

LIQUID ECOLOGIES:

Land, Water, and Oil in the Gulf of Mexico

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Detail of the FAO/UNESCO Soil Map of the World, Mexico and Central America, Sheet III, 1972.

"The Soil Map of the World was the very antithesis of Borges' fantasy. It was at once so obviously a thin simplification that governments wondered what useful purpose it could possibly serve, and yet so complicated it defied commonsense interpretation." from: Perrin Selcer, "Fabricating Unity: The FAO-UNESCO Soil Map of the World," in *Historical Social Research* / *Historische Sozialforschung*, 2015, Vol. 40, No. 2, pp. 174-201.

INTRODUCTION

The Gulf of Mexico is a rich assemblage of atmospheric anomalies and political currents, material streams and petrochemical pipelines, pre-colonial ghosts and post-colonial violence, diverse diasporas and varied eco-regions. It is a world dislocated by borders and embargos, transected by shipping lanes and language, and unified by climate crises and tourism. These *Liquid Ecologies*, as Lisa Blackmore and Liliana Gómez write, are "host to turbid histories of capital flows, philosophical currents, aesthetic traditions and residual traumas that connect distinct spaces, times and bodies."¹ A container ship departing from the Port of Houston and traveling due South will reach the port of Veracruz, Mexico in two days. Beginning in one of the largest ports in the United States, the voyage would pass the Cantarell and Ku-Maloob-Zaap oil fields, Mexico's largest oil and gas producing regions. By plane, a direct flight from Houston to Mérida, to La Havana, or to Miami takes approximately two hours. The flight to Mérida, the capital of the Mexican state of Yucatán, would pass over the invisible Chicxulub impact crater, responsible for both the Cretaceous-Paleogene extinction event, as well as the oil fields described above. There is a perverse poetry to this mirror across the Gulf: the impact that produced the fifth mass extinction event opened up some of the ancient carbon reserves that would contribute to the sixth.²

Liquid Ecologies will explore how design agency might work to counter the dominant political, economic, and cultural paradigms that contribute to these turbid histories and troubled environments. Increasing incidence of catastrophic weather events,

1. Lisa Blackmore and Liliana Gómez, *Liquid Ecologies in Latin American and Caribbean Art*, (Routledge, 2020) 2.

2. The Sixth Mass Extinction is the result of the devastating effects on the planet by human activity. See Elizabeth Kolbert, *The Sixth Extinction: An Unnatural History* (Henry Holt & Company: 2015)

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INTRODUCTION CONT'D

sea level rise, and shifting patterns of migration are rapidly transforming these territories, all of which stem from anthropogenic climate change directly tied to the post-colonial histories of extraction and processing of fossil fuels. The studio will examine these viscous exchanges throughout the region—from oil and labor, to soil and water, to weather and people—which play a crucial role in defining the landscape. The studio will learn with the varied approaches to urbanization and occupation, anti-colonial and indigenous land practices, responses to climate risk and adaptation, and contemporary approaches to ecosystem management present in the region. Taking the Gulf of Mexico as a case study, *Liquid Ecologies* will document the conditions that unite and divide the region in order to reimagine new associations and relations across this already intertwined world.

PHASE 01: DEEP TERRITORY

The studio method will begin with research and deep mapping at the scale of the territory of the Gulf of Mexico to critically question assumptions about the climate, ecology, land use, governance, economics, and cultural conditions that define the region. Guiding this investigation will be the “seven cheap things” as articulated by Raj Patel and Jason W. Moore: nature, money, work, care, food, energy, and lives.³ Each group will produce visual deep mapping narratives that explore these topics for their chosen region. These narratives—a combination of mapping, drawing, and film media—will include vertical layers from ocean floor to atmosphere, horizontal layers from commodity movements to human/non-human migrations, and the multi-temporal and trans-scalar relations across the Gulf. Groups will navigate the entanglements that define these disparate landscapes, ultimately laying the groundwork for selecting sites in which to situate final proposals. The studio will focus on the following regions for the research phase:

- **Northwest Gulf of Mexico:** from Alabama to the Rio Grande.
- **Northeast Gulf of Mexico:** from the eastern Mississippi River Delta to Apalachee Bay.
- **South Florida Continental Shelf and Slope:** from Apalachee Bay to the Straits of Florida, including the Florida Keys.
- **Campeche Bank:** from the Yucatán Straits to the Tabasco-Campeche Basin, including Arrecife Alacran.
- **Bay of Campeche:** from the western edge of Campeche Bank to the offshore regions east of the port of Veracruz.
- **Western Gulf of Mexico:** between Veracruz and the Rio Grande to the north.
- **Gulf of Mexico basin:** including the Sigsbee Deep, the Sigsbee Abyssal Plain, and the Mississippi Cone.

[Embodied Experience \[Local\]:](#)

The studio will engage in local site visits and meet with organizations and institutions responding to climate risk and mitigation, resiliency planning, and environmental justice action. These will include the *Texas Environmental Justice Advocacy Services (t.e.j.a.s.)*, the *Houston Climate Justice Museum (HCJM)*, and the *Harris County Flood Control District Wetland Mitigation Bank*, among others.

3. Raj Patel and Jason W. Moore, *A History of the World in Seven Cheap Things: A Guide to Capitalism, Nature, and the Future of the Planet*, (University of California Press, 2017).

[Phase 01 Reading:](#)

Lisa Blackmore and Liliana Gómez, *Liquid Ecologies in Latin American and Caribbean Art*, (Routledge, 2020).

Andrew Herscher and Ana María León, “At the Border of Decolonization” in *e-flux: At The Border* (2020).

Raj Patel and Jason W. Moore, *A History of the World in Seven Cheap Things: A Guide to Capitalism, Nature, and the Future of the Planet*, (University of California Press, 2017).

Kathryn Yussoff, “Epochal Aesthetics: Affectual Infrastructures of the Anthropocene,” in *Accumulation: The Art, Architectu, and Media of Climate Change*, Nick Axel et al eds. (*e-flux architecture*, 2020), 13-25.

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PHASE 02: FIELD WORK

To support this research, students will engage in methods of virtual and in-person fieldwork to research their regions throughout the term. The method for this phase will be embodied and journalistic: visiting sites both physically and digitally, identifying archival material, participating in conversations with local constituents, and engaging in collective discussions. Through this process the “site” and “field” will become a loaded space to both expand and question. Students will develop a fieldwork plan that will guide their research as well as produce a collective field guide to communicate both their fieldwork process and deep mapping narratives.

The term “conviviality,” as defined by philosopher and social critic Ivan Illich, is the “opposite of industrial productivity” and the “autonomous and creative intercourse among persons, and the intercourse of persons with their environment.”⁴ Throughout the research phases, students will identify local organizations, spokespeople, and representatives of their Gulf regions, ultimately co-curating an event at the University of Houston to discuss their research. Students will develop the schedule and coordinate the event, present their research, and guide the discussion. These *Convivial Conversations* will help to parse the complex and interrelated web of corporations, agencies, infrastructures, landscapes, and architectures underpinning and connecting these regions, and serve as a means to gather feedback from a broader array of voices.

PHASE 03: CONVIVIAL ASSOCIATIONS

Emerging from the deep mapping narratives, fieldwork, and convivial conversations, groups will develop a prototype for an “association” consisting of a program, site(s), approach to property and territory, articulation of environmental relations, and structure of social and economic governance. Groups will characterize the types and tendencies of their association in the context of their research: what new or alternative way of being in the world does it propose? What existing organizations, peoples, and governance mechanisms can be built upon or reimaged? How can we make these new approaches visible and articulable through design?

PHASE 04: LIQUID ECOLOGIES

Students will develop specific design proposals to accommodate and support their convivial association. The intent is to place these various sites and landscapes in conversation to generate new ideas, architectural hybrids, and protocols of existence. Projects could take the form of housing prototypes, biological field stations, new pedagogical landscapes, adaptive reuse protocols, landscape approaches, among other agendas and programs. The final conversation will also be a collectively designed event, with students as agents in the format and production of the projects. The proposals and event will ultimately ask: how can design create new alliances between peoples, landscapes, organizations, matter, non-human life, and atmospheres? How do we situate ourselves, as designers, within these ecological and material processes, and how do we approach the task of design with new sensibilities and ethics of care?

Phase 02/03 Reading:

Subhankar Banerjee, “Ought We Not to Establish ‘Access to Food’ As a Species Right?” in *Third Text*, January, 2013, Vol. 27, Issue 1, 33–43.

Ivan Illich, *Tools for Conviviality*, (Marion Boyars: 2009).

Emily Eliza Scott and Ursula Bie-mann, “Mobilizing Materialities: A Dialogue on the Planetary Condition, and New Aesthetic Environmental Imaginaries” in *Productive Universals - Specific Situations* (Sternberg Press, 2019) 406-435.

Paolo Tavares, “Nonhuman Rights” in *Forensis: the Architecture of Public Truth*, edited by Forensic Architecture (Sternberg Press, 2014) 553-571.

4. Ivan Illich, *Tools for Conviviality*, (Marion Boyars Publishers: 2009) 11.

Embodied Experience [Abroad]:

The studio will also seek to travel across the Gulf of Mexico to Mérida, Mexico, to meet with environmental activist organization *Va por la Tierra*, advocating for environmental justice in the Yucatán. We will also visit various biological reserves in the region containing cenotes left by the Chicxulub impact, as well as cultural sites such as the Mayan cities of *Chichen Itza* and *Uxmal*.

Final Deliverables:

- Deep Mapping Narrative
- Field Work Plan
- Deep Map/Field Work Booklet
- Convivial Association Proposal
- Convivial Conversation Event

- Design Proposal
- Territorial Model
- Animated/Filmic Visualization
- Communication Strategy
- End of Year Exhibition Design