Amalgam: Shanghai 2212

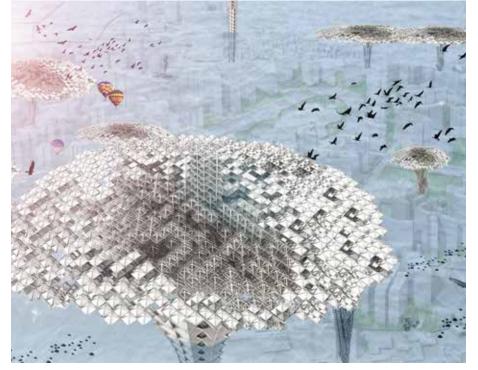
Wendy W. Fok University of Houston

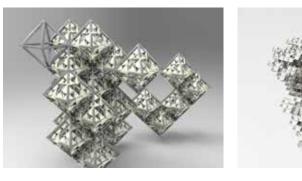
As more than half of the world's population is expected to continue to live in cities, exponential urban development and population growth along with infrastructural increase are considered as parallel concerns and topics of discussion. The purpose of these design speculations is to offer potential design applications for architects and urban planners to form dynamic investigations, integrating a layered approach of amalgamating architecture / landscape / infrastructure within future scenarios of "edge-based" urban environments (Hong Kong, Shanghai, Bangladesh, Houston, Texas, and Orlando, Florida). This topic will continue to be under relentless scrutiny given the challenges of ecological changes and those aspects of urban development that deal with design processes that consider the urban fabric and the scalability of agricultural and ecological research, which has been and will continue to be a necessary requirement for future city planning.

To better understand the larger potential repercussions, case-studies were developed that focused on several international target zones: Orlando, Florida and Houston, Texas (two US cities that are predicted to be 60 meters under water within the next 100 years to 200 years), and Bangladesh, Shanghai, China, and Hong Kong (three Asian edge cities that have been historically influenced by their contact with Western culture, and are consistently suffering from overpopulation). These case-studies were used to develop research proposals using alternative strategies using non-solar and non-wind driven sustainable energy solutions.

The case-studies take specific environmental conditions into consideration while exploring specfic techniques of self-sustainable systems and their ecological effects. Each researched location employed specific contextual approaches based on a manifold of environmental conditions that defined the ecological designs using both analog and digital tools to further the urban strategies for each city. Much of the research originated through finding innovative relationships while searching for paradigms that applied digital design technologies to the development of sustainable cities.

The speculative proposals produced question the edge condition of urban coastal developments, and the role of architects, designers, and urban planners as they intervene along coast-

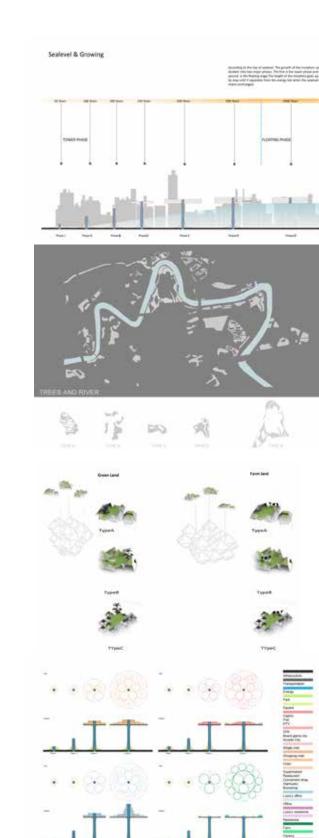




establish a new set of relationships between democracy, individualism, sustainability, and capitalism as these interface along the 'edge' of the city. Many of the proposals of the studio systematically questioned the authenticity of current cities, and how sprawl and dynamic urban growth has affected our understanding of places and non-places. Effort was made to view energy, not simply as another good to be individually consumed, but rather to be reimagined within an urban environment cognizant of, and involved in the efficient production, distribution, and recycling of energy. Investigations also explored different strategies for fabrication as integral to questions posed by the studio.

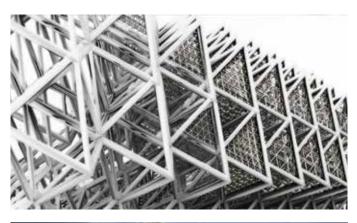
Michel Foucault defined a heterotopia as a real place that facilitated change and research, lines and waterfronts. These projects aim to mirroring in miniature the larger urban

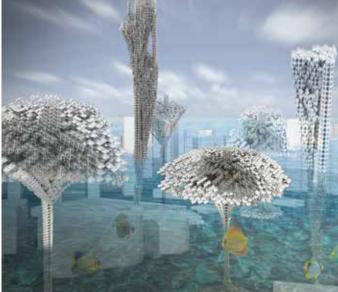
system within which urban actors were located. Foucault thought that all systems could only become logically consistent by excluding nonconforming items (a process leading to the production of unreal, imaginary, repressive and generic non-spaces). He proposed to study the logic of systems by looking at these exclusionsthat strange mixture of disparate elements that constitute the real fabric of heterotopic spaces. Actors use these real spaces, heterotopias, embedded in their systems to accelerate or slow change.



UNIT FUNCTION ANALYSIS

New Constellations New Ecologies







101_5: Enclaves / Territories + Expanding Megalopolises