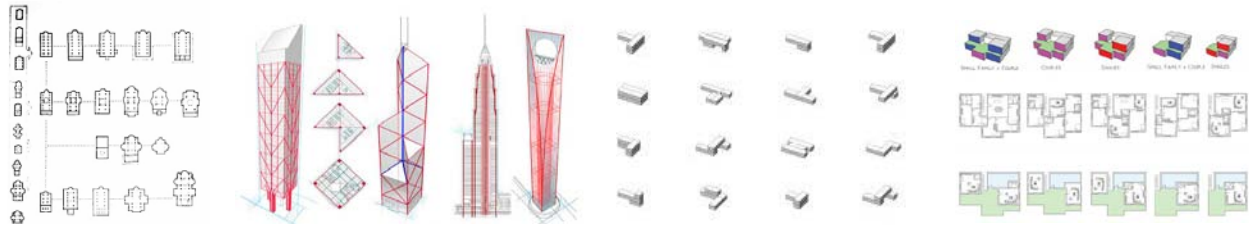


FEB.15.2011



Pragmatism - dictated by consideration of the immediate practical consequences rather than by theory or dogma; the doctrine that the content of a concept consists only in its practical applicability

Parametric - an associative technique where the interaction of independent (genotype) variables with dependent (flexible) variables allow iterative variations (phenotypes) of the same theme to be explored, categorized, typed, and bred

*Archetype - an original model of a person, ideal example, or a **protoType** upon which others are copied, patterned, or emulated*

Genotype - the genetic makeup of a cell, an organism, or an individual; inherited and carried within its genetic code. Not all organisms with a duplicate genotype look or act the same way because appearance and behavior are modified by environmental and developmental conditions.

Phenotype - is any observable characteristic or trait of an organism: such as its morphology, development, biochemical or physiological properties, behavior, and products of behavior. Phenotypes result from the expression of an organism's genes as well as the influence of environmental factors and the interactions between the two.

parametric protoTyping

Arguably, architectural pedagogy and practice are primarily concerned with a project's phenotypic characteristics. While a basic genotypic syntax often serves as an implied typological or programmatic starting point, design processes typically work towards customizations – creating either more site-specific and/or user-specific conditions. However, it is possible to redirect pedagogical projects and design practices to explore and examine more genotype-driven design processes.

The vertical studio is proposed as a sort of design-research initiative which will allow students to specialize in the full exploration and comprehension of a specific building type for the duration of a semester (building types will be chosen at the beginning of the semester but must be of an urban derivative, examples include, but are not limited to: housing/house, office, retail, education, hotel, etc). Design work will be individual, but the studio will attempt to have 2-3 students work on the same category of building in order to build a collective pool of data around 3-4 building types. Though the studio will address multiple programs and building types the cohesive glue of the studio will be the genotypic 'protoTyping' aimed at 1) creating a comprehensive documentation of both typological precedents and an exacting quantity of specific measurables which serve to both form and optimize a specific building type, and 2) designing an open-source 'computational' DNA (genotype, seed file, design core, protoType) which is then used to deploy and investigate specific phenotypic variants.

To offer a similar context - the proposed studio is reminiscent in intent to FOA's, now famous, but old unit at the Architectural Association which attempted to create sophisticated datascares of quite pragmatic office tower parameters prior to students proposing individual projects. It then diverges in its desire to encapsulate this type of *pragmatic design guide* as a sort of 'computational' DNA via a workable parametric or information based seed model/protoType. Rather than attempt to contemplate the term 'proto' as a conceptual tabula rasa or 'first' invention, the studio proposes that the 'protoType' emerges as a sort of 'invariant' discovered via reverse-engineering a series of similar projects. So the 'protoType' is born *after the fact* as a refined model on which all future proposals would then patterned, emulated, or bred. It's speculated that the sheer intensity of an 'inward' looking dissection - which first establishes pragmatic variables and associations between building sub-systems and then parametrically and iteratively alters the relationships of those rules to the point of *strain* - will inevitably find moments of design innovation.

The studio work will be divided into three phases:

Datascares. Working with their selected building type, students will be asked to conduct and document typological, programmatic, and organizational research. The level of research and documentation is aimed to build absolute student specialization within specific building types. Students are to understand typical arrangements, planning grids, organizational variants, floor-to-floor heights, occupational loading, egress parameters, fire codes, preferred structural spacing, etc. Rather than focus towards a comprehensive design project with detailed resolution, the idea is to allow the pragmatics to saturate the design process until it affects its core of its conceptual and organizational base. Documentation will be collective and will be formatted to a *publishable* standard. Students will also be asked to develop 'parametric' and 'computational' routines for FAR values, egress widths, etc.

protoType. Students will then be asked to create diagrammatic and physical models of 'a generic' ... a protoType based on the banality of the accumulated datascape. By the end of the second phase students will have had to develop a flexible DNA model/or parametric protoType, capable of starting within a neutral/banal state, but flexible enough to be altered via internal parameters into hybrid and mutated variants.

Phenotype. The final phase will ask students to introduce contextual, environmental, program specific, effectual, and material variables which will nurture the genotypic protoType into a phenotypic design proposal. If time allows, students will be asked to deploy the same protoType into multiple context-specific variants.

While the studio is computationally-oriented, it is foremost, design-oriented. It is intense. Desired outcomes are anything but banal.