

A Pedagogical Practice / A Pedagogical Portfolio

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The value and intent of the programmatically framed studio assignment, and the appropriateness of simulating practice in academia, is questioned. An alternative framework for studio assignments is proposed, namely one that is structured thematically. A selected portfolio of student work is presented as a second, parallel text. The work embraces the concrete realities of academia: it is constructed, it suffers the resistance and discipline of budget, technique and material, it is mostly non-representative, it is without scale, it is grounded in basic issues of architectural production. The work was completed by undergraduate architecture students at the University of Michigan.

A PEDAGOGICAL PRACTICE

Architectural pedagogy is widely predicated on the notion that in order to prepare a student to become an architect, the academic institution should approximate professional practice. This premise manifests itself in structural ways, ranging from the American system of "accreditation", which is an attempt to guarantee a minimum common professional experience across schools of architecture, to the Swiss concept of the *Diplom Architekt*, wherein the terminal degree itself constitutes the State's assurance of professional qualifications. The need to frame the education of the architect in terms commensurate with professional practice has a myriad of implications for the design studio, the most obvious of which is that the studio assignment given by the instructor should approximate a professional commission, and that the work produced by students of architecture should lie close to that of their professional counterparts. Most academic activity satisfies this apparently self-evident criteria. Some, however, does not. The remarks below are dedicated to this later group.

In any architectural commission, there is a substantial gap between the discourse of the project brief and the discourse of architectural production. In fact, one can claim that a commission to "design a house on this or that site, for this or that client" is not, per se, an architectural problem. It is, perhaps, a solution statement, the descrip-

tion of an outcome, a caption circumscribing work done. Or perhaps, more accurately still, the brief is both problem and solution, starting point and terminus, a simultaneity, however, wrought at the expense of specificity. The brief serves only to stake out the territory for the architectural work, like chalk marks delimiting the grounds of an archaeological site. The blurred lines indicate neither the intent of the dig nor do they define the critical third dimension along which discovery is anticipated. The enterprise of the architect, like that of the archaeologist, almost immediately divorces itself from the surface condition. And while the depth at which an architectural project evolves and the strata on which it ultimately comes to rest obviously varies from architect to architect, one can say with certainty that the merit of a work never resides in its programmatic or even typological adequacy.

The question arises as to the pedagogical intent behind programmatically framed studio assignments. Presumably, the benefit is that such a framework — albeit with more, and less quantifiable, parameters — is similar to that which confronts the professional architect. In the interest of "realism," academia simulates practice. The student is implicitly expected to engage the studio project on a level utterly other than that of the brief itself. The student is also expected to recognize valuable finds from insignificant fill. to understand the limits and capabilities of the tools s/he uses, and to fulfil the assignment in the very process of leaving it behind. None of these issues is typically foregrounded by the brief itself. Instead, the program serves primarily as a pretense for a rather subterranean activity that unfolds between the instructor and the student and the work.

There might well be justification and necessity for a clandestine act of design in the context of a profession whose responsibilities ethically transcend the interests of private capital. There is no analogously compelling reason to insist on the clandestine nature of design within the context of an educational setting. On the contrary, one can argue that within the academy, design activity should form not only the dominant subject of study but also the explicit object of study. Ironically, this means that the work might

appear quite unlike normative productions. But unfamiliar appearances should not necessarily lead to the conclusions of irrelevance. The relationship between a built artifact (a building) and the ground it inhabits (the site) can be highlighted, explored, and articulated in any number of ways without recourse to a programmatically inscribed category (ie., a house). The relationship between a structural system and a spatial concept can be approached directly without the pretense of a building program. The potential of a building program to transcend its prescriptive tendency and to engender form can itself be thematically addressed. Studio work can be framed thematically rather than typologically or programmatically, sponsoring a direct and focused investigation of issues. In other words, a simulated professional practice can be augmented by an overtly pedagogical one.

There is, of course, value in simulative activities. Anyone who has flown in an airplane ought to be glad for the existence of flight simulators. But there is an ontological irony in the fact that "realistic" work in the context of an architecture school is generally held to be that work which best mimics another reality. Locational amnesia; a prerequisite for both the flight simulator and for most schools of architecture. Traditional pedagogical models succeed to the degree that they transcend the concrete context of the academy itself. An inherent schism ensues: precision of the simulation is cast against pedagogical focus. The rift is most often bridged by the imaginative brief the inventive program, the fantastic site, the pliable client, the inoperative budget. Cordoned off from external restraints, the very conspiracy with reality that frequently summons the best professional work is sacrificed in the process of simulating that same reality.

A discursive space cannot be investigated by an institution bent on mimicking that very discourse. It is the responsibility of the studio to delay the wholesale absorption of received ideas, to question the nonnative status of practice and to interrogate the very tools with which architecture is conceived. It is equally important for schools of architecture to resist becoming weightless shadows of an assumed reality. The danger of a self-fulfilling prophecy is apparent and real. Stepping out of the discipline and slamming the door on the discursive space is, however, unlikely to yield useful insight. Meta-discourse and simulation; while measuring from opposite sides of the boundary, both are obligated to accept the outlines of the specimen under consideration. A critical practice - a pedagogical practice - must locate itself on the very edge of the demarcation, neither within nor without. The rejuvenation of the discipline is most likely to stem from a position in the margins.

Certainly, academia can accommodate a program of training and establish the criteria for competency. This is the overt mission of many schools. For many students, this is also the explicit reason for studying in the first place. And for many teachers, education is the process of transporting a prescribed body of knowledge from one brain to another. Yet

competency should not be the only goal of academia. While skills are indeed valuable and competency is certainly desirable, more valuable and indispensable — both for the profession and for society at large — are minds and hands that are trained to question. A teacher, an institution or a student not willing to engage the discipline on the level of critical reflection is merely a hand-maiden to prevailing conditions. Critical work is the legitimate subject of a pedagogical practice. Critical work is taxing. It demands, on the part of the instructor, the abdication of authority. The teacher is no longer the source of answers but the source of questions. It demands, on the part of the institution, the courage to assert the authenticity of academia. And lastly, critical work is demanding on the student, for it requires a willingness to embrace the risks, rather than the certainties, of education.

A PEDAGOGICAL PORTFOLIO

1. Lines

The first act on the first day of the first studio is preparing the drawing surface and mounting the parallel rule. The first line follows almost reflexively, and every subsequent building act is judged against this line. Here, the order is reversed; the line is subjected to the density of material. The assignment is to record the application of a force using two sheets of steel, each measuring 1 ft. square. The resulting form is the product of a constructive act and specific material properties. The subsequent assignment is to draw eight precise sections of the construction, a remarkably difficult task. Drawing itself becomes an act of construction. The drawn is judged against the built. The parallel rule and the triangle become tools employed to construct scaffolding, which is used to construct the line.

2. Site

These projects attempt to measure two quite distinct sites via an architectural operation. In the first the site is a standard 2x4x6ft wood stud (Fig. 2). The assignment is to describe a path from one edge to the extreme opposite edge of the site. The design articulates the length and depth of the wood by two connected paths, one curvilinear and fixed, the other linear and adjustable. The paths are experienced acoustically as well as visually. When assembled, a stone dropped in a hole in one end of the board "measures" the length of the wood. Except for the pine wood brackets, all the material is excavated from and returned to the original site. The second piece measures the floor and ceiling of a given room (Fig. 3). When lit, the device casts light and shadow on the opposing surfaces: an "x" of light on the ceiling (from which the shade is hung, precisely at the center of the "x") and a corresponding "x" of shadow on the floor (on which the quadrupod rests, supporting the light source.)

3. Thick Plans/Thick Sections

Within the thickness of forty sheets of plywood, each student

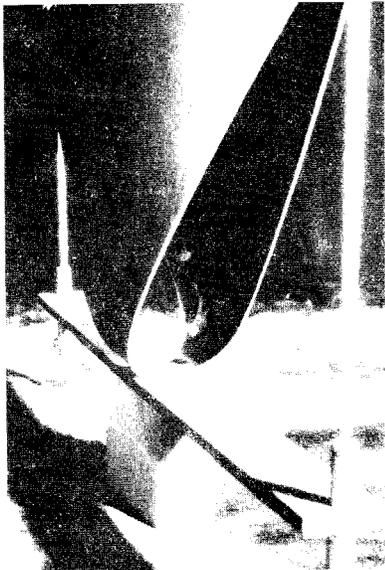


Fig. 1.

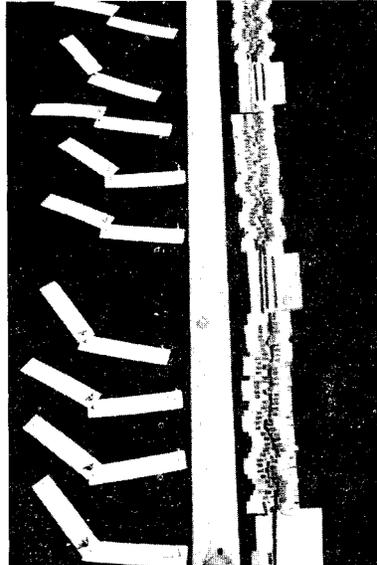


Fig. 2

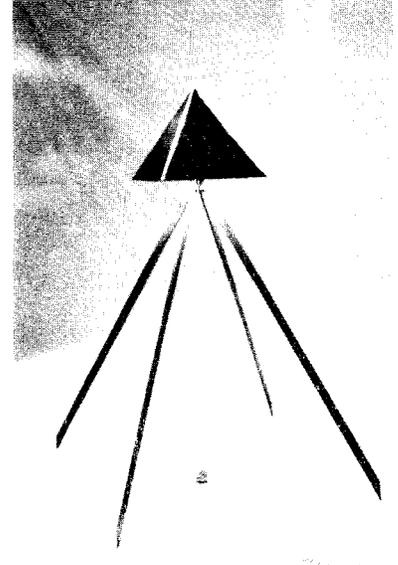


Fig. 3

is asked to excavate two dwelling spaces. 20 sheets are stacked vertically, 20 sheets are staked horizontally. Use of a jig saw is not permitted, thereby rendering all cuts visible on the exterior edges - the facades - of the plywood. Each plywood sheet is a thickened drawing. The pencil is replaced by the saw blade, enforcing the concrete discipline of construction. Space is produced by the accretion of thick sections (the vertical sheets) and thick plans (the horizontal sheets.) Prior to any cuts, the plywood sheets (600 in total) are aligned on a long thin portable table, forming a group site model. The presence of this collective row instills a sense of responsibility on the part of each designer with regard to the overall figure. Each individual work was thereby embedded in a larger, quasi-urban condition.

4. Tectonics

This project begins at the end, with a given form. Each student produces a plaster mold of a portion of their body. The mold is used to cast a very thin latex skin, which has no structural rigidity but which retains the topography of the original site. The task is to fabricate a structure that will support the skin in its original configuration. The infinitely complex landscape of the skin problematizes the quest for structural order. The skin and the persistence of gravity conditions the work down to the finest detail, but the architecture in no way aspires to replicate the bodily skeleton itself. Instead, the body serves to highlight the artificiality of the constructive act. To paraphrase Aldo Rossi, cities are not made of "tissue," buildings do not "grow," and architecture is not "organic."

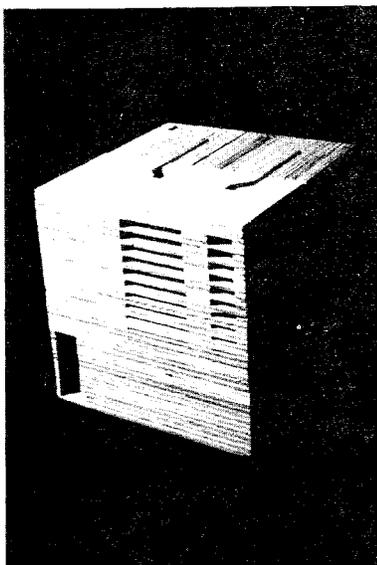


Fig. 4.

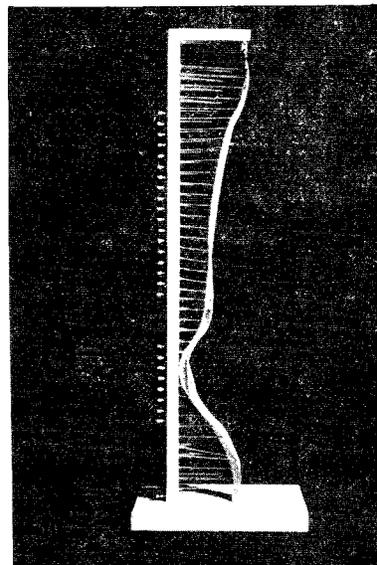


Fig. 5.

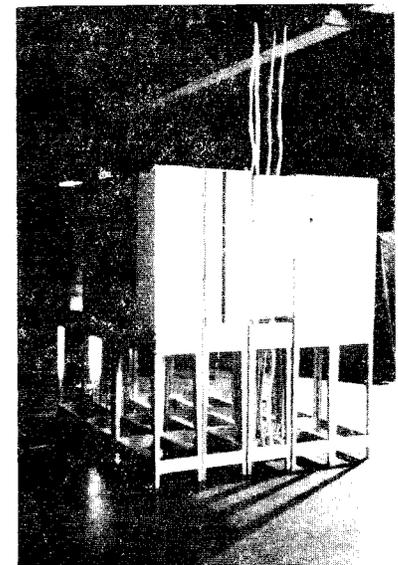


Fig. 6.

5. Single-Row-Block-Housings

A thin latex skin cast from the upper portion of the body is to be housed in a plywood box of predetermined dimensions (12" x 12" x 36" high.) At issue is not only the development of a architecture that mediates between two diametrically-opposed conditions (hard/soft, opaque/translucent, rigid/flexible, planer/curvilinear,...) but also the explicit construction of the viewing subject (ie. structuring the exterior experience of the interior.) The plywood housing is sited on a table top twice the area of the box (12" x 24" x 36"

high.) 15 such constructions are grouped in checkerboard fashion with each box adjacent to an empty site. These empty sites are subsequently infilled with a framework clad with flat latex skins cast on plywood sheets: an inversion of the original box. The frame/skin assembly has to accommodate the particularities of the surrounding plywood constructions, imprinting a reflexive contextualism on the individual pieces. The final work can be arranged in a dense block, in rows with continuous facades, or as free standing elements.