

Faculty of Architecture and the Built Environment

Fall 2016 - Complex Project - Graduation Studio - Havana



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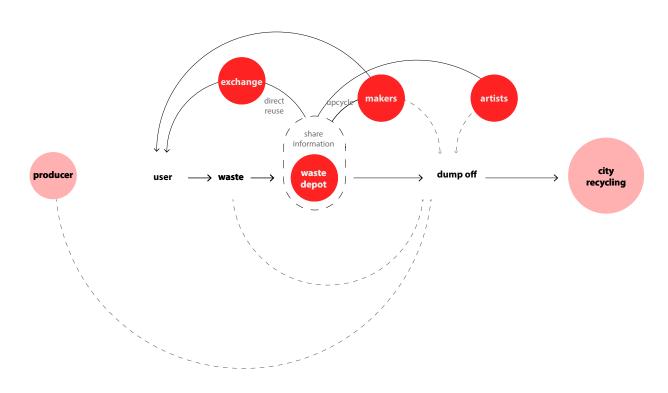
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Upcycle and Waste Depot

It is a collective platform to share sustainability that already exist as a lifestyle within Cubans' daily life. It also acts as a "waste transfer station" providing a community-to-recycle facility channel.

The relationship between research and design

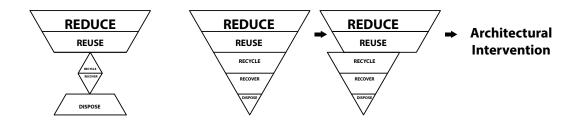
The research forms a foundation to design process. Designing an upcycle and waste depot in a combination of waste facility and public amenity requires a wide range of information including local waste strategy, social background and waste infrastructure system in both developing and developed countries. The findings in different scales from global to household illustrated that there is a missing link between waste and architecture. To find out the solutions to stitch the missing link back was based on further researches in the development of waste management. Consequently, the lack of public engagement is a key. In order to reconnect the missing link in Havana's waste network. The understanding of social background in recycling culture helps to from the architectural program – collective repair workshop as an anchor to facilitate the recycling. Furthermore, different communal program were facilitated by analyzing those information in terms of site research, cultural background and local technology. The main program is developed based on research:



The relationship between the theme of the studio and case study

The design focuses on the urban context in Havana where is being transformed from all the changes in a range of political, economic and social. Different projection to urban configuration are created by this unique and rich political background. The emerging of "accidental sustainability" seemed an obvious and necessary survival strategy for Cuban since the fall of Soviet Union in 1990s and the US embargo.

In view of the resource scarcity and unique culture of "accidental sustainability", the investigation of waste infrastructure seemed an alternative to improve their current environmental and health issues. The given site – Profunda reflected the need of waste infrastructure upgrade. It has the rich culture of repair and reuse, which already provided a good foundation in waste hierarchy.



Through a combination of collective repair workshop and object exchange platform, the locals can share sustainability and maximize the life cycle of object. It engages public collaboration into waste network, which building a new identity of waste infrastructure through new moods that we add, but also through using the atmosphere that already exists.

The relationship between the methodical line of approach of the studio and the method

Complex project places an emphasis the research on multi-perspective and a wide range of understanding that not only in discipline of spatial, but also political, economic and social. It aims to develop critical thinking on design process. Design decision making is based on those ranges of research layers. In the beginning, personal fascination and initial design direction were stimulated by a collective research outcome. It is effective to narrow down a particular topic from a large scale of possibilities. In addition, better understanding Cuban culture thanks for assistance of architectural historian in a case of Cuba with limited online information. The arrangement of different forms of meeting and seminar in certain topic provided a lot of additional interactive information exchange and sharing. Zoom in from urban scale to building site scale guided the master layout plan in response to site context step by step. The approach mainly focused on the site response and narrative development, but somehow lacked of support by architectural theory. In case of waste facility design, it required many existing building references to create a clear and efficient waste processes. Typology studies is necessary for design process in order to master this kind of scale of building.

The relationship between the project and the wider social context

This project investigates the ways that waste facilities, urban ecologies and public amenities can work to reinforce one another into a single integrated urban landscape of work and play. It towards a new position in Havana that architecture can repair the physical and mental separation of waste and public activities to create new avenues for public engagement with recycling processes. Meanwhile, it creates a dialog between Cuban culture (i.e. accidental sustainability) and physical disability of waste management. All these leads towards environmental and health improvement and as well as the utopian zero waste sustainability. This new model of upcycle center and waste depot is proposing how to re-tie the missing link between architecture and waste that is neglecting the ability for design to positively impact the relationship people have with waste. On the other hand, socially, the concept of cradle—to-cradle by reusing materials around and reinventing waste bring it back to functional and aesthetically pleasant shape which conveying the resilient message to community.