Columbia University Graduate School of Architecture, Planning, and Preservation Spr

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A6911 Urban Planning Studio A4004 Advanced Studio IV Richard Plunz, Architecture Critic Douglas Woodward, Urban Planning Critic

NEW PARADIGMS FOR A RESILIENT VIEQUES



Vieques, Playa Caracas, May 2018

If as Julio Ortega has argued, 'whatever happens in Puerto Rico will be a rehearsal of what's going to happen in Latin America;' in the same manner we contend that whatever happens in Vieques will be a rehearsal of what's going to happen in Puerto Rico. Luis Galanes Valldejuli, Tourism and Language in Vieques (2018)

'We need reinvention not reconstruction..." quoted in Naomi Klein, *The Battle for Paradise* (2018)

Vieques is a small island adjacent to the main island of Puerto Rico, with a population of about 9,000. It took a direct hit from Hurricane Maria on September 20 of 2017, a Category 4 storm that left over 400 homes destroyed and hundreds more damaged. Now, one year later, large questions remain about the processes of rebuilding. Under consideration is not only short-term return to some form of "normalcy," but also potentials for a radically new approach to resources and quality of life. This studio presents opportunities to engage several scales within the Vieques spectrum: to include immediate rebuilding needs while researching longer-term options for reinvention and the opportunity to develop innovative design responses at manageable scales. Innovation on Vieques will have the potential to reverberate on the Puerto Rican mainland and on other Caribbean islands.

Vieques can be described as a "colony of a colony." Whereas mainland Puerto Rico is heavily dependent on imports from the mainland United States, Vieques depends almost completely on the big island for energy, water, food, education. Now, in our Post-Maria thinking, aspects of the island's peripheral existence can represent opportunity. Given that Vieques is a small community on a small island, changes can allow Viequenses to have greater control over their destiny. Such is the hope of many in the Vieques community and is the utopic aspect of this studio challenge: how to imagine and visualize the potentials of Vieques and how to empower the local community to "re-imagine Vieques" as a new kind of selfsustaining environment. This question will be integrated with the highly pragmatic aspect of our challenge, which has to do with the remaining immediacy of addressing the partial or complete destruction of homes and community fabric.

THIS SPRING JOINT URBAN PLANNING / ARCHITECTURE STUDIO will be a sequel to a Fall 2018 Advanced Architecture Studio. It will continue to engage the study of housing and related livelihood futures for Vieques, while expanding the scope of architectural design to include planning, policy and implementation issues. The core concerns of infrastructural development will remain

Working within a coalition of local officials and experts, families and local students, the **Fall Studio** team began evaluation of existing housing needs and options for residents, with particular reference to the constraints of post-Maria FEMA and HUD recovery efforts. From this starting point, it began to research new recovery strategies for the island that better address development potentials. Thus far, **three scales** of design exploration have been pursued, to be continued in the Soring:

1. **First** is engagement with the **houses** and associated needs of **local residents**, who are still experiencing immediate housing difficulties and aspire to re-imagine their lives and livelihoods. A group of 8-12 case-study houses informed demonstration **house design**(s) proposed by each team. Low density single-family housing is the predominant model on the island. Given the small, shrinking population, this is unlikely to change. Land ownership is highly valued, especially given a history of expropriation by the US Navy. Existing conditions provide an opportunity to create housing that challenges the dichotomy between urban and rural, man-made and natural.

2. A **second** core design concern has been examination of several **sites** available for innovative community design options within the village of Isabel Segunda and periphery (6-10 site options) as identified by the Municipality. This exploration informed a **community node design** to be proposed by each team. This aspect of the studio focused on locii for public functions that improve community resilience and was related to increasing food security, improving communication networks, bridging divisions between native Viequenses and newcomers/tourists, or other aspects of anticipated community needs.

3. A **third** core design concern researched long-term resilient **building systems** with regard to climate considerations while addressing questions of ecology, resources, and identity. This exploration informed a **building component design** proposed by each student. This scale of design provided the opportunity to address building and maintenance as a process in which the act of construction is as important as the building itself to the Vieques community. And it pointed to the need for radically rethinking of the long-term nature of building systems to address resiliency in the face of intensified present and future ecological challenges.

THIS SPRING JOINT URBAN PLANNING / ARCHITECTURE STUDIO will further develop several of the challenges identified in the Fall 2018 Semester. And it will explore policy issues that are inherent to the future of the Vieques community, including when appropriate, the implementation of the previous studio explorations. In addition, an extensive GIS data base has been constructed to facilitate research and design on additional topics including but not limited to the following suggestions.

1. HOUSING design, related to AFFORDABILITY, SELF-BUILDING and ECOLOGICAL considerations;

2. COMMUNITY PLACES design, for community EMPOWERMENT;

3. Innovation in INFRASTRUCTURE design, engaging TRANSPORT, ENERGY, WATER and WASTE;

4. Design for CLIMATE RESILIENCE in several contexts including COASTAL AREAS.

5. PROPERTY TITLE ISSUES and proposed remedies;

6. MICRO-GRIDS funding and installation; and DISTRIBUTED INFRASTRUCTURE in general

7. Improvements to **DISASTER RESOURCE PLANNING** & allocation strategies (FEMA, Army Corps, Navy);

8. Identification of EMPOWERMENT RESOURCES for locally based relief groups;

9. Examination of **LOCAL CODES** and housing post-disaster—what structures fared best and what strategies and immediate responses can be learned from them;

10. **ECOLOGICAL STRATEGIES** in correlation with building typologies, land-use, topography 11. **MICRO-MASTER PLANNING** for the towns incorporating planning and urban design strategies responsive to what was hardest-hit and where.

12. Options for **ECONOMIC DEVELOPMENT** including tourism and alternatives to tourism.

Vieques community client and partner organizations will work closely with the studio both for field study and project development components. Included are: the **Vieques Conservation and Historical Trust**, the **Municipal Government of Vieques**, **Hope Builders** and the **Institute for Puerto Rican Culture**. On the Columbia side, this initiative stems from collaboration with the **Earth Institute Urban Design Lab**.

Field Study in Vieques will be as follows: Arrival **Sunday, March 10** and departure **Saturday, March 16**. 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 7 Architecture MIDTERM REVIEW

March 10-16 SITE VISIT & PRESENTATON

Week 8-9 Debriefing and Final Project Strategy Development

Week 10-13 Overall project development including final report preparation

April 29 Architecture FINAL REVIEW