Vernacular Building Techniques and Resilience within Jamaica and the Caribbean.

Project Essay

In October of 2025, a hurricane of unforeseen magnitude made landfall in Jamaica, causing immense damage to a number of homes, schools, and churches across the entire island. While the Caribbean is no stranger to Hurricanes, this storm was at a scale rarely seen before, with winds up to 190mph and surges that rapidly flooded towns and cities. Following the storm, reconstruction after the storm is now taking place across the island. Reconstruction in the past has not always been an easy process for many nations in the Caribbean. In Jason Herbeck's *Past and Present Matter(s)*, reconstruction after the 2010 earthquake in Haiti was often rushed and did not consider what he calls "local cultural models"[1]. Herbeck expands on these cultural models stating that local knowledge is "considered synonymous with authenticity of identity, since both represent a localized aggregate of traditions, (technological and/or cultural) experiences, and craftsmanship"[2]. These two themes of local knowledge and tradition constitute the main questions and themes of this project, vernacular building and cultural production. In this project, the research begins at the present situation: the effort to rebuild after Hurricane Melissa. Investigating the intersections between past and present situations, the project looks to culture alongside vernacular building techniques that are attuned to the specific climate and community needs. The overlap between cultural products such as reggae music and the phenomenon of the dancehall, will connect to the built environment and the communities that are seeking to rebuild after disaster. This project seeks to approach design, not as a solitary effort of the architect but as an endeavor that begins with the community and people who reside within it.

Looking to culture, author Sonjah Niaah places the dancehall scene as a growing and moving phenomenon that transcends geography stating that the dancehall is a "community and area as performance allows for their extension and metamorphosis into geographies larger than themselves."[3] Jamaican music has long since been a part of Jamaica's cultural identity within and beyond its borders. Artists like Bob Marley and Sean Paul can be heard on radio stations, television shows, and in movies throughout the world. Music, while not often seen in terms of architecture, has been deeply tied to the city and urban life within Jamaica. In Stephen Steumpfle's *Port of Spain* he posits that "Reggae music then disseminated a more complex image of the city – one that articulated social struggle but also community ties…"[4]. Despite the imagery of warm beaches and summer vacations that are invoked with reggae, music has always been a reflection of the hardship and resilience faced by communities in Jamaica. Expanding on the social connections of music, I hope to expand these cultural connections in music, to architectural resilience. This project is focused on the development of a body of research that will in turn develop a design proposal that addresses the connection between music, resilience, and reconstruction.

The Caribbean city is unique, with each island being shaped and molded by numerous forces in its history. The colonial past of the Caribbean is not distant and the influences from the era are also just as important in the understanding of culture as an actor in the built environment. Author Rivke Jaffe writes that "Their distinctiveness results from a combination of interrelated factors including a history of slavery, and development in proximity to the United States."[5] Alongside Jaffe's perspective on the Caribbean city, Steumpfle states that in the Caribbean " the city evolved as a realm of collective endeavour and imagination, with manifestations of both social difference and commonality."[6] Interrelation is a key part of the research that this project is focused on and research will also involve laying down a historical foundation to understand the present conditions architecturally and culturally. This project approaches architecture with an understanding that design not only involves the functionality of building but the lived experiences that will occur within them. The

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[1] Herbeck, Jason. Past and Present Matter(s): Vernacular Architecture, the Caribbean House, and the Building Blocks of Literature. Liverpool University Press 2018, 39

[2] Herbeck, Jason. Past and Present Matter(s): Vernacular Architecture, the Caribbean House, and the Building Blocks of Literature. Liverpool University Press 2018, 40

[3] Niaah, Sonjah Stanley. DanceHall : From Slave Ship to Ghetto. University of Ottawa Press. 2010, 88

[4] Steumpfle, Stephen. Port of Spain : The Construction of a Caribbean City, 1888-1962. The University of the West Indies Press. 2018

[5] Jaffe, Rivke. The Caribbean City. Ian Randle Publishers. 2013

[6] Steumpfle, Stephen. Port of Spain : The Construction of a Caribbean City, 1888-1962. The University of the West Indies Press. 2018

project will also involve discussions within the community. Local building knowledge is understood best by those who are building in their own communities. Much of what is built in Jamaica is used directly by the same hands that put the walls up. After the hurricane, many of the homes are being rebuilt by families whose understanding of building comes with the lives they have lived on the land. The research from this project firstly investigates the cultural and architectural connections that exist within the Caribbean. Beyond this however, it seeks to take these intersections and use it to address present and critical situations such as post-disaster reconstruction.

Methods/Processes

The beginning phases of the project will begin during the Spring semester with the initial collection of research on the history of architecture in the Caribbean and Latin America. During this phase the goal is to create a foundational understanding of architecture in the aforementioned regions. Identifying key cultural actors will also be an important step in developing the body of research in the project. In May I will travel to Jamaica with my family and church organization where I will be participating in a hurricane rebuilding effort in Montego Bay Jamaica. During this trip, I will be able to actively participate in the construction of new roof structures and community buildings. This trip will serve as an opportunity to document the existing built conditions in various towns within Montego Bay. Documentation of existing homes, schools, churches, and other small buildings will be crucial towards the presentation of the project. Following the trip, the findings from the construction and community will be used to further develop the research and questions that are being asked in the project. Through research and writing, a book will be produced as a collection of the findings from the spring and summer phase.

During the Fall, I will be participating in a Global Experience program with the School of Architecture in South Korea and Japan. I will not be deeply involved in research development during this semester however, I find it to be a great opportunity to expand my view on the research topic. The building methods in these two countries have traditionally been deeply tied to the cultural practices and the climates of their regions. Through participating in this program, I hope to develop an even stronger global understanding of architectural practice and its intersections with culture.

In the Spring semester, I will begin the second phase of the project. This part of the project will be focused on the development of a design proposal that addresses the conclusions found from the research conducted throughout this Spring and Summer. Drawings and models will be produced according to the design proposal throughout the Spring. Drawings will be produced and printed throughout the semester for presentation and review in juries and critiques. Additionally, models will be made using plaster, wood, concrete, paint, and other materials. During the Spring, there will be a midterm jury presentation of the design proposal and overall project. After the midterm, production of the final project will begin. At this stage, final drawings and models will be produced for the final exhibition of all of the project findings and deliverables. This exhibition will present the book and research findings from the first phase as well as the design proposal that will address the scope of the project in its entirety.

Skills

Throughout my time at Syracuse, I have been engaged in multiple research projects and installation opportunities that have shaped my skills as an architecture student. In Fall of 2024, I participated in a course with Erin Cuevas, the 2024 Boghosian Fellow in the School of Architecture. The course theme was supergraphics, where I worked in a team to develop graphic installations using projection and mapping. This course greatly improved my ability to work through multiple scales to develop a visual installation. Our Erie Canal timeline, mapped key dates in which land that originally belonged to the indigenous tribes of the region, was dispossessed and developed into the Erie Canal. The use of simple materials resulted in a timeline that was projected directly onto the water in an existing Erie Canal Lock. (Fig.1)

In the summer of 2024, I received SOURCE funding for a personal creative project titled, *The Soundtrack of Life and Everyday Encounters.* This project, focused on music and retail spaces, catalogued the

various types of music found in stores, restaurants, and concert venues throughout Virginia. This project took place over the course of the summer and it was incredibly beneficial in my development skills for research and information collection, and project management.The detailed timeline and deliverable outline helped support my progress over the course of the summer.,The project was built up of sound samples that were collected over the course of the summer that resulted in a website and presentation that I was able to share with a community of students and faculty at Syracuse University.

Working on this project will deepen my understanding of architectural construction methods that are specific to the Caribbean and other parts of the world. Cultural production inevitably impacts the built environment and by researching this area, I hope to carry these connections with me as I design and work in the field. Architecture is a field that I consider to be deeply related to communities and in practice, and I hope to keep this focus with me beyond my academic studies.

Travel

As part of the first phase of the project, travel to Jamaica is planned to take place in May 2026. The trip is part of a construction effort by Praying Pelicans and the First Baptist Church of Manassas Virginia. In partnership with a local community church in Montego Bay, Jamaica, multiple sites have been noted as needing large amounts of repair due to damages caused by Hurricane Melissa in October of 2025.The date of departure is May 16, 2026 and the date of return is May 22, 2026. This trip will be a valuable opportunity to be engaged directly with the construction process following the hurricane. The trip will also involve gatherings around food, music, and community engagement and these opportunities will allow me to further my understanding of culture and production within Jamaica. Following the conclusion of the trip, the observations will be a crucial part of the research on building techniques used within Jamaica. Production of writings, additional research, and mapping exercises will be part of this process that will be a part of the final deliverables for this phase of the project.

Communication and Impact

The questions that this project asks are not just isolated to Jamaica and the Caribbean, but push at the formal boundaries of architecture. Architecture is not only made by architects, but the communities that live in the buildings and build their communities through culture. This project seeks to approach these intersections between culture and architecture and develop these into a proposal that can support communities as they rebuild after disasters. Hurricane Melissa left a deep impact on Jamaican communities, and the damage from the storm will require many years of effort. Music, food, and everyday life are aspects that are influenced and impacted by the disasters that Jamaican communities have faced and through this research, I strive to develop meaningful proposals that can be used to address the conditions of post-hurricane rebuilding.

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Figure 1

