

The Production of Notational Objects

Presented at the ACSA Northeast Regional Conference Princeton University, October 1990

It is significant that the call for papers for this conference required the submission of images of student work along with an abstract. From this we can infer that the discourse of the studio is co-valent in the realms of words and images. And, to extrapolate, a cursory survey of professional or scholarly magazines reveals a preponderance of pictures, both photographs and our profession's secret scriblings, plans, sections, elevations, diagrams.

The latter, no less than the former, are images susceptible to consumption through multiplication. Having seen hundreds of versions of the Wexner Center, will the original still provoke the hoped for feeling of anxiety? As Oscar Wilde says, "Anything becomes a pleasure if one does it too often."

I believe conventional methods of notation used in most architecture schools, various forms of representation and miniaturization (plans, sections, elevations, axonometric drawings, and scale models) are fundamentally limiting in several ways. First, in their effort to fully explain something as profoundly complex as built architecture they often fall into the realm of caricature. They turn ideas to stone. Second, the process of designing architecture continues at least through the completion of construction. If the aforementioned schematic design tools comprise 20% of the total design time, the notational objects used in the last 80%—riser diagrams, framing plans, schedules, specifications, change orders, may contain 80% more possibilities. Cross fertilization of the conventions of the profession and the conventions of the academy could be exponentially generative. The in-kind trajectories established by these nota allow us to address change (political, technological, cultural) without recourse to stylistic debate.

At one level, this project is an attempt to reframe the activities of professional practice. I propose that drawing a reflected ceiling plan or writing specifications can and should be done with the same creative energy as studying elevations. Likewise these notational systems conform to rules established by cultural convention, which renders them susceptible to cultural critique. Intense involvement with the production of all notational objects and a willingness to question their neutrality, are projects I hope my students will continue throughout their professional careers.

I assume you are all familiar with the position taken by Owens, Frampton and others which problematizes the primacy of the visual. Equally, you probably hear, as I do, murmurings that architecture is a visual art. It is my contention that architecture both is and is not a visual art. Or, put another way, architecture is a visible art, dependent on objects which act as intermediaries between the invisible and the material. I will discuss a series of scorings which attempt to occupy and explore this zone of paradox.

Perseus knew how to operate peripherally. When he set out on his mission to kill Medusa the Gorgon, he realized those who had preceded him turned to stone. He knew to succeed he must not look upon his goal. And so, like Alice walking backwards, he looked the other way. Her reflection in his bronze shield allowed Perseus to gaze at the woman with hair of serpents, and to kill her. His shield was a notational object.

Notational objects posit an other. They intentionally, precisely, negotiate the waters of paradox, the gap of loss, of longing. They do not bridge the gap, but rather skate back and forth, perennially on thin ice. This is their necessary condition, for theirs is a strategy of delay. There are, of course, many others. An object (building, city) of analysis is an other. An idea is an other. For Leibniz the spiritual was an other made sensible through a system of nota called calculus. The other is that which we try to control, that with which we desire unification, but that which, should we be so unlucky as to succeed, will inevitably turn us to stone.

The reliance on an other is not new: Vitruvius and Palladio looked beyond the production of the architectural object no less than Eisenman. This studio project, however, increasingly looks in to look out. Thus the second text is played against itself, acquiring the density of doubling.

This writing is an analytic notation. Its primary structure demonstrates an unresolved duality. Parallel texts, the words linear, the images cyclical, move into and out of tangency. Focus, registration, mis-registration. The section cuts across two consecutive studios to track the use of notational objects to record & transform architectonic information. At the foundation of the work is intense student involvement, crucial to the formulation of the ideas presented here. Layered plans--the pedagogies of the studios, the individual students' projects--bleed outward from the place of incision. Dialectic juxtapositions--visible/invisible, practice/theory, conventional/original make a framing plan. The site plan lays out the work of Roland Barthes, Rosalind Krauss, Italo Calvino, Robin Evans, however their locations are uncertain and dimensions are not yet fixed. In the parti there is and will remain what Craig Owens calls a "trembling around the edges".

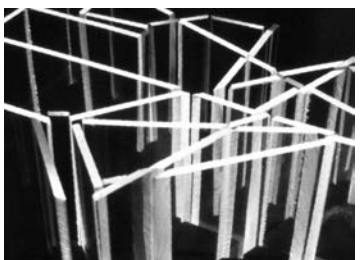
One plan is two sets of two studio projects. The first set of projects was produced in an advanced degree studio. This studio, taught to graduate students with one previous semester of architectural training, encouraged multiple formulations of the language of architectonics they acquired in their first semester. They were challenged to evolve skills to meet the requirements of their individually defined programs. In addition, the studio posed professional practice as a legitimate context for critical discourse. In fact, practice is a very fertile ground for deconstruction, as is the building industry. The two projects, one aesthetically sacred, one profane, were an Artist's Studio and the renovation of a meat packing plant into a furniture factory. The Artist's Studio registered the work and workings of a particular artist; and the Manufacturing Facility used two and three-dimensional objects to notate the activity of production used to study several activities of production.



The second set of projects is from an ongoing graduate studio. The pedagogical intention of the studio is to facilitate a weave between several essential and problematic couplets inherent in the production of architecture. These are the following: the conventional and original, the sensible and the abstract, practice and theory. Together they establish the x, y, and z axes which define the field of operation. Notational objects are used to analyze two architecturally significant college campuses in northern Florida, Frank Lloyd Wright's Florida Southern College and Carriere & Hastings' Ponce De Leon Hotel, now Flagler College. This analysis, as it establishes context and the authority on which to act becomes, in a sense, a Master Plan. But it is a master plan which acts on a contextualism of the invisible with the authority of the purposely equivocal.

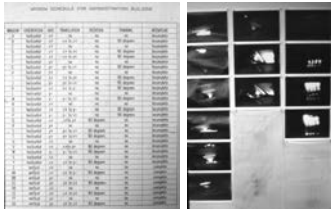
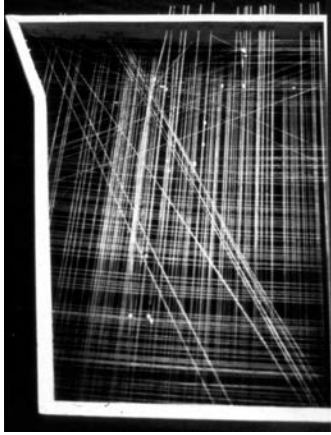


A key aspect of this investigation is the hypothesis that the choice of method and medium of analytic notation, along with its subject, are the beginnings of design. Thus analysis is, by definition, generative. The method of production of analytic objects, as well as the information recorded, provide a trajectory which will roll over into the upcoming proposal phase of this studio. (A double of a double.)



Shields

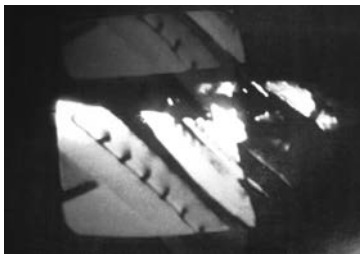
- Shields operate under the rules of reversal and doubling.
- In a shield, one can see the image of the other, but it is backwards. Or upside-down. It is exactly dis-located.
- The power of the double is most evident in a shield. Origin is replaced by repetition. The endless doubling of the funhouse mirrors looms large.



Key to plan.

Angela Morrison:

"The notational system used in recording information on the Florida Southern Campus was that of the video camera or camcorder. The initial premise originated from the camera's ability to capture and record images obliquely in three dimensions, based on the perceptual ability of humans. Since a camcorder necessarily frames, the primary focus of this notational experiment was things that had the inherent ability to frame or be a frame. Definitions of framing determined "openings". Opening: a breach, an aperture. The openings considered were overhead openings and windows. Door openings were excluded. In an effort to approach the problem systematically, a window schedule was created. The use of a window schedule allowed typical window elevations to communicate the various ways in which the camcorder frames things on the Florida Southern Campus. There were three primary moves that the camera followed. Each set of movements occurred about each of four axes. This set of movements include a stationary frame, a translating frame through rotation, and a translating frame through panning. The resulting window types were translated into three dimensional drawings and models."



Key to section.

- In a shield, the realistic jarringly becomes the real.
- To operate on a shield, a mirror, one must move opposite one's intended trajectory (like trying to drive a car backwards looking through a rear view mirror).
- Thus a studio project based on the production of working drawings is operating as a shield.
- And a building designed from the stair sections out uses the rules of a shield.
- A spec office building could be a shield, as is positive banality.
- A shield is protection: When using it one feels safe in an inherently uncontrollable situation.
- Maybe all notational objects are shields.



Molds

- A mold restricts and shapes decisions in three (or more) dimensions from an exterior source.
- Molds can make multiples: the word comes from the Latin modulus, a module.
- As it makes multiples, it questions the status of the original.



Key to plan.

Michael Nicholson:

"The existing structure's slab and footings became the setting for production. Plaster was chosen because it best represented the actual pouring of foundations and because casting would mime the allegedly sequential design process of architectural practice.

Step one: Previous building information



mold/reverse-cast/original
 Step two: Codesearch
 mold/original-cast/reverse

A code search rendered information pertaining to maximum length of dead-end corridors for the building type and maximum distance between exits. A literal diagram of the codes was applied to the second cast in clay.

Step three: Site information (sitework)
 mold/reverse-cast/original

Due to the qualities of the plaster, it had become increasingly difficult to maintain the clarity of the solid-void and reverse/original conditions that had been established in the production of the casts and molds. Synthetic rubber was chosen for its ability to retain the finest of details and also because it could be removed from a cast without destroying itself or the cast.

Step four: Program
 Step five: Schematic design
 Step six: Budget
 Step seven: Detail(s)

The actual construction of the eighth mold lies in the cutting apart, the de-tailing, or destruction of, the eighth cast, which is constructed of rubber."



Key to section.

- Zoning and building codes are molds.
- Structural load tables are molds.
- A mold is a hollow form or matrix for giving a particular shape to something in a molten or plastic state.
- A mold is the shape imparted to the thing by the mold.



Jigs

- In the woodshop, students learn to use tools. They also learn to make tools to expand the capabilities of the wood shop's tools. A second generation tool is a jig.
- A jig is a device which becomes an intermediary between a first generation tool and an object of production.
- A jig is indirect
- A jig is reciprocal.
- Jigs have a one-to-one relationship with their other.
- Jigs define things through specific tangencies.
- Jigs operate between a first generation tool, a contractor, and an object of production, a building.
- A set of working drawings is a jig.
- By clarifying the nature of points of tangency, a jig clarifies the intent of its other.
- Jigs are conventionally three (or more) dimensional.
- Jigs facilitate the construction of one specific type of object.
- A jig is a tool of delay.
- A jig assures uniformity in successive pieces.

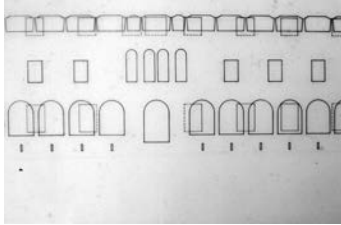


Score Cards

-A score is a line drawn as a boundary, the beginning of a race.

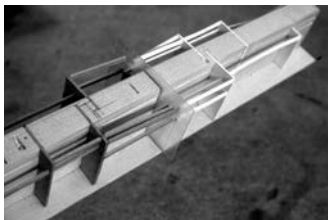
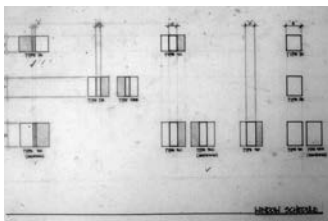
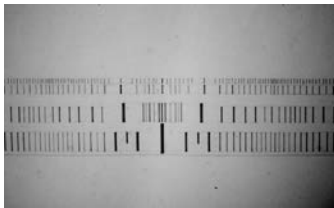
-A score is a written or printed piece of music with all the vocal and instrumental parts arranged on staves.

-To score is to make notches, cuts, lines. The score card is the thing so inscribed.



-A score card records decisions, actions, events external to itself.

-A window schedule is a scorecard: it registers window sizes, operating types, materials, numbers of units, without placing them in physical relation to each other.



Key to plan.

Chuck Allen:

"The analysis questions the apparent symmetry of the void relationships within the facades at Flagler College. As a whole, it is a symmetrically designed volume within which slight changes in window placement cause a new reading of the facades. This displacement of voids is a reaction to the functions of the interior spaces causes the voids to slip if the elevations are read against each other. In order to understand these relationships, only the voids are drawn from each elevation.

Facades are drawn as elevations which can either be folded about a central axis or a common corner, or superimposed over other parallel facades. By incorporating the notions of folding and translation of each facade we can now see where the slippage or displacement of voids occurs. To further this investigation, the voids become three-dimensional volumes which allows the slippage to be translated into shearing or bending. Shearing occurs when facades are folded about an axis, while bending takes place when parallel faces are superimposed against one another. The common area marked by the slippage of voids becomes the resultant void.

Key to section.

-Each type of score card has an architecture of its own, with its own structure of rules.

-A score card is a fossil, the residual object of a process of analysis or synthesis.

-A score card invites play.

-A scorecard has no inherent dimensionality.

-A score card registers the marks of a process occurring elsewhere.

-Cost estimates and materials take-offs are scorecards.

-Sometimes sections, interior elevations, engineering drawings are scorecards, because they register decisions made elsewhere, say, in plan.

Scorecards can be generative. Once their architecture is understood the scorecard's rules can reflexively reconfigure the external event, say, the design of a building.

-A scorecard presumes scientific objectivity. Its marks are seen as inevitable.

-Interpretation and intervention occurs in the structure of the score card, in the method by which it registers moves.

-Score cards are analytic: they selectively record some aspects of their other, not all.



Another foundation: Italo Calvino, in If On a Winter's Night a Traveler, writes "There is always something essential that remains outside the written sentence; indeed, the things that the novel does not say are necessarily more numerous than those it does say, and only a special halo around what is written can give the illusion that you are reading also what is unwritten." At the instant of the cut, we glimpse the unwritten.