



# MONSOON [+OTHER] AIRS

UNIVERSITY OF WESTMINSTER  
20-21 APRIL 2017



# PROGRAMME

## THURSDAY 20 APRIL

18.30 – 20.00

### KEYNOTE

Sean Lally of Weathers: Night White Skies

## FRIDAY 21 APRIL

09.30 – 09.45

### TEA + COFFEE

09.45 – 10.00

### WELCOME AND INTRODUCTION

Lindsay Bremner

10.00 – 11.45

### PANEL 1: AIR SPACE

Anthony Powis (Chair)

Andrew Turner: The INCOMPASS project and its Field Campaign

Nerea Calvillo: Airscapes in the Making

Victoria Watson: The Earth is Flat and Square – Yves Klein's Paintings of Thunderclouds

11.45 – 13.00

### PANEL 2: WEATHER REPORTS

Rosie Thomas (Chair)

Anasuya Basu: Kolkata

Rifat Islam Esha: Dhaka

Neha Lalchandani: Delhi

13.00 – 14.00

### LUNCH

14.00 – 15.00

### PANEL 3: AIR POLITICS I

Beth Cullen (Chair)

Stine Simonsen Purl: Betting on the Monsoon in a town of semi-arid Rajasthan

Harshavardhan Bhat: Complicit Unknowns

15.00 – 16.00

### PANEL 4: AIR POLITICS 2

Sudhir Chella Rajan (Chair)

Hannah Swee: The Role of Cyclone Forecasting in Responding to Uncertainty

Etienne Turpin: The Fog of War Machines

16.15 – 16.30

### CLOSING REMARKS

Simon Joss

16.30 – 18.30

### EXHIBITION + DRINKS

Exhibition work by Tom Benson, Nerea Calvillo, Vishal Gowtham, Vinusha Keshav, Koushik Krishna, Aishwarya K, Sean Lally, Keerthana Muralidharan, Cid Schuler, Calvin Sin, Victoria Watson.

## LINDSAY BREMNER

(Convener)

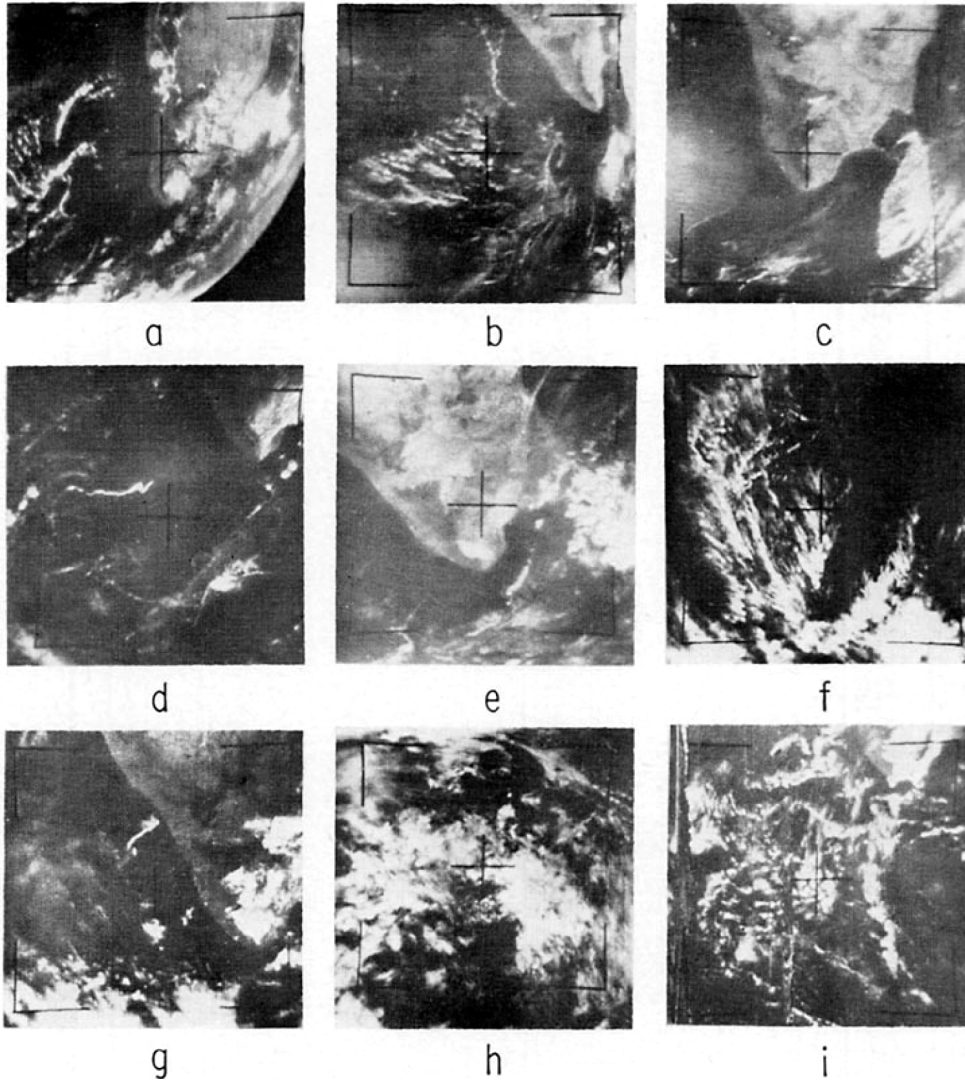
Lindsay Bremner is an architect and scholar who began her academic and professional life in Johannesburg, South Africa, where she published, lectured and exhibited widely on the transformation of Johannesburg after apartheid. She taught at the University of the Witwatersrand in Johannesburg, at Temple University in Philadelphia, and at MIT as a visiting professor, before taking up her current post as Director of Architectural Research at the University of Westminster. Her work positions architectural research within wider socio-material concerns. This includes *Folded Ocean*, a project that investigated the transformation of the Indian Ocean world and *Geoarchitecture*, an exploration into intersections between architecture, geology and politics. She is currently PI on *Monsoon Assemblages*, European Research Council grant no. 679873.

## MONSOON ASSEMBLAGES

The ambition of this cutting edge research project is to deliver a ground breaking, interdisciplinary design-driven inquiry into the impacts of changing monsoon climates in three of South Asia's rapidly growing cities. This will be undertaken at a time when climate change and urban development conspire to produce unlikely futures for urban survival. Extreme weather events, all attributed to the monsoon's capricious nature, are resulting with increasing frequency in water shortages, power failures, floods, out-breaks of disease, damage to property and loss of life. In responding to these events, the project will challenge the dominant view of the monsoon as a natural meteorological system outside of and distinct from society. Instead it will propose that the monsoon is a co-production of physical and social dynamics entangled within historic lived environments that can be analysed, worked with, shaped and changed. To do so, an unconventional interdisciplinary team will develop a novel research methodology around the new operative concept of 'monsoon assemblages.' This will bring together the spatial design disciplines with the environmental humanities to advance research of lived environments as indivisibly natural, social and political and to propose models for intervening in them through design.

## MONSOON [+ OTHER] AIRS

The Monsoon [+ other] Airs Assembly is the first of three annual symposia convened by Monsoon Assemblages. This year's assembly will interrogate questions of monsoon atmospheres, aircapes, media, and politics.



## TIROS VII cloud photographs

Bunker, Andrew F. 1967. 'Cloud Formations Leeward of India during the Northeast Monsoon', *Journal of the Atmospheric Sciences*, 24: 497–507

## SEAN LALLY

### Night White Skies

Sean Lally is the founder of 'Weathers'. Lally is the author of the book *The Air from Other Planets: A Brief History of Architecture to Come* (2014). He is the recipient of the Prince Charitable Trusts Rome Prize from the American Academy in Rome in Landscape Architecture and the winner of the Architectural League Prize for Young Architects and Designers Award. Lally is currently associate professor in the School of Architecture at the University of Illinois at Chicago.

Two of the greatest pressures on society today include humanity's manipulation of the environment and the advancements in bioengineering of the human body. The first is changing the makeup of the physical spaces we occupy and the second, the very body that perceives that space. At this intersection are the physical boundaries that define architectural space. The focus of this lecture is to define the architectural territory that exists today to best integrate these two quickly advancing industries as the epicenter of architecture's spatial, social, and ethical discourse.

## ANTHONY POWIS

(chair)

Anthony is an architect and doctoral researcher as part of the Monsoon Assemblages project. He trained at Cardiff University, the University of Westminster and the Architectural Association. During his MArch at Westminster he received the Banister Fletcher Prize for his dissertation 'The Production of Space in Protest, Law, and Police Action: London, winter 2010-2011'. Anthony previously worked at muf architecture/art, leading public space projects in London and has been an associate at Architecture Sans Frontieres-UK, undertaking practical research in Ghana and London. He is also a visiting lecturer in the department, teaching an undergraduate design studio.

## ANDREW TURNER

The INCOMPASS project and its Field Campaign

Following a physics degree at Oxford, Dr Andy Turner completed his PhD at the University of Reading in 2006 on the subject of the monsoon-ENSO relationship (a means for predicting a season's monsoon rains) in current and future climates. In particular he looked at how systematic errors in the ocean surface could limit the effectiveness of forecasts. Since then he has continued to study climate variability and change in the Asian monsoon region and is leading collaborations with the Met Office and internationally, including the INCOMPASS project – a ground and air-based field campaign as part of joint work between the UK Natural Environment Research Council and India's Ministry of Earth Sciences.

The monsoon in India supplies around 80% of annual rainfall between June and September, giving the majority of water supply for agriculture, industry and human consumption. Despite its importance, simulating the monsoon in short range numerical weather prediction (NWP) models and over the long-term in climate projection experiments has been a long-standing challenge for atmospheric scientists. Most of the models used for forecasting show dry biases during the Indian monsoon – a problem that becomes apparent often after only a few days. This limits our confidence in these forecasts, either for the weather a few days ahead or for the climate at the end of the century. In this lecture we show how well current models can simulate the monsoon and discuss some of the key problems.

These problems motivate the need to gain a more in depth understanding of the fundamental processes connecting the land and ocean surfaces with the atmosphere above it, as monsoon winds flow from the southwest and strike the coast of India, interacting with mountains and a variety of land surface types such as deserts or irrigated areas. The collaborations built among our partners in the UK and India should enable better models to be designed, ultimately leading to better forecasts of the monsoon.

## NEREA CALVILLO

### Airscapes in the Making

Nerea Calvillo is an architect, researcher and curator, and obtained her PhD at ETSAM Madrid in 2013. The work produced at her office, C+ arquitectos, and her visualization projects like In the Air have been presented, exhibited and published at international venues like the Canadian Centre for Architecture (CCA), the Contemporary Art Museum of Chile (MAC) or LABoral Art and Industrial Creation Centre. She is a Poiesis Fellow (NYU), Assistant Professor at the Centre for Interdisciplinary Methodologies at University of Warwick and Unit Master at the Architectural Association. She investigates the material, technological, political and social dimensions of environmental pollution, and her current work is on toxic politics, pollen and queer urban political ecologies.

Digital visualizations of the air are generally used to represent concentrations of gases or particles. Yet generally little attention is paid to the capacities of visualizations in their actual making. Through examination of a practice-based research project on the visualization of air pollutants in Madrid, it can be argued that the design and production of digital visualizations can be not only a representational tool, but also a research method. On the one hand, during the production of the visualization the socio-technical assemblage of air pollutants emerges, and therefore its networks and power relations can be accounted for. On the other, their making is a means to interfere in the world. This interference is analyzed by looking at the realms that the making of the visualization brings together, such as environmental research, media art, or collaborative production. Also, through the design decisions, alternative and speculative landscapes of pollution can be formulated, which call for other imaginaries and practices to engage with air pollution.

## VICTORIA WATSON

### The Earth is Flat and Square – Yves Klein's Paintings of Thunderclouds

Victoria Watson is a Senior Lecturer in Architecture at the University of Westminster, where she co-ordinates the undergraduate History and Theory course, and a studio tutor on the MA Architecture degree at the Royal College of Art. She is a partner in Doctor Watson Architects (DWA), a not-for-profit organisation specialising in the relationships between painting and building in architecture. She has contributed articles about modern architecture, colour theory and aesthetics to a variety of journals and magazines. In 2010 she won a Rome scholarship and in 2012 her book, Utopian Adventure: the Corviale Void was published. Her architectonic models, derived from the study of colour in twentieth century avant-garde practices, have been exhibited at the Royal Academy in London.

Thunderclouds are by no means unique to monsoons, however, they are characteristic features of monsoon systems; and painting thunderclouds is by no means unheard of in histories of art.

This paper is about Yves Klein's attempts to paint thunderclouds. Klein is of interest to Monsoon Air because, at the time he began to paint thunderclouds he already was notorious for his proposals for an architecture of the air, where large areas of the terrestrial surface would be climatically conditioned so that people could live naked, out in the open, floating on cushions of pulsating air. Klein explicitly mentioned monsoons as included within the scope of air architectures, which, as he explained, 'should adapt themselves to the given circumstances and natural conditions.' By the time he got around to painting thunderclouds, Klein had already developed a wholly materialist mode of working and was able to demonstrate the architecture of the air with very few drawings, relying instead on material traces of events acted out with 'air, gases, fire, sound, odours, magnetic forces, electricity, electronics.'

## ROSIE THOMAS

(Chair)

Rosie is a pioneer of the academic study of popular Indian cinema, establishing an international reputation following the publication of her first groundbreaking article on Hindi cinema in *Screen* in 1985. Since then she has written widely on Indian cinema, contributing to numerous books and journals. She is co-founder and co-editor of the international Sage journal *BioScopes: South Asian Screen Studies*, a forum for new research on the history and theory of South Asian film, screen-based arts and new media screen cultures. Her monograph *Bombay Before Bollywood: Film City Fantasies* was published in 2013 by Orient Blackswan, and republished in 2015 by SUNY Press.

## ANASUYA BASU

Kolkata

Anasuya is a journalist with an English daily, *The Telegraph*, published from by the ABP Group in Kolkata, India and is here as a Chevening fellow for the South Asia Journalism Programme 2017. She writes on urban issues, development, and how it affects environment. She also covers art and culture and heritage architecture in Kolkata. Currently, She is researching on issues of riverfront development.

## RIFAT ISLAM ESHA

Dhaka

Rifat Islam Esha is a Sub-Editor at *Dhaka Tribune* - an English daily newspaper. She does special reporting for the paper besides sub-editing. She has written pieces on urbanisation and water and noise pollutions.

## NEHA LALCHANDANI

Delhi

Neha Lalchandani works with *The Times of India*, India's leading daily, as an Assistant Editor. She did her Masters in English from Delhi University and joined the newspaper in 2005. As a city reporter, she has worked extensively on civic and political matters related to environment, water needs of the city, women's issues and social welfare. Her focus has been on urban development of Delhi, the stress of development on existing infrastructure and the impact of government policies on marginalized communities.







## BETH CULLEN

(Chair)

Dr Beth Cullen is an environmental anthropologist specialising in participatory research approaches. She worked in Sub-Saharan Africa periodically from 2005 to 2012. Her ESRC funded PhD research explored the use of participatory video as a method for collaborative research with pastoralists in the Rift Valley of Ethiopia. Following her PhD, she spent three years working as a social scientist on interdisciplinary research projects for the International Livestock Research Institute (ILRI) in Addis Ababa. Her postdoctoral work focused on critically evaluating approaches to natural resource management and agricultural development. Beth has conducted fieldwork in East Africa, West Africa and South Asia (Bangladesh). She holds a PhD in Anthropology, an MA in Social Anthropology and an MA in Research Methods for Anthropology with a focus on the anthropology of development and indigenous knowledge systems.

(previous spread)

Eliot, John. 1900. *Handbook of Cyclonic Storms in the Bay of Bengal* (Calcutta: Government Printing Office)

Maury, Matthew Fontaine. 1858. *Explanations and Sailing Directions* (Washington: Hon. Isaac Toucey)

## STINE SIMONSEN PURI

Betting on the Monsoon in a town of semi-arid Rajasthan

Dr. Stine Simonsen Puri is a postdoctoral fellow of Department of Cross-cultural and Regional Studies at Copenhagen University. She has an educational background in social and cultural anthropology, and wrote her PhD on speculation and informal economy based on long-term fieldwork among gamblers in India. Her current research concerns speculative economies in India evolving around weather uncertainties. The research is based upon fieldwork among gamblers, speculators and farmers in a semi-arid region of Rajasthan. The research is part of a joint project “Escalation” which aims to contribute on the theorization of scale and accelerating change. Apart from this Dr. Puri is also engaged with the history and contemporary practices of temple dance in India.

While the Indian government are investing money in improving forecasting technologies to prevent natural disasters as well as to increase farming output, a century old practice of rain forecasting is on a decline. The popularity of cricket betting as well as increased police interference has made rain betting an activity primarily for old men. Yet the case of rain betting offers a perspective on alternative ways of scaling the monsoon in terms of its temporalities and spatialities, which at the same time brings insight into information systems of other speculative economies that evolves around the uncertainty of the monsoon.

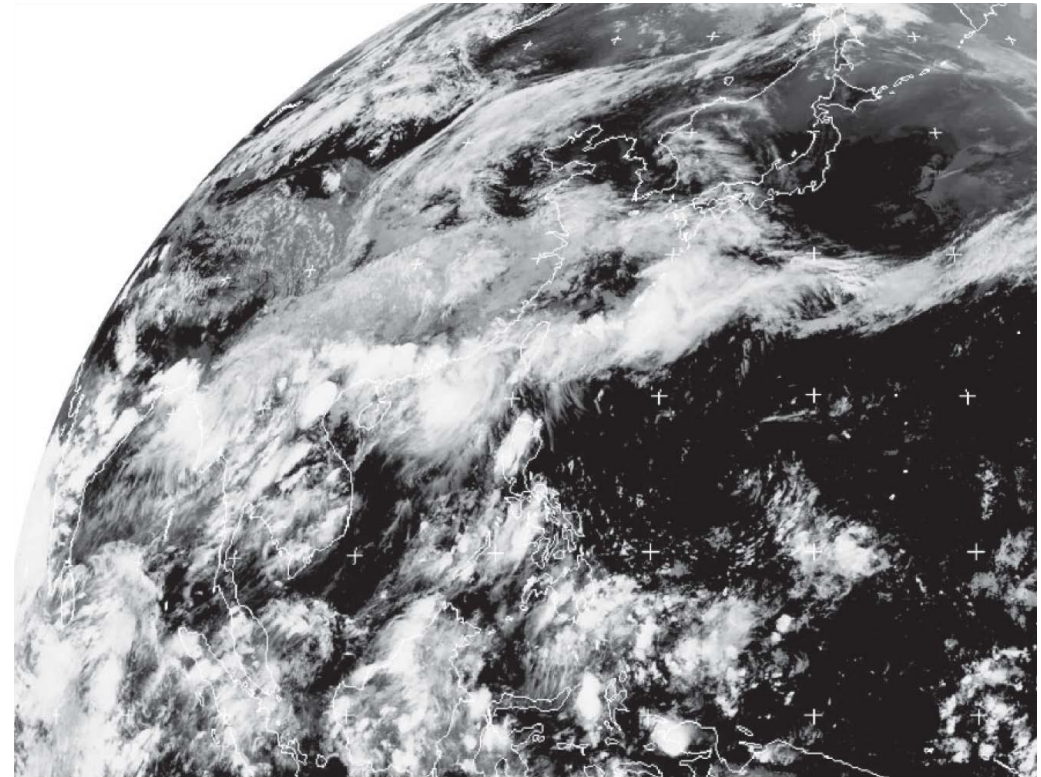
The paper is based on fieldwork among rainbettors and bookmakers in the town of Fatehpur, in the semi-arid region of Rajasthan. During the monsoon men from the surrounding villages come to the satta bazar to place bets between 100 and 100.000 rupees on whether or not rain water will come out of the waterpipe of an old building used for grains storage, while bettors from cities further away place their bets by calling the bookmaker. The paper focuses on the different methods of prediction among various bettors and how technology organizes knowledge of rainfed spaces.

## HARSHAVARDHAN BHAT

### Complicit Unknowns

Harshavardhan Bhat is a PhD Researcher with the Monsoon Assemblages Project at the University of Westminster. He's currently working on a monsoon air and urbanism themed project anchored out of New Delhi and is interested in the study of politics, the infrastructural condition, air and contextual research on the 'Anthropocene'. He's an Alumnus of the '15/'16 postgraduate programme on 'the city' at the Strelka Institute for Media, Architecture & Design in Moscow and holds an MSc in Comparative Politics (Conflict Studies) from the London School of Economics. Harsh was previously a Fellow with the Jindal School of International Affairs in New Delhi and has also managed political consulting projects in South India and Rwanda.

I discuss in 'complicit unknowns', the entanglement of the complicit and the unknown in coproducing a perception of phenomena or fiction that binds people into an everyday fabric to sustain meaning. Drawing scenes from the state of Karnataka in southern India, I try and construct an expressive claim on the Maḷegāla (the Kannada word that translates to 'rainy season/time') as a complicit unknown. It's presence or non-presence is complicit to nourishment or violence but this comprehension of presence and/or non-presence is made viable as a device of the unknown. This device is part of a condition called 'these days' or 'iganagāla' (a Kannada dialect-term for 'these times/days') which based on mental clustering can be a random gathering of objects, people, feelings - about gods, politicians, cars, jobs, nature, circumstance, computers, roads, commercial behaviour etc, immersed to an ever growing list of possibilities based on who's thinking it. So the wells go dry, the rain stops short, the winds carry dust, the highway floods, lakes burn and cars cough. Every scene is part of this encapsulated period of 'these days'/iganagāla like the 'maḷegāla' which is a complicit unknown. So in this world of complicit unknowns - who is complicit to what and what is unknown to whom? We still gaze at the sky in hopes for the grounds to be replenished but we gaze at 'time', an anthropocenic time in claiming ourselves to be complicit unknowns, as the ocean of the sky, it's air, absorbs, circulates and distributes the materiality that is burnt into it.



#### The Mei-Yu front over southern China

University of Dundee Satellite Receiving Station  
in Galvin, J. F. P. 2008. 'The Weather and Climate of the Tropics: Part 6 – Monsoons',  
*Weather*, 63.5: 129–37

## SUDHIR CHELLA RAJAN

(Chair)

Sudhir Chella Rajan teaches at the Department of Humanities and Social Sciences at IIT Madras. His interests are primarily at the interface of political theory and the environment; in particular, on new challenges that enter politics within democratic societies in the face of composite social and environmental encounters. He has worked on emergent policy dilemmas in automobile pollution regulation in California, the politics of power sector reform in developing countries, conflicts in relation to energy access and climate change policy, the patterns of social change needed in transport in the United States for fair climate policy, ethical approaches to addressing climate change and sea level rise, new interpretations of the resource curse in resource-rich developing countries, changes to the periurban (periurban.org) landscape in South India and the shifting meanings of corruption in environmental and everyday discourse. He is currently writing a manuscript on the 'big' history of corruption in India.

## HANNAH SWEE

### The Role of Cyclone Forecasting in Responding to Uncertainty

Hannah Swee has a PhD in social anthropology from University College London where she was an AXA Research Fund Doctoral Fellow in Environmental Risk. Her research focuses on how people live with recurring disaster threats, and her interests include disaster risk reduction, capacity building, climate change, and sustainability. Her publications include the recent special issue on living with disasters in the journal *Nature and Culture*, and the forthcoming book *Ordinary Extraordinary: Ethnographies of Risk, Limits and Exposure*. She currently works on applying academic research in humanitarian organisations.

Every year Far North Queensland, a region in the north east of Australia, experiences a cyclone season between November and April, which is part of its annual cycle of weather. With each cyclone season approximately four cyclones are expected to form in the Coral Sea off its coast, and one or two are anticipated to make landfall. As a result, residents in this region experience cyclones as regular, seasonal events that are associated with specific times in the year, and they employ a wide variety of methods to forecast them. These range from observations in the natural environment to meteorological tracking maps. In this paper, I will draw on 18 months of ethnographic fieldwork in Far North Queensland to begin a discussion that not only describes what these methods of forecasting are and how they are used, but also explores the role of forecasting in the way in which a sense of control is established amidst the uncertainty that comes with cyclone threats.

## ETIENNE TURPIN

### The Fog of War Machines

Research Scientist, Massachusetts Institute of Technology

If you ask anyone in Jakarta why groups of men are stalking narrow residential streets with awkward silver boxes slung around their sweat-soaked bodies, it is likely they will reply that the fog being dispersed from their machines kills mosquitoes. This is only partially true. The machines mix gasoline and pesticide in a heated chamber designed to produce microscopic droplets of insecticide; then they eject a thick, white cloud, dramatic and eruptive. The "fog" is directed toward the most common places in the *Aedes aegypti*'s environment, usually dark nooks, hidden corners, and covered ditches. Yet, the target of the fog is only nominally the *Aedes aegypti*. More precisely, the fog of these war machines is intended to make the environment within which dengue lives unlivable.

During the presentation, Etienne will explore some paradoxes of pathogenesis in a time of runaway climate change and ecosystem collapse with particular attention to the changing nature of the tropical monsoon and its implication for urban epidemiology. Drawing on design research from Indonesia conducted by an exact office, PetaBencana.id, and the MIT Urban Risk Lab, Etienne will contend that an interventive disposition is required to renegotiate by design the parameterization of life on earth.



Monsoon Assemblages is a research project funded by the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (Grant Agreement No. 679873)

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