

A4004 Advanced Studio IV

A6911 Urban Planning Studio

Richard Plunz, Architecture Critic

Douglas Woodward, Urban Planning Critic

Gloria Serra Coch, Associate Critic

CARIBBEAN RECONNECTIONS. A SUSTAINABLE FUTURE FOR PUERTO RICAN ISLANDS



Culebra, Puerto Rico

“We need REINVENTION not reconstruction” — “I heard talk of ‘multiple sovereignties’—food sovereignty, liberated from dependence on imports and agribusiness giants; energy sovereignty, liberated from fossil fuels and controlled by communities. And perhaps housing, water, and education sovereignty as well.”

Naomi Klein, *Battle for Paradise* (2018)

THIS SPRING 2020 JOINT URBAN PLANNING / ARCHITECTURE STUDIO is a sequel to Fall 2018 and Spring 2019 GSAPP studios on the island of Vieques, Puerto Rico (see lulu.com/us/en/shop/urban-design-lab-earth-institute/new-paradigms-for-a-resilient-vieques/ebook/product-24388294.html). This studio will focus on the neighboring island of Culebra and on the Main Island at the Municipality of Ceiba. All three sites are related through shared problems related to transportation and general developmental issues. This studio will continue to engage the study of infrastructure, building and livelihood futures begun in Vieques, while expanding the scope of architectural design to include planning, policy and implementation issues. The core concerns of infrastructural development will

A4004 Advanced Studio IV + A6911 Urban Planning Studio Spring 2020 Caribbean Reconnections

remain. All three sites were heavily impacted by the heavy presence of the U.S. military activities until 2004. All three sites were also heavily impacted by Hurricane Maria in September 2017.

Ceiba is a small municipality located on the eastern coast of the Main Island and the location of the former Roosevelt Roads Navy Air station that was the nexus of military activity in all three sites from 1940 until it was decommissioned in 2004. The Naval airport was used for bombing practice runs, primarily to Vieques, but also to Culebra. Its port facility was also used for extensive logistic purposes. At the time of its closing the entire complex engaged 1,200 military personnel as well as a much greater civilian population. Adjacent to Ceiba are adjoining Municipalities of, Fajardo, Naguabo. Ceiba has a population of 13,000 (down from a high of 18,000 in 1990) and drew much of its job opportunities and economic support from Roosevelt Roads. With its decommission in 2004 it suffered from the enormous loss of the military economic activity. Historically, Fajardo was also a strategic port dating from Spanish rule, and until recently Fajardo was the port for the passenger ferry service to both Culebra and Vieques, but its recent relocation to the port at Roosevelt Roads has produced even more local economic stress.

Culebra is the smallest of the islands, located 17 miles off the coast of the Main Island and 12 miles north of its larger companion island of Vieques. Culebra is the least populated municipality in Puerto Rico, dominated by private houses and the small town center of Dewey, together with several adjacent smaller islands. The municipality's abundant attractions include several bird sanctuaries and beaches; most significant is the Playa Flamenco, ranked one of the best beaches in the world. However, it suffered from decades-long use by the US Navy as a target for bombing and gunnery practice, but such use was terminated in 1975 in contrast to 2002 in Vieques. Like Vieques, the environmental and social effects of the Navy occupation remain without adequate remediation. It has been devastated by natural and man-made disasters including Hurricanes Irma and Maria in 2017; environmental degradation; lack of infrastructure; absolute dependence on electricity and water supply piped through Vieques from the Main Island; and neglect from the US Government and agencies, particularly from FEMA at the present.

Core Design and Planning Challenges. An overriding concern of the studio will be exploring the developmental advantages of infrastructural improvements in maritime-related infrastructure. Although there is small plane air access, it is very limited and expensive for local use. The primary main connections to Culebra and Vieques are by sea, limited to unreliable ferry service running from Ceiba on the Puerto Rican mainland, using a small, antiquated and inefficient fleet. As well, all freight to both islands must first pass through the Main Island, which in turn must originate from the mainland States, adding substantially to the inefficiency and cost. A studio concern will be to explore the consequences of knitting back the seaborne connections between Culebra and the main island and to build resilience in the landside access points and terminals to which the ferries connect and the villages that abut them.

A range of challenges related to the above will entail developing detailed building-scale design strategies that can address the growing environmental risks at the macro-scale. Among the issues that projects may address can include **HOUSING** design, related to **AFFORDABILITY, SELF-BUILDING** and **ECOLOGICAL** considerations; **COMMUNITY PLACES** design, for community **EMPOWERMENT**; Innovation in **INFRASTRUCTURE** design, engaging **TRANSPORT, ENERGY, WATER** and **WASTE**; Design for **CLIMATE RESILIENCE** in several contexts including **COASTAL AREAS; PROPERTY TITLE ISSUES**, proposed remedies and analysis of other legal impediments to recovery; **MICRO-GRID** funding and installation and

A4004 Advanced Studio IV + A6911 Urban Planning Studio
Spring 2020 Caribbean Reconnections

DISTRIBUTED INFRASTRUCTURE; Improvements to **DISASTER RESOURCE PLANNING** & allocation strategies; Identification of **EMPOWERMENT RESOURCES** for locally based relief; Examination of **LOCAL CODES** and housing post-disaster—what structures fared best and what strategies and immediate responses can be learned from them including adaptive re-use of structures; **ECOLOGICAL STRATEGIES** in correlation with building typologies, land-use, topography; **MICRO-MASTER PLANNING** for the towns, incorporating planning and urban design strategies responsive to what was hardest-hit and where; Options for **ECONOMIC DEVELOPMENT**, including tourism, in both Roosevelt Roads/Ceiba and on Culebra; Study of **FERRY SERVICE** situation between Ceiba, Roosevelt Roads, Culebra and Vieques.

In summary, you will be challenged to propose a small-scale **ARCHITECTURAL INTERVENTION** within a larger **PLANNING STRATEGY** to make a **BIG DIFFERENCE** in local lives.

Collaborators: The studio will incorporate architectural and planning solutions to the problems that continue to beset the islands and to address finally the disconnectedness that characterizes the islands' relationships to one another. Principal clients for the studio will be the **Municipalities of Culebra and Ceiba**, and the **Roosevelt Roads Development Authority**. There will be a close working relationship with numerous other community stakeholders.

Studio Organization. Very important in the evolution of the studio explorations will be the correlation between small-scale architectural pieces that can give credibility to larger-scale developmental planning strategies. In this manner, the skill sets of both architects and planners are integrated, providing an invaluable source for innovation outside of normative disciplinary constraints. Teamwork is important. Joint presentations on various research and design progress will be held weekly. Joint project development will be emphasized inclusive of both planners and architects, roughly following challenges related to political economy and spatial structure. Everyone should be keen on exploring the studio topic, willing to work hard, and to collaborate. With inclusion of both planners and architects we will have a well-rounded skill set. By Mid-Semester analytics will be completed to the extent that schematic spatial proposals can be advanced for presentation in Ceiba and Culebra. As well, exchanges with our local collaborators throughout the semester will further evolve issues and options. With field-study and feedback, a draft comprehensive report of the studio findings will be completed by the semester end.

Field Study will be as follows: Arrival **Sunday, March 8** and departure **Saturday, March 14**. Semester outline is below, to be further elaborated:

Week 1-2	Preparation of base survey materials and review of Phase One work
Week 3	Identification of individual project topics
Week 4-6	Processing Survey/Initial Program. Design development
Week 7	Progress Review and Site Visit Preparation
March 4	Urban Planning MIDTERM REVIEW
March 5	Architecture MIDTERM REVIEW
March 8-14	SITE VISIT & PRESENTATION
Week 8-9	Debriefing and Final Project Strategy Development
Week 10-13	Overall project development including final report preparation
April 27	Architecture FINAL REVIEW
MAY 6	Urban Planning FINAL REVIEW