ARCH 4060 / 6306 - Techniques in Design Thinking: An Unpacking of Historical Algorithms

Spring 2020 Course Description
University of North Carolina at Charlotte, School of Architecture
Instructor: Nicholas Ault
3 Credit Hours: TR 6:00 – 7:15 pm
Office Hours: By Appointment Only

‘A proper building grows naturally, logically, and poetically out of all its conditions’

Louis Sullivan

PREMISE
This course seeks to investigate the tools and methodologies of the architects + designers that have come before. Prior to the rise of digital tools - and the modularization of construction - design was a discipline that was based on a continually evolving process. A process predominantly focused on proportion, geometric relationships, structural statics, logic and rigorous processes. In this course we will seek to explore some of these methodologies and to reinterpret them with contemporary tools in an effort to develop an adapted methodology to underpin contemporary design techniques.

OBJECTIVE
The goal of this course is to explore the processes and procedures that have laid the foundation for the aesthetic declarations, trends and methodologies for creating architecture over the past century. These studies will unpack a variety of ‘historical’ design algorithms in order to develop a functional understanding of each and update these algorithms to align with contemporary tools and techniques that will enable us the more fully understand how past modalities can provide opportunity as design procedures today.

METHOD
This course will feature both written and design based components. Students will select a specific architect(s) or process as focus for the semester and will venture to understand and apply outmoded design techniques utilizing contemporary technology in order to modernize a design procedure that may have been lost to time. These investigation will be manifest in a variety of manners including video, drawing(s), physical model, complex fabrications. A research document that catalogues the process of generation, technique of study and potential applications will be developed alongside the research. (Quality projects may be selected to be submitted to a regional or national academic conference.)

EVALUATION
The semester will constitute primarily of a single project with two components one written + one design based. These assignments will aggregate from smaller projects throughout the semester with the final project / research presented in a semi-public forum.