



Geological Sections Through Trinidad, by H. G. Kugler, 1959. The Petroleum Association of Trinidad 1961

LANDSCAPES OF EXTRACTION

Climate Change and the Urban Infrastructure of Oil in Trinidad & Tobago

OPTION STUDIO FALL 2019

Tao DuFour, in collaboration with Mark Raymond at the Caribbean Collaborative for Architecture and Urbanism, UWI

This studio will explore the industrialized and urbanized landscapes of oil and gas extraction in the island of Trinidad in the southern Caribbean. Petroleum and other hydrocarbon deposits within geological strata of the island and its coastal waters were discovered in the 19th century when Trinidad was a British colony; as early as 1866 the world's first continually producing oil well was drilled in the south of the island. Today, Trinidad and Tobago is the primary oil and natural gas producer in the Caribbean, with one of the largest natural gas processing facilities in the Western Hemisphere located on the west coast of Trinidad. As a significant producer and consumer of hydrocarbons, the island is implicated in climate change; at the same time, however, as a small island developing state whose patterns of settlement and urbanization are primarily coastal, it is also vulnerable to the effects of climate change, specifically the interrelated phenomena of global warming, sea-level rise, and environmental hazards of weather—increasing frequency and severity of storms and hurricanes. Through interdisciplinary research methods—drawing on architecture, urbanism, geography, and ecology—the studio proposes to interrogate the overlapping territories of urbanized and industrialized landscapes of oil and gas production along the west coast of Trinidad, in order to discover and describe their complexity, and project possibilities for design in the face of the urgencies of climate change.

The studio draws on the theoretical insights of anthropologist Anna Tsing, who examines conditions in degraded landscapes in which a specific resource has been depleted by industrial extraction. Such landscapes of “capitalist ruination”, Tsing notes, house possibilities for other modes of non-extractive appropriation. Hydrocarbons are finite geological resources, and it is proposed that Trinidad’s industrial landscapes of oil and gas extraction are landscapes of ruination *in anticipation*, mirroring in a future projection the ruination of the former (post)colonial landscapes of sugar production. The global tendency in principle—and in many geographies in practice—reflects a shift from hydrocarbon based energy and fossil fuels to renewables. Trinidad & Tobago is already facing the depletion of its oil and gas reserves, and like many oil producing nations in the contemporary planetary situation, faces an *environmental ethical dilemma*. Seeing Trinidad as an exemplary context, the studio proposes to project through design-based research, possibilities for urban and landscape transformation and the constitution of new environmental imaginaries, as extractive industries are superseded either intentionally or through extended *temporalities of ruination*. We will approach the problem from two interrelated perspectives: design research based on historical, urban morphological and environmental analyses drawing on cartographic and geographical information systems resources; and ethnographic perspectives mediated through literature, music, film and popular media that offer insight into lived experience and environmental imaginaries that constitute Trinidad & Tobago’s cosmopolitan texture.

The studio will involve a week long joint field trip (Sept. 21-29) to Trinidad with students in the Mellon Expanded Practice Seminar co-taught by Tao DuFour and Natalie Melas, “Atmospheric Pressures: Climate Imaginaries and Migration in the Caribbean”, and is developed in collaboration with Mark Raymond, of the Caribbean Collaborative for Architecture and Urbanism, University of the West Indies (CCAU) (UWI) at St. Augustine, Trinidad & Tobago. *\$500 field trip contribution per student is required.