

#### 4.154 Option Studio. Fall 2022

Professor Andrew Scott  
TA: Sarine Gacia Vosgueritchian  
Tuesdays / Thursday 1.00-5.00

#### CUTTYHUNK: Island Resilience



Islands tend to be fascinating examples of landscapes, ecologies and communities on the delicate and leading edge of sustainability and the imminent challenges brought about by climate change. The Galapagos are a prime example. Often challenged but sustained by consequences of tourism, they tread a fine line between economic and cultural viability on the one hand and the impacts of environmental and climatic vulnerability on the other. In such scenarios, island communities, such as Cuttyhunk, work hard to survive and become resilient- but with a concern around the policies they need to implement in the future to achieve a new form of ecological balance and real sustainability.

The delicacy of this ecological balance is also subject to an understanding of the 'flows', in and out / to and fro, that sustain this native island and its culture - and perhaps provide a framework for understanding interactions over variable time scales that create strategies towards a more resilient future. As an example, many smaller-scaled islands such as Cuttyhunk, have flows and changing seasonal cycles of people, resources, goods, waste, climate variations, animals, vegetation and beaches to name a few of the most obvious. Also these flows and cycles can be traced and mapped through history to reveal a palimpsest of physical responses by earlier generations that have inhabited the island. Set against this scenario, the studio for the semester will work with the island of Cuttyhunk in southern Massachusetts, to consider how as architects we must engage with such issues in considering how to impact change on an island through design and architecture.

The island of Cuttyhunk is the most westerly of the Elizabeth Islands that frame Buzzards Bay in southern Massachusetts, and are part of the town of Gosnold that dates back to the early 1600's. Capt. Bartholomew Gosnold came to the island in 1602 from Falmouth, England with 30 men and named it 'Elizabeth's Isle'. At the time Cuttyhunk was still physically connected to the other island's landmass. The name of Gosnold exists to this day as the official town name, even though Gosnold himself died in 1606.

Regarding the title of what is now the island, "the name Cuttyhunk is believed to derive from branches of the Wampanoag Tribe who hunted and fished the islands- and is a shortening of Pocotohunkunoh (P00 cut uh HUNK uh nah), A good case can be made that the meaning of the root word is 'Halfway Island.' Looking at the nautical chart makes it clear that Cuttyhunk lies halfway between current-day Martha's Vineyard and current-day New Bedford." (from Jessie Little Doe Baird, Wōpananâak Language Reclamation Project.) \*\*

While the nearby twelve-mile-long Elizabeth islands are unique as they are mostly uninhabited for the purposes of preservation, Cuttyhunk is the exception and grows from a population of only about twelve people in winter to several hundred with summer visitors, in addition to the regular day-trippers and significant numbers of visiting boaters from July to September. The island is about 1.5 x 0.75 miles and is accessed by a daily ferry from New Bedford. People, goods and products come in while out goes the sorted waste on the ferry together with recycling. Water comes from various wells and the island recently invested in a substantial solar plant. Cuttyhunk is a 'dry island' (no alcohol for purchase), has almost no vehicles (except golf carts and ATVs), and the island has regularly resisted pressure from investors to opening up restaurants and the other commercial development, especially thanks to intervention from the Buzzards Bay Coalition. As a town community it has a small cluster of very small buildings that serve as the 'center', with a museum, town hall, church, school (currently no students) and a library. Most of the development has happened in a relatively ad-hoc manner around the boat basin at the northern end of the island.

The southern half of the island is wild in nature and is still is farmed with oyster beds, while the northern end has a protected boat basin surrounded by mostly moderately-scaled summer homes and a network of roads. During three summer months the island is busy and active with flows of people, boats, resources waste and fuel, but quiets down as it faces the winter months when essential repair and infrastructural work is completed and the people disappear. As mentioned, Cuttyhunk is in a balancing act as it questions whether it is a community that can exist outside of the short summer months for visitors - and and if so it will need to figure out how to survive while preserving the island's culture and ecology, flora and fauna, and the future impacts of a changing climate. The thesis of the studio is that in times of climate change, sea level rise and a more-volatile climate, the island can retain positive outlook on its future as a year-round community, including being a laboratory for observing changes to the land, landscape and ocean and fishing, while also being a resource for learning and testing new ideas that enable it be exist sustainably.

The studio will use Cuttyhunk as the context for making architecture as a strategic and physical act on the island. We will consider two projects: a short project that consider show to rethink the summit 'destination' and high point on the island (with 360 degree views) that is in need of new design thinking; and a longer project that is a modestly-scaled residential ecological education center that poses the possibility of new directions for public engagement on the island's future. The idea is for the center to be a resource for visitors of different ages and backgrounds to spend time experiencing and researching the island and to express this through a non-invasive, resilient and adaptive form of architecture. As a precedent, Bundanon in New South Wales by architect Glenn Murcutt and Kerstin Thompson Architects is an inspiring reference.

For the (longer) ecological center project, we will discover and determine 'sites' (different landscape profiles, orientations and microclimates) from a larger consider of the island climate and ecology, together with the ability to support specific architectural concepts. Such concepts will look for a formal clarity as typologies together with a tectonic language of material and assembly appropriate for building on an island (including the notion of all timber prefabrication for transportation) with a variable climate that suggest different modes of openness and privacy. Projects may consider both a singular built element or an aggregation of forms in the landscape, embedded or elevated, vertical or horizontal - and will look to a composition of a parts that makes an organizational and experiential whole in the context of the island from near and far. Design projects will have to be climatically resilient and self-sufficient in terms of energy and resources.

The studio will aim to visit Cuttyhunk relatively early in the semester for experiencing the island and making specific studies to enhance and understanding of the inherent 'ecological flows'.

\*\* from Cuttyhunk Historical Society