

4.154 Option Studio. Fall 2022

Professor Andrew Scott
TA: Sarine Gacia Vosgueritchian
Tuesdays and Thursdays 1.00-5.00 EST

No final exam (final review will be held the week PRIOR to final exam period instead)

CUTTYHUNK: Island Resilience



SYLLABUS

Studio description

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, Wōpananāak 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 quietens 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 interesting 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
Studio methodology

Studio structure and Assignments

The format for the studio will be structured with a series of exercises (assignments) that are both design and research focused. Research in the context of the studio will be viewed as an agency to designing and broadly poses questions that need to be asked, investigated or represented to deepen an understanding of the role and possibilities inherent in design concepts. The studio will progressively develop a deeper understanding of the context (location, thesis and issues) of the broader design assignment through the activity of conceptualization, experimentation, design development and through testing through drawings and model prototypes.

The studio will be structured around six exercises which are choreographed to inform and build on each other, culminating in a comprehensive project of architecture. Within and between exercises, the studio will be engaged in discussion of design work through discursive desk crits, pin-ups of work which may be using different media, and design reviews. Design reviews are essentially 'commitment platforms / stages' of the design process which enable a commitment to specific ideas, strategies or development phases in the overall design process.

The exercises are broadly as follows, but may be adjusted or modified as the studio progresses during the semester 1 and 2. Following a broad introductory meeting to the studio, context and project description, the studio will engage in a phase of informative research pertinent issues related to Cuttyhunk Island, together with an opening first conceptual design exercise, essentially intended to engage students quickly with design thinking. 3. Site visit prior to engaging in site and siting selection, precedent studies and typological speculations / analysis. 4A. The development of a conceptual design proposition, narrative project based on a programmatic brief. 4B. Expanding the design concept through the development and articulation of the environmental, assembly and formal logics of the emerging design project. (followed by the mid-term review) 5. Design development a of the project through the formalities of plan, section and appropriate drawings and diagrams to convey the synthesis of the project and its systems to the selected site context (followed by Thanksgiving break) 6. Refinement of the project through selected models and modeling techniques that explain and articulate the design narrative, culminating in the final review as an overall presentation of the work of the studio for the semester.

Learning Objectives

The learning objectives of the studio are broad and commensurate with an advanced stage of a professional program in architecture. They provide a basis for understanding and experiencing more complex issues and contexts in design, especially those engaging sites in their physical, historic and cultural contexts, well as climate changes, resilience and sustainability issues in the generation of architecture.

Specifically, the studio's learning objectives include: the ability to research, conceptualize, develop, test, represent and communicate an architectural project at different scales; to learn to theorize, explain and evaluate concepts, and to be able to translate these into physical and formal design organizations; to understand the complexities of site and place in designing with the natural and climatic systems, and to integrate concepts relating to ecology and sustainability of an architectural proposal; to develop macro and micro scaled design concepts with associated narratives that are related through the design project; to deploy a variety of 2d and 3d media, techniques and simulations in support of the goals of the design project.

Studio Schedule: (*provisional: maybe revised and reissued by the instructor when appropriate)

Wk 01	Tu Sept 06 Th Sept 08	Studio Preview Studio Introduction <i>Exercise 1: Island research</i>
Wk 02	Tu Sept 13 Th Sept 15	desk crits crits /pin ups Ex 1
Wk 03	Tu Sept 20 Th Sept 22	<i>Exercise 2: Summit concepts (teams?)</i> desk crits09/24 optional site visit?
Wk 04	Tu Sept 27 Th Sept 29	desk crits <u>Review /pin-up Ex 1 and 2:</u>
Wk 05	Tu Oct 04 Th Oct 06	Site visit? <i>Exercise 3: Site studies and tests / precedent</i> desk crits
Wk 06	Tu Oct 11 Th Oct 13	(No studio: holiday) <u>Review Ex 3: Exercise 4A: Conceptual propositions</u>
Wk 07	Tu Oct 18 Th Oct 20	(AS away); (AS away) remote crits 2-4?
Wk 08	Tu Oct 25 Th Oct 27	<u>pin up Ex 4A</u> <i>Exercise 4B: Environmental, assembly and formal logics</i>
Wk 09	Tu Nov 01 Th Nov 03	desk crits desk crits
Wk 10	Tu Nov 08 Th Nov 10	<u>Mid review: mid project</u> <i>Exercise 5: Design development: plan, section and systems</i>
Wk11	Tu Nov 15 Th Nov 17	desk crits desk crits
Wk 12	Tu Nov 22 Th Nov 24	<u>Review Ex 5.</u> Thanksgiving Holiday
Wk 13	Tu Nov 29 Th Dec 01	<i>Exercise 6: Models and modelling:</i> desk crits
Wk 14	Tu Dec 06 Th Dec 08	desk crits mock presentations
Wk 15	Tu Dec 13 Th Dec 15	<u>Final Review?</u> (Wed Dec 14 Last day of classes)
Wk 16	Tu Dec 20	Dec 16 -22 Exam period

Attendance and Absence Policy

Attendance for the full duration of each class is mandatory. The design studio is an exceptional learning environment that requires your presence as well as your continued input. You are allowed three excused absences for the semester. An excused absence is defined as one that was discussed with and approved by the professor at least 24 hours prior to the date of absence, or a family or medical emergency that is confirmed by your physician or a dean in Student Support Services or Grad Support. Absences beyond the three allotted will

result in a decrease in your final grade. If you miss six or more studio classes, you will be asked to drop the subject or may receive a failing grade.

Absences from studio for medical reasons or otherwise should be notified to the instructor or TA as soon as possible.

In the event of a canceled class due to weather or illness, there will be notification of the canceled session and the syllabus will be adjusted to include the material in one or more later classes.

Studio Culture

A positive, active and lively culture in the studio is important and therefore regular attendance in the studio is required, and participation in the discourse of the studio is essential. It is expected that all students will work and show presence in the studio during studio hours. Students must commit to the incremental development and iteration of their work on a regular basis (ie daily). The project work will call for a high level of collaborative discussion and problem solving whether working on individual projects or on a team basis.

Evaluation Criteria

Students are expected to make a continuing and positive contribution to the culture of the studio and engage in general discourse, which will be taken into account in the evaluation of grade for the studio. The evaluation of performance in the studio will be divided between major exercises during the studio – and the capability to develop, present and discuss a comprehensive body of work at the final review. Generally, 40% of the grade will be for assignments and exercises during the course of the studio-- and 60% assessed on work at the conclusion of the studio. However, students should understand that these two elements are interwoven and so the final grade will also reflect a comprehensive valuation of the work of the student during the whole semester leading to a final project. Students will also be issued with advisory comments on their progress and development at or around the 'mid-term review' stage of the studio (likely in the second half of the semester).

In addition, the following parameters will be taken into consideration of student's 'work, both in terms of helping their progress and in final grading. (1) Concept: How clearly is the student articulating the conceptual intentions. (2) Translation of Concept: How well is the student using their concept to develop a design response to the given problem. (3) Representation Quality: How accomplished are they with regards to drawing, modeling, digital representation (4) Oral Presentation skills.

Grading and completion requirements

Skills: How clearly are they presenting their ideas orally, whether at their desk, in class discussions, or to a more formal jury? (06) Participation in Discussions: How actively and how constructively are they involved in class discussions, both formally and informally? (07) Response to Criticism: How do they effectively take advantage of criticism from instructors, classmates and outside jurors? (08) Auto-Critical Skills: To what extent are they able to critique their own work regularly and effectively? (09) Attendance – see below.

A: Excellent - Project surpasses expectations in terms of inventiveness, appropriateness, verbal and visual ability, conceptual rigor, craft, and personal development. Student pursues concepts and techniques above and beyond what is discussed in class

B: Above Average - Project is thorough, well researched, diligently pursued, and successfully completed. Student pursues ideas and suggestions presented in class and puts in effort to resolve required projects. Project is complete on all levels and demonstrates potential for excellence.

C: Average — Project meets the minimum requirements. Suggestions made in class are not pursued with dedication or rigor. Project is incomplete in one or more areas.

D: Poor - Project is incomplete. Basic skills including graphic skills, model-making skills, verbal clarity or logic of presentation are not level-appropriate. Student does not demonstrate the required design skill and knowledge base.

F: Failure - Project is unresolved. Minimum objectives are not met. Performance is not acceptable. This grade will be assigned when you have excessive unexcused absences.

General references for Cuttyhunk Island:

Cuttyhunk Historical Society:

<https://www.cuttyhunkhistoricalsociety.org>

<https://www.cuttyhunkhistoricalsociety.org/wp-content/uploads/2020/07/TIMELINE-Cuttyhunk-2020.pdf>

<https://www.cuttyhunkhistoricalsociety.org/wp-content/uploads/2020/07/Monograph-Gosnold-Monument.pdf>

<https://www.youtube.com/watch?v=xnLoF6FM08Y>

Buzzards Bay Coalition

<https://www.savebuzzardsbay.org/wp-content/uploads/2019/03/Cuttyhunk-Conservation-Project-Campaign-Flyer.pdf>

<https://www.savebuzzardsbay.org/news/cuttyhunk-properties-permanently-protected-from-development-and-preserved-for-public-access/>

<https://www.savebuzzardsbay.org/take-action/donate/cuttyhunk-conservation-project>

Boston Globe:

<https://www.bostonglobe.com/2022/06/02/lifestyle/cuttyhunk-island-dwindling-year-rounders-look-recruit-newcomers/>

A trip to Cuttyhunk Island:

<https://www.youtube.com/watch?v=3r5bY9p-A3Q>