

# Integrative Urbanism: Rethinking Identity and Preservation in Havana, Cuba

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## Abstract

If Havana has suffered the negative effects of neglect over the past fifty-plus years, its formal urban fabric - its scale, dimensions, proportions, contrasts, continuities, solid/void relationships, rhythms, public spaces, and landscapes - has remained intact. A free-market Cuba, while inevitable, leaves the city vulnerable to unsustainable urban development. And while many anticipate preservation, restoration, and urban development—particularly of Havana's historic core—"business as usual" preservation practices resist rampant development primarily through narrow strategies of exclusion (where, what, how, and why *not* to build), museumizing Havana as "a city frozen in time."

Seeking a third option at the intersection of this socialist/capitalist divide, this paper describes 4 student projects from THE CUBA STUDIO, a collaborative Integrative Urban Studio at Marywood University's School of Architecture. Over the course of 16 weeks, students in THE CUBA STUDIO speculated urban futures for a post-revolutionary Havana--strategizing ways of preserving Havana's architectural and urban identity in the face of an emerging political and economic shift that is opening Cuba, albeit gradually, to global market forces. And rather than submitting to these forces, the work critically engages them. Some driving questions were: What kind of spatial politics do we deploy while retrofitting Havana? How will the social, political, and economic changes of an "open" Cuba affect Havana's identity and urban fabric? What role does preservation play? For that matter, what does preservation *really mean* and by what criteria are sites included in the preservation frame? What relationships are there (or could there be) between preservation, tourism, infrastructure, education, housing, and public space?

In the process, students established systematic research agendas to reveal opportunities for integrated "soft" and "hard" interventions (i.e. siting and programming), constructing ecologies across a range of disciplinary territories including (but not limited to): architecture, urban design, historic preservation / restoration, art, landscape urbanism, infrastructure, science + technology, economics, sustainability, urban policy, sociology, and cultural/political theory. An explicit goal of the studio was to expand and leverage "preservation" (as an idea, a discipline, and a practice) toward flexible and inclusive design strategies that frame precise architectural interventions at a range of temporal and geographic scales.

Keywords: Havana, Cuba, Urbanism, Heritage, Place

## *Columna de Agua*: Activating Public Space Through Water Infrastructure

*Columna de Agua* intertwines infrastructure, public space, and urban development (including strategic demolition) in Old Havana in order to rethink and leverage the relationship(s) between tourism and preservation toward more equitable and inclusive urban/architectural design strategies. In the process, the project situates historic preservation within the flows of globalization and vice versa.

Since the early 1990s, Cuba has invested heavily in tourism as part of its "Special Period," slowly increasing its GDP over the past 20 years.

<sup>1</sup> While good for the national economy, such an investment in global tourism by a government struggling to provide basic local necessities has inevitably led to economic, sociocultural, and developmental disparities in Old Havana between infrastructures and urban spaces zoned for profit-generating tourism and those zoned otherwise (i.e. neglected "non-tourist" local neighborhoods). In other words, profit/tourist-driven preservation and development - on its face - intensifies and perpetuates Havana's split identity: on the one hand, as a cultural object to be consumed by a foreign public; on the other, as a foreign object to be desired by local *Cubanos*.

In response - after mapping, analyzing, and interconnecting existing housing conditions and infrastructure (including development policies, water, energy, and economies) - *Columna de Agua* proposes to reactivate the 19th century *Acueducto de Albear* as a catalyst for integrated infrastructure and urban development, development that optimistically (and ambitiously) pulls tourism, energy, and community into each other while preserving Old Havana's urban, architectural, and cultural memory. By reactivating the aqueduct - itself evoking the tension between history and modernization - as a new water filtration and cleansing system for the city, this project opens up strategic opportunities to rethink infrastructure as an organizational development tool for the city as well as tactical opportunities to redesign it as a performative public space.



Figure 1: Columna de Agua: Activating Public Space Through Water Infrastructure.  
Students: Robert Trapper, Domenico Granci, Andrew Reynolds, David Olivetti.

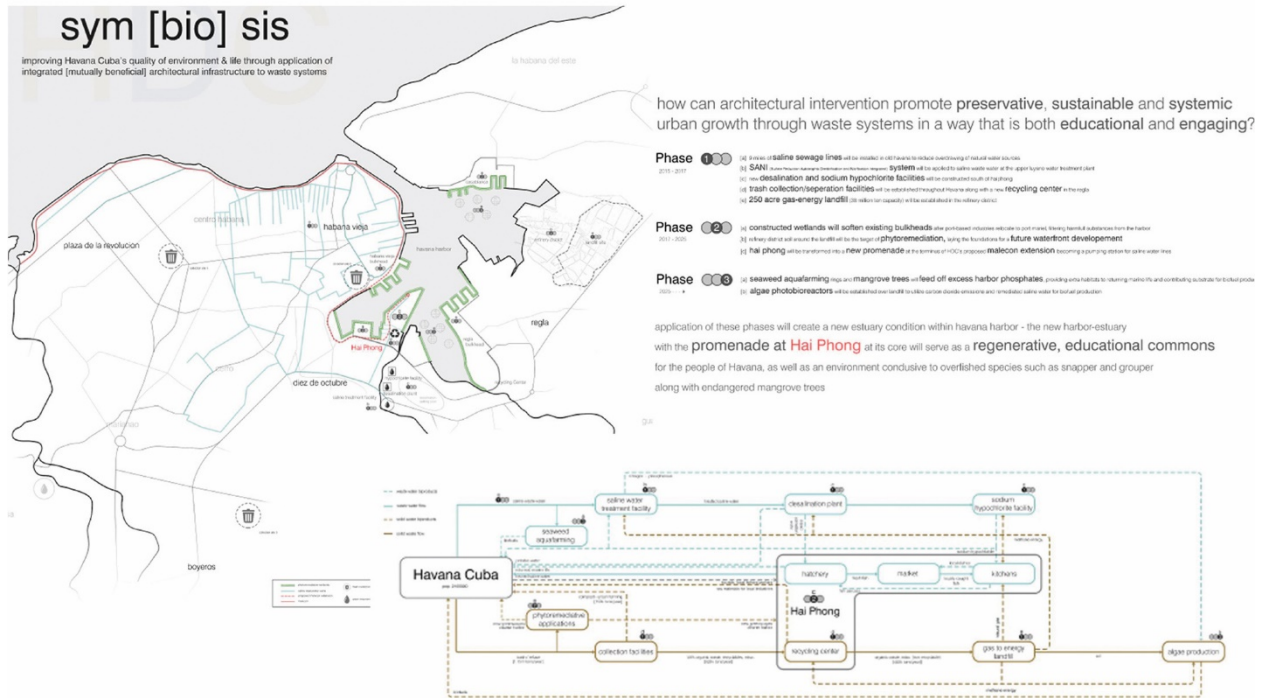


Figure 2: symBIOsis: Restoring Havana’s Environment Through Waste Infrastructure.  
Students: Greg Goldstein, Brett Tomczyk, Dalton Deardorff.

Within a larger design strategy, then, *Columna de Agua* proposes four phased tactics (Zone, Systematize, Build, and Expand) towards integrating water infrastructure, urban architecture, and public space: 1) **Site Design/Zoning** manufactures potential sites for new architecture and public spaces along the aqueduct line by bounding select dilapidated and unrepairable buildings within a zoning policy that fuses their demolition (death) with their preservation (memory) by stipulating that their footprints and foundations be preserved and integrated (rebirth) into any future urban/architectural development along the aqueduct line; 2) **Rills Systems** capture, filter, and redistribute water along channels, pools, and resurfaced / elevated footprints and foundations of demolished buildings, symbolizing the physical death of these buildings while preserving their memory; 3) **Strategic Building** proposes to (re)program, design, and build new urban architecture on rezoned sites along the aqueduct line, opening up opportunities to integrate contemporary architecture into a historic urban fabric while addressing architecture’s role in a globalizing Cuba; and 4) **Urban Expansion** explores the other aqueducts within Havana and their integration into a larger system.

## symBIOsis: Restoring Havana’s Environment Through Waste Infrastructure

*symBIOsis* seeks environmental restoration / preservation by proposing design strategies at the intersection of landscape architecture, urban policy, and waste politics (i.e, the generation and management of waste). Specifically, the project responds to (a lack of) waste management in Havana by proposing a new public, cultural, and technological *wastescape*, one that promotes systemic and sustainable growth while softening the anticipated surge of pollution via increased international tourism post-U.S. embargo.

Havana currently generates approximately 1 million tons of Municipal waste per year (for the current population of 2.1 million).<sup>2</sup> Left unchecked, this is projected to rise to about 2 million tons by the year 2030. Lacking a comprehensive waste management strategy, much of this waste sits on Havana’s streets for days; When collected, much of it ends up in landfills around the city. A considerable amount of that waste makes its way to Havana’s harbors via the *Almendares* and *suspended*, *Luyano / Hondo*, and *Arroyo Tadeo* rivers and tributaries, polluting the city’s bay with a toxic mixture of organic and suspended solid wastes and hydrocarbons. To add, Havana’s harbor shares the typical effects of most post-industrial cities: throughout the 20th century, more than 50 industries and oil refineries have dumped waste directly into Havana’s bay.<sup>3</sup>

In response, *symBIOsis* proposes to: 1) **Extend** the *Malecon* into Old Havana's industrial waterfront and harbor, pulling the city's public edge - and by extension, its community, its tourists, and their waste - into its derelict non-public spaces in order to increase the property value of these spaces (cultural and/or market), stage the development process, and induce the cleansing process (by revealing undesired waste through desired property); 2) **Incorporate** aquaponic farms on the edge to filter and cleanse the harbor waters; and 3) **Design** a performative *wastescape* as a destination for tourism, a place for the community, and a catalyst for environmental regeneration and architectural intervention. As a set of intertwining design actions, these 3 interventions would converge (at different physical and

temporal scales) in a new estuary condition in the harbor and a landscaped promenade that participates in the site's environmental regeneration while providing an educational commons for both *Cubanos* and tourists alike.

## Critical Preservation: Reestablishing the Social Venues in *Centro Habana*

Opposed to UNESCO's exclusive "world heritage" designation on Old Havana (at the expense of other "historic" parts of the city), *Critical Preservation: Reestablishing the Social Venues in Centro Habana* addresses housing, public space, and the crumbling building infrastructure of *Centro Habana* (Central Havana), a neighborhood to the west of the old core that is left out of the preservation frame and hence the tourist zone. As such, this project explores and re-conceptualizes the meaning of heritage and the processes by which it is culturally, politically, and architecturally constructed.

While *Centro Habana* houses a majority of Havana's population, it is comparatively more deteriorated than Old Havana because of neglect and decay. As a result, it suffers from an increasing shortage of good housing and basic infrastructure as surrounding neighborhoods gentrify and compete for government funding. To add, the disparity between a dense population and good quality housing is exacerbated as the government addresses these issues as "quick fixes," that is, by building cheap, low quality and temporary building stock quickly instead of sustainable long-term housing. This leads, in turn, to a weakened neighborhood character and public identity; "quick fixes" may solve an immediate problem *right now* through a patchwork of building materials and architectural styles, but they do so with minimal cultural impact. In other words, what is gained as square-footage is lost as heritage.

In response, *Critical Preservation* proposes to recycle and repurpose both discarded building material (the material byproducts of dilapidated buildings) and the sites of those buildings toward new social venues for the community. In doing so, this project expands the criteria by which buildings and sites are assigned value (economic, social, cultural, architectural, urban, etc.) by prying open a market for them. Additionally, students proposed eco-material workshops that would train *Cubanos* in to salvage, restore and reuse of these materials in order to lend a sense of ownership to the community. The eco-material workshops would provide the community with the building materials and training to rebuild their own homes, community and socio-cultural venues. The process of removing dilapidated buildings and the creating urban spaces allows each community, neighborhood, and block to be unique in its interaction with the city.

The historic preservation of these buildings was addressed by zoning and landmarking the footprint of removed buildings for open urban spaces. Newly created lots are purposed for social gatherings, parks and urban oases. Existing open lots are reused for parking and connectivity between buildings is established by "roads" or "plazas" between occupied spaces.

## *El Circuito de Cambiar*: Havana's Housing Renewal and Energy Reinvestment

As a World Heritage Site (UNESCO), historic preservation in Old Havana intertwines cultural patrimony with the rush for foreign currency.<sup>4</sup> Meanwhile, the rest of the city - and especially *Centro Habana* - is often overlooked, leaving its populace in terrible, often temporary, housing conditions.

In response, *El Circuito de Cambio* addresses and intertwines seemingly disparate issues of poor quality housing and energy through innovations in urban agriculture and entrepreneurial homestays (a Cuban AirBnB). Students analyzed existing energy consumption and available resources in Cuba, leading to a proposal that involves systematic adaptive reuse strategies that convert and reprogram select habitable buildings into housing and eco-hostels. Students also took into consideration the proposed influx of tourism and its impact on energy and resources in the city of Havana in their proposal for a series of connected eco-hostels.

The eco-hostels enable the community to participate and invest in the growth of the city and in rehabilitating their existing building stock. Proposed vertical farming and entrepreneurial policies would redirect governmental funds to improve housing conditions and empower *Habaneros*.

Students proposed integrated phases which would address issues of housing and resources in the urban development. Buildings and sites were identified on a scale of "Excellent" to "Deplorable" as a means of accessing their value for redevelopment. Buildings that were in excellent condition were targeted as potential first phase development of eco-hostels. Profits gained from this venture were to be rolled into the next phase to fund buildings of lesser quality. This phased development allowed neighborhoods and buildings to be redeveloped systematically, all the while giving control of the process back to the citizens.

The phased process also involved identifying areas of Old Havana that would generate higher income at the pilot phase, whose profits could eventually be transferred to Central Havana for further redevelopment. The proposal called for the integration of local citizens and tourists in the proposed eco-hostels where urban vertical farming would meet the demand on a local scale.

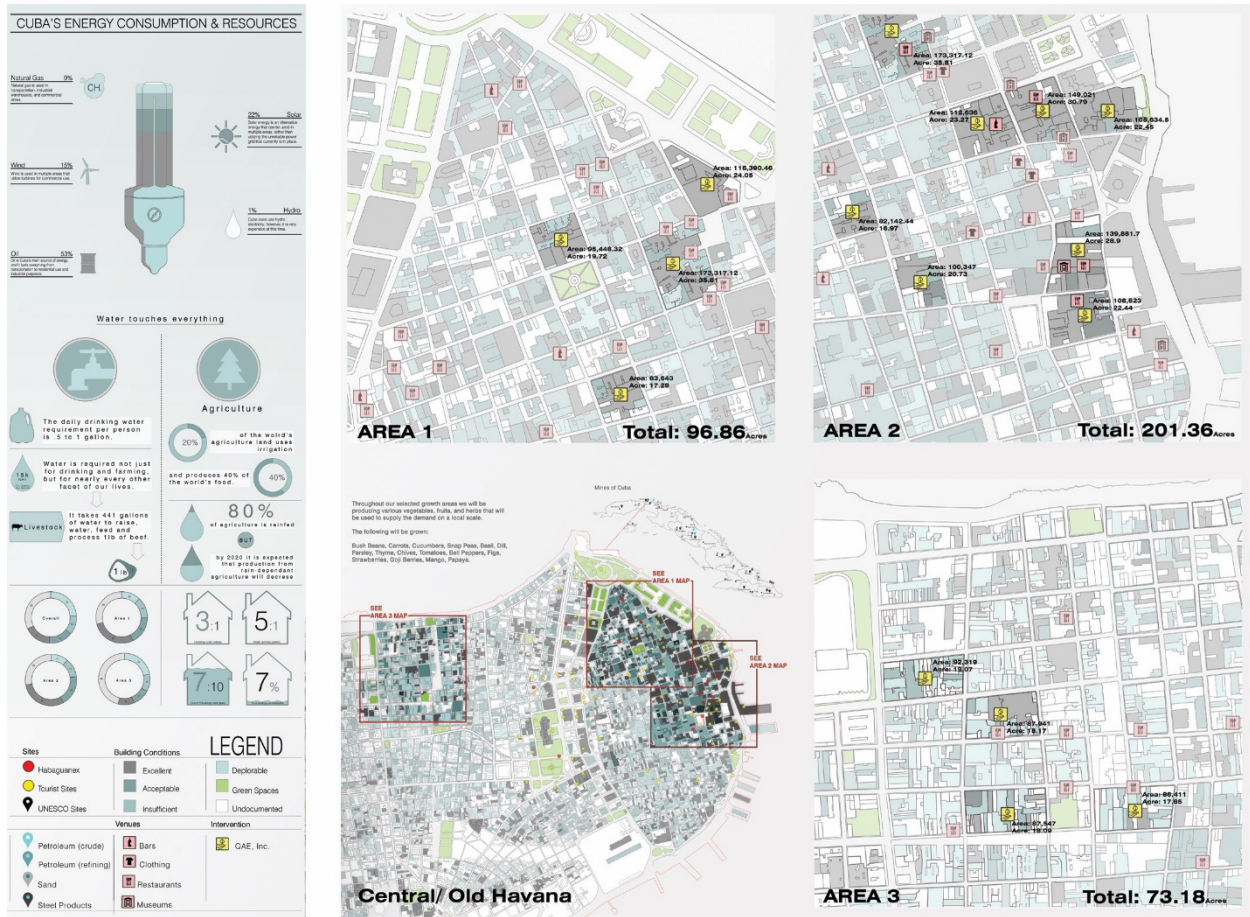


Figure 4: *El Circuito de Cambiar*: Havana's Housing Renewal and Energy Reinvestment.  
Students: Sophia Assaf-Bautista, Ty Quattlebaum, Shane Ehrlich.

## Biography

Gabriel Fuentes is an Assistant Professor at Marywood University's School of Architecture with Master's degrees in both Architecture and Urban Design. In addition to teaching architectural design, he coordinates the history and theory curriculum and teaches seminars on urbanism and mapping. In 2010, he founded the *Design Action Studio for Research, Architecture + Urbanism* (DA | S) - a research-driven, interdisciplinary, and collaborative design practice that engages the built environment at multiple scales. As a designer, writer, and educator his work has been widely recognized. He has presented his research both nationally and internationally, including: the 2014 ACSA conference (Globalizing Architecture), the 2013 National Conference on the Beginning Design Student Conference, the 2011 Cuba Futures Conference, and the 2010 ACSA Fall Conference (Urban/Suburban Identity). He has published a book chapter on Cuban Modern Architecture as well as an article on developing world urbanism in the December 2013 issue of the *Journal of Space Syntax*.

Jayashree Shamanna is a Clinical Instructor at Marywood University's School of Architecture. She obtained her Master of Science degree in Architecture from Texas A&M University with an emphasis on Historic Preservation and her Bachelor of Architecture from BMS college of Engineering, Bangalore India. In addition to her professional work, she teaches architectural design at Sophomore, junior & senior levels. She has taught Digital Media and frequently lectures in the Architectural History course on Hindu & Buddhist Architecture. She has lectured at local community colleges in expanding the awareness of architecture, design & sustainability. She is also involved in helping local community based historic societies in small restoration projects.

<sup>1</sup> World Travel and Tourism Council. *Travel & Tourism Economic Impact 2015*, Cuba. London, UK: World Travel and Tourism Council, 2015.

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<sup>2</sup> Goodsell, James Nelson. "Havana." Encyclopedia Britannica Online. June 2016. Accessed January, 2016.

<https://www.britannica.com/place/Havana>.

<sup>3</sup> Quevenco, Rodolfo. "Sustainable Development of Coastal Waters." International Atomic Energy Agency. March 2015. Accessed July, 2016. <https://www.iaea.org/newscenter/news/sustainable-development-coastal-waters>.

<sup>4</sup> "Old Havana and Its Fortification System." - UNESCO World Heritage Centre. 2016. Accessed March, 2016. <http://whc.unesco.org/en/list/204>.