossain's other research interests include land-water separation in colonial Bengal and representation of water in South Asia.

The city is addressed in many different ways – it is seen as a body, a machine, an organism, a second nature and now a third or even a fourth nature. These readings of the city (or settlements), however, have been conceived on 'dry ground' separated from water as an element that is managed or controlled.

Looking at certain traditional practices like muslin weaving, in the monsoon landscape of the Bengal Delta can offer an alternative reading of human habitation, one that challenges the dry and permanent ground. Muslin is a kind of cotton fabric, delicate and palpably transparent, that attracted the entire world. During the spinning process, the finest thread was spun in intensely humid conditions, usually in the morning and evening, with water bowls around to moisten the air, or else besides river-edges or on boats to capture humidity. The wetness in the atmosphere was one of the main reasons why this practice was unique to Bengal. Is it possible that this practice is a mode of habitation? In this monsoon-landscape, where much is submerged during the rain, when the lines of riverbanks are erased, when towns established by the colonizers are washed away by the changing course of rivers, what is the point of reference? Can this landscape serve to open a new imagination that shifts us from a divided landscape of contained waters to a 'ground of wetness' that requires a new vocabulary of habitation? In this paper, I will discuss, what connections can be drawn from the traditional weaving practices to the idea of dwelling to explore wetness as intrinsic to the ground of habitation.

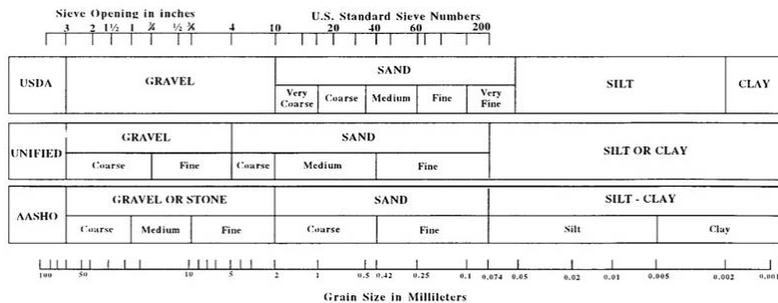


DAVID CHANDLER

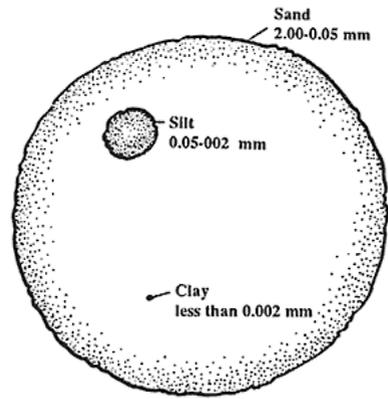
Closing Remarks

David Chandler is Professor of International Relations at the University of Westminster. His research focuses on analysis of policy interventions in the international arena, including humanitarianism, statebuilding and the promotion of resilience. He is also interested in contemporary theories challenging the anthropocentrism of modernist thought, particularly in relation to the Anthropocene, the ontopolitics of critique and new technologies, including algorithmic governance, sensorial assemblages and Big Data. He is a major authority in his field and has published around 20 books (authored and edited) and around 200 chapters and journal articles.

COMPARISON OF PARTICLE SIZE SCALES



Soil Texture Triangle
12 Major Textural Classes and Particle Size Scales as Defined by The USDA





MONSOON ASSEMBLAGES

UNIVERSITY OF
WESTMINSTER^{##}



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