Global Investigations in Land Reclamation - Past and Present

Premise and Purpose:
Inspired in part by a May term abroad in Mainland China and Hong Kong, I have become interested in pursuing research around the topic of urban land reclamation - the process by which cities have been building up and creating new land from submerged waterbodies for centuries. Through this investigation, I will study the historical motivations and effects land reclamation has had on the development of coastal cities and how current reclamation projects are continuing to shape these places into the future. Beginning with a broad study of several locations, I will catalogue and analyze the motivations for historical reclamation projects, and the ultimate effects they had on the city and surrounding ecology. From this broad historical analysis, I will select a smaller number of sites to explore current and planned reclamation projects. My investigation in this stage aims to identify how these projects address modern, relevant conditions effecting coastal cities: these conditions include sea level rise and climate change broadly, coastal habitat preservation and restoration, urban density and land shortage, and the resilience of coastal urban areas.

While there has been some research into land reclamation practices and history, most of these studies and papers have looked at reclamation from a disciplinary background other than design; applied geography and engineering being the most numerous. The impact of reclamation on the urban form of coastal areas cannot be understated, and is an almost universal practice in coastal cities across the globe. In addition, I feel the capacity of reclamation as an urban design tool has not been explored in a thorough and exhaustive way.

Learning Outcomes:
Primary Learning Goal: The primary learning objective of my proposed directed study is to investigate the history and current practice of land reclamation.
Objectives:
1) Investigate the historical role reclamation has played in the development of several global, coastal cities.
2) Develop documentation and graphic standards that allow for comparison and continuity between each city studied.
3) Focusing the scope of study to a smaller number of entities, analyze present day reclamation projects, identifying how these projects are responding to modern challenges like climate change, sea level rise, and environmental considerations.
4) Through the development of this investigation, gain a better understanding of research practices through faculty mentorship.

Student Background
As a senior in the B.S. in Architecture program, my entire academic background is rooted in critical dialogue and investigation through design. In addition to the intense and structured investigations of my past design studios, I have been able to take coursework in the areas of urban design and theory, architecture history, and urban studies outside my major. This broad and highly critical basis of knowledge combined with the guidance of faculty with a strong research background positions me well to conduct this type of advanced exploration.

Mode of Inquiry:
I anticipate engaging primarily in secondary research strategies for the first part of my study, which is mainly concerned with historical documentation and existing conditions. Primary sources will be engaged when possible to supplement existing sources of information or to aid in interpretation of the ladder when necessary. For the second half, focused on current and even future plans, I expect the mix of primary and secondary research to be more equal. I plan to establish dialogue with faculty and other resources in the actual areas of study to supplement and support my own research locally.
Evaluation:

Working with both a primary faculty advisor, meeting on a biweekly basis or more frequently when needed, and engaging secondary faculty mentors in other relevant disciplines, I will have regular contact hours with faculty to aid in my investigation and monitor my progress. Midway through the semester, when I will change focus from historical research to present plans, there will be an opportunity to curate and represent the work from the first half of the semester in a way that can be evaluated. Similarly, at the conclusion of the second half of the semester, the work completed can again be represented in a final, evaluable way.