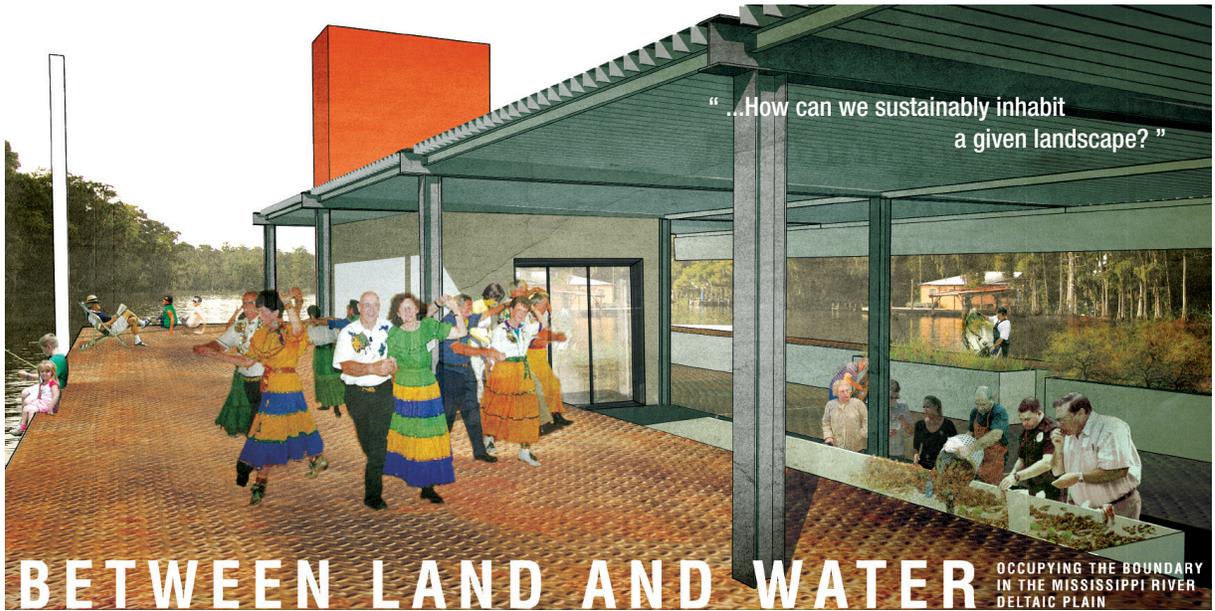


Between Land and Water: Sustainably Inhabiting the Changing Landscape of Deltaic Plains, A Case Study for Southeastern Louisiana

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Sustainable inhabitation can be defined as prolonged engagement of a physical environment to facilitate human existence without depleting or permanently damaging that environment. Human beings must alter their environments to serve their own needs, but most people never experience the infrastructure, systems and processes that make life possible. As technology and culture become more complex, our simple relationship with the places we inhabit has become equally complex and obscure. Under the pressures of unprecedented energy consumption and climate change, how can we begin to question the way we inhabit a given place - especially rapidly changing deltaic landscapes such as that of the Mississippi River? We must begin to look critically at our relationship with these places and how we use their resources in order to make informed, responsible decisions about how we build and how we live into the uncertain future.

Historically, building existed as a natural response to the way people lived within a specific landscape. In his book *The Control of Nature*, author John McPhee tells us that the Louisiana landscape "...exists in its present form because the Mississippi River has jumped here and there within an arc about two-hundred miles wide, like a pianist playing with one hand - frequently and radically changing course, surging over the left or the right bank..." The Mississippi River carries one fourth of the watershed of the United States and created the land on which Southeastern Louisiana was built. The region is home to the largest combined port in the world in cargo tonnage between Baton Rouge and New Orleans and is a major producer and processor of domestic oil and seafood. Currently, Louisiana's deltaic plain is also rapidly changing - losing 30 square miles of crucial wetlands every day due to sea level rise, subsidence and tidal erosion. It exists in a precarious state while the land-building power of the river has been truncated by the levee system that protects the livelihood of human settlement. This region is a critical juncture of natural systems, industry and humanity. How can site-specific events and processes such as natural and man-made geologic systems, agricultural and aquatic practices, plant and animal adaptations and historic settlement patterns inform the tectonics and mechanics of a new means of occupying such a place? The project aims to establish a paradigm for occupying the boundary between land and water, promoting an understanding of our unique relationship to this boundary and facilitating ways to live with it instead of control it. Its intention is to function as a catalyst for community-based sustainability and learning through direct interaction with the landscape and its resources. As such, the project includes mobile dwelling units and a permanent land-based component. Tourism, infrastructure and public venues for leisure, local trade and cultural immersion are key program components. The end-users include tourists, seasonal hunters and fishers, and permanent residents. Other relevant considerations include land-loss prevention, living with water, necessary infrastructure for modern life and how these elements interact with one another and the landscape.

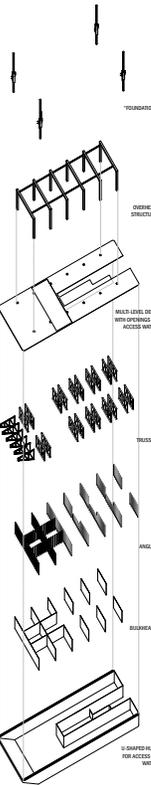


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A SUSTAINABLE PROTOTYPE

A 'four barges' acts as a vessel to house the programmatic response to Southeastern Louisiana's diverse landforms and rich resources. It includes tourism, infrastructure and public venues for leisure, local trade and cultural immersion and facilitates a sustainable means of habitation.

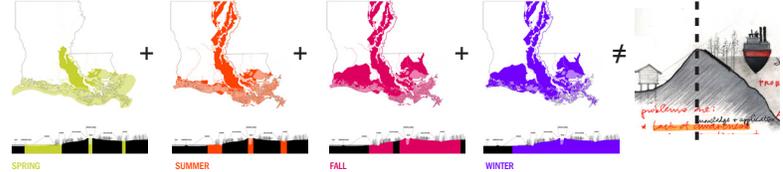


UNDERSTANDING THE LOUISIANA LANDSCAPE

Louisiana's ground is not permanent - necessarily being made and removed by a system of rivers, marshes, swamps and the Gulf of Mexico. Here, its diverse landforms are mapped onto a diagrammatic plan and section of the Deltaic Region.



Despite the region's wide range of landforms, unique geomorphology, diurnal flooding, diverse hunting and fishing opportunities and agricultural seasons that fill the year, settlement patterns in Louisiana have become an attempt to fix the land/water boundary (far right). Site-adaptive activities like fishing, dredging and agriculture can take place across the section of the region according to season.



SYNTHESIS OF SITE + HUMAN NEEDS

A synthesis of site-adaptive and life-sustaining activities throughout a cyclical calendar year according to season and geography are the program for the sustainable prototype.



SCHEMATIC SECTION THROUGH LAND/WATER BOUNDARY