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Design and Studio Pedagogy

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Thomas A. Dutton is an architect and Associate Professor of Architecture at Miami University in Oxford, Ohio, where he has taught since 1977. He has long been concerned with critical social theory and its implications in architecture and architectural education. He received a B.Arch from California Polytechnic State University in San Luis Obispo and a M.Arch and Urban Design from Washington University in St. Louis. He is co-director of the Architecture Department's Community Design Assistance Group.

Utilizing an educational concept known as the hidden curriculum to analyze the design studio, the author argues that there is a rough correspondence between schooling and larger societal practices, where the selection of knowledge and the ways in which school social relations are structured to distribute such knowledge, are influenced by forms and practices of power in society. Asymmetrical relations of power are reproduced in schools and classrooms, including the design studio. In response, the author has been experimenting with a transformative pedagogy for the design studio, attempting to set up the conditions to investigate not only the many issues of design, but the nature of design education itself, especially with regard to how knowledge is produced and disseminated, how social relations are structured, and how students and the professor come to see their roles in these activities.

1. Introduction

There is no doubt the design studio now occupies the premier position in most architectural programs across the nation. Evidenced by the commitment and intensity given to it by students and professors, the tendency to place other coursework at the curriculum's margin and its potential for integrating skills, values, and architectural literacy, the design studio has become the "heart and head of architectural education . . ." Some proclaim that as a pedagogical method, the design studio has no comparable

model relative to its intensity and involvement except perhaps the internship of medical students.² Certainly, compared to typical classroom scenarios, studios are active sites where students are engaged intellectually and socially, shifting between analytic, synthetic, and evaluative modes of thinking in different sets of activities (drawing, conversing, model-making). That these attributes characterize many studios is clear and attests to the uniqueness of the studio as a vehicle for student education. Yet the studio system is marked by some serious flaws; flaws that are readily recognized and actually counter what might be normally considered as sound teaching practice.

This paper is broken into two distinct sections, each of which would be incomplete without the other. The first part analyzes and critiques the design studio in terms of its commonly held assumptions and practices, its relation to the profession, and to society as a whole. Employed in this examination is an educational concept known as the hidden curriculum. Though it is an established and debated concept in other disciplines, particularly education, the hidden curriculum is relatively unknown in architectural education, and a brief description is necessary here. Viewed through the hidden curriculum, the studio is revealed in terms of its destructive inclinations to legitimate hierarchical social relations, thwart dialog and sanction the individual consumption of "acceptable" knowledge in a competitive milieu.

Such inclinations speak to a rough correspondence between schooling and wider societal processes, whereby the selection and organization of knowledge and the ways in which school and classroom social relations are structured to distribute such knowledge are strongly influenced by forms and practices of power in society. That is, the characteristics of contemporary society—characteristics such as class, race and gender discrimination and other asymmetrical relations of power—are too often reproduced in schools and classrooms, including the design studio.

Their prevalence demands conscious and effective counter measures, including the development of enlightened pedagogical practices that encourage students and teachers to question all forms of knowledge within social relationships animated by dialog and reciprocity.

The second part of this paper represents an attempt to contribute to the formation of a transformative pedagogy for practical application in the design studio; transformative in the sense that the pedagogy sets up the conditions to investigate deeply not only the many issues associated with design, but the nature of design education itself, especially with regard to how knowledge and meaning are produced and disseminated, how social relations are structured, and how students come to see their roles in these activities. In this way there is an explicit attempt to make "the pedagogical more political and the political more pedagogical."³ The paper concludes with the presentation of a studio model which utilizes such a pedagogy, and a discussion of its importance in architectural education.

II. Hidden Curriculum

Over the last two decades, there has been a new wealth of ideas and debates centering on educational reform. Out of this has emerged a concept called the hidden curriculum which has made a significant contribution to pedagogical theory. Simplified, the hidden curriculum refers to those unstated values, attitudes, and norms which stem tacitly from the social relations of the school and classroom as well as the content of the course.⁴ In comparison to the formal curriculum with its emphasis on knowledge (i.e., course content: what should be "covered" and its place in the curriculum), the concepts of the hidden curriculum brings into focus questions concerning the ideology of such knowledge, and the social practices which structure the experiences of students and teachers.⁵

Using the concept of the hidden curriculum as a perceptual base, one begins to recognize that:

1. schools are not neutral sites, and thus

2. they are an integral part of the social, political, economic, and cultural relations of society.
3. This nexus of relations plays a significant role in the selection, organization, and distribution of knowledge in schools as well as
4. the formation of school social relations and practices.

When recognized, the hidden curriculum becomes a crucial vehicle through which critical analysis reveals the dialectical relationship between knowledge, culture, social relations, and forms of power within society and within the process of schooling.

Hence, through the filter of the hidden curriculum teachers can interpret the relationship between *knowledge* and *power*, and how classroom knowledge always reinforces certain ideologies, values, and assumptions about social reality so as to sustain the interests of some groups at the expenses of others.⁶

Similarly, educators can clarify the relationship between *social practices* and *power*. That is, injustices and inequities of society are not simply nestled in the mind, but are embodied in forms of lived experiences and social relationships that penetrate to the innermost recesses of human subjectivity—forms that in this society tend to legitimize top-to-down models of authority and types of social control characteristic of most institutions. As one critic put it, the hidden curriculum “comprises one of the major socialization forces used to produce personality types willing to accept social relationships characteristic of the governance structures of the workplace.”⁷

In sum, the notion of the hidden curriculum constitutes one of the “most important conceptual tools”⁸ with which to analyze and critique educational institutions in terms of the knowledge forms that are produced, and the ongoing social practices that are formed to disseminate such knowledge.

III. Hidden Curriculum and the Design Studio

Applied to architectural education, the hidden curriculum greatly enlarges the

examination of the design studio. Situated in a broader context, the design studio, as a producer of knowledge and as a social practice, can now be shown in its intimate connections to wider production, distribution, and legitimation practices of society, manipulated by governing social, economic, and political institutions. By focusing on these connections, the subjects of studio knowledge and social relations are put in a new light.

Studio Knowledge

Knowledge is not a neutral entity. As any commodity, it is produced and distributed according to particular voices situated in relations of power that are asymmetrical. To talk about knowledge, then, is to talk about power, and therefore the legitimation of some forms of knowledge due to their association with forms of power over others. Thus, it is more correct to talk about dominant and subordinant forms of knowledge.

For example, it was not so long ago that concern for an architecture of social responsibility was central to architectural discourse. Now within academia and the profession the voice for an architecture of social responsibility is weak.⁹ In fact, it appears that all those things an architecture of social responsibility would be expressly against—the secrecy of esoterica, the desire to build “art” to the exclusion of other important variables, the tendency for architectural drawings to be considered as things-in-themselves, the torrent of paper architecture and the ability of drawings to inform adequately about the end product—are exactly what is in place today.¹⁰

Scores of architects and critics have reacted strongly to this swing towards aesthetic formalism. For example, Ada Louise Huxtable finds the shift disturbing in that the primary dialog is now among architects, with a corresponding orientation of practice “away from sociological to exclusively esthetic concerns . . .”¹¹ Tzonis and Lefaivre argue that underlying the seemingly *divergent* directions of “Palladianism,” “Chomskyan linguistics,” “manneristic versions of LeCorbusier and Terragni,” “German

expressionism,” and the “French Beaux-Arts tradition,” and so on, there is a convergence.¹² The convergence is marked by the attempt to construct a simple, make-believe ideological world where professional confidence, stability, and prestige can be restored. Architects are presuming they can roam freely in the realm of mental constructs, disassociating themselves from the external world of unpleasanties, and turning “inward for approval to the closed world of peers or of the office drawing board, where everything becomes possible.”¹³

The impetus and prevalence of this condition cannot be explained solely with reference to the profession. Architecture, in itself, is not capable of totally reproducing its own existence, and thus the derivation of these tendencies must rest within the nexus of forces that connects architecture to societal institutions and forms of power. This points to the pressures and practices of prominent institutions that bear on the profession to influence its direction. As these institutions necessitate physical manifestation they seek forms and languages through which their power will be communicated and legitimized.¹⁴

Schools of architecture are not free of these political-economic trends. Thus, while architecture is intimately related to societal relations of power, it is important to judge what effect this relationship has on the education of future architects. As professional predilections and dispositions, become manifest in schools, and become the content of design studios, it is clear that studios are likewise steeped in the complex interplay of ideology and power, within which knowledge is shaped and distributed. What is taught in design studios plays a strategic role in the political socialization of students.

It is worth repeating that knowledge is always based upon ideological considerations. It is not neutral. Knowledge either maintains the status quo, or in the service of alternative interests, it can become a weapon of resistance and opposition with which the constellation of interests and ideologies underscoring

the status quo can be interrogated and challenged. Thus the task before educators is to understand and act upon the ideological dimensions of knowledge, and to recognize the inescapable fact that *all* pedagogical work is political work. Closer to home, this suggests that architectural educators critically analyze the interrelationship between architectural schooling, the profession, and the wider society in order to illuminate the political nature of recent currents in the profession. This in turn will reveal which histories, cultures, and visions are reinforced and legitimized relative to what is produced as knowledge in the design studio.

Social Relations

Turning attention to the design studio as a social practice and utilizing the vantage point of the hidden curriculum, there is much in the structure of the studio that mirrors the structure of most contemporary workplaces. In other words, characteristics that have come to be common in modern workplaces *do* take form in some way in the design studio. Normally these include systems of *hierarchy* which require a strict division of labor, "rigorous obedience" and orientation to means rather than ends,¹⁵ and an ethic of *competition* to ensure work compliance and intensity.

Hierarchy: The presence of hierarchy in studio organization, though commonplace, is an experimental condition that cannot be taken lightly. My position is that hierarchy obviates the presence of dialog. Dialog here is more than simple conversation or discussion. As a fundamental precondition dialog requires an *equality* of participants—an equal distribution of power—which by definition is lacking in any system of hierarchy. Gregory Baum writes clearly about this position:

"True dialog takes place only among equals. There is no dialog across the boundary between masters and servants, for the master will listen only as long as his power remains intact and the servant will limit his communication to utterances for which he cannot be punished. In fact, to recommend dialog in a

situation of inequality of power is a deceptive ideology of the powerful, who wish to persuade the powerless that harmony and mutual understanding are possible in society without any change in the status quo power."¹⁶

Real dialog rarely exists across the boundary between teachers and students, even in the design studio. Usually structured in vertical relations, teachers tend to speak in ways (often unconsciously) that legitimize their power and students orient their speech and work to that which is approved. Such a setting is marked by persuasion (however subtle) as the principal tone of discourse. To put it in the words of Paulo Freire, "The mark of a successful educator is not skill in persuasion—but the ability to dialog with educatees in a mode of reciprocity."¹⁷

Competition: In examining competition, one finds it is often regarded as the major motivator of the studio. As in a market economy, competition is considered the means of improving the product by pitting one producer against all others. Hence competition is supposed to bring out the best in people. I think it also brings out the worst. Not only generating needless emotional pressure and antipathy among peers, competition tends to promote the belief that ideas are unique, to be nurtured individually, closely guarded, and heavily protected against stealing. Such a system portrays ideas as personal, not meant to be shared, lest someone else gain a competitive edge.

One significant consequence arises out of this view. Students come to believe that they must work alone, or with those who see the world similarly to ensure the "purity" of ideas. Design in this view is legitimized as a self-indulgent activity, negating cooperation and compromise as possible vehicles for good design. Frequently a severe ranking develops among the students which shuts down further any desire of collective work: obviously good ideas cannot come from others who are "less qualified" than oneself.¹⁸

Hierarchy and Competition: Recent research supports these claims about the

effects of hierarchy, competition, and self-interest as they are manifested in the design studio. In his contribution to the *Architectural Education Study*,¹⁹ Chris Argyris has accomplished some important work which focuses on the design studio primarily in terms of the behaviors and verbal exchanges between teachers and students, and secondarily on what was taught as content. The study encompasses professors exhibiting widely different styles of teaching, in different universities, and in different year-levels of the architectural program. Four points became clear in this study.

First, borrowing from prior research on the interrelationship of theory and practice in educational settings (conducted with Donald Schön), Argyris continually found a distinct mismatch between "espoused theories" and "theories-in-use" on the part of both professors and students. Apparently this incongruity is quite a common occurrence, as Argyris and Schön point out:

"When someone is asked how he would behave under certain circumstances, the answer he usually gives is his espoused theory of action for that situation. This is the theory of action to which he gives allegiance, and which upon request he communicates to others. However, the theory that actually governs his actions is his theory-in-use, which may or may not be compatible with his espoused theory; furthermore, the individual may or may not be aware of the incompatibility of the two theories . . . But as our research progressed, we learned that people often espoused theories of action different from those that actually governed their behavior . . ."²⁰

With regard to the design studio Argyris found that what was *described* in comparison to what *transpired* in studio settings were altogether consequences that were essentially unsound, and certainly not in line with what the espoused theories purported.

Second, the interaction between teachers and students was characterized by "both striving to control the learning environment,"²¹ but given the power differ-

ential, students typically lost in this effort. This tended to set up a competitive win-lose context between teachers and students, and students themselves, with the corresponding results of non-dialog and attempts to persuade and transform. Argyris writes:

"Students do not utilize each other as resources as much as they could. One reason is the common fear that other students will steal their ideas. An unwritten rule among students is that they stay away from each other's work, at least until its authorship is established . . . We do not mean to imply that students never talked to each other about their work . . . However, in all schools, discussions usually concerned technical or engineering problems, building rules, and the like. Students worked alone during their creative moments."²²

Third, the studio setting became a teacher-centered experience, and hence the learning of design was productive only to the extent that the students understood and accepted what the professors taught. Consequently, dependency upon professors remained high with students trying to make connections between their own problems and the teachers' expectations.²³

Fourth, professors and students rarely questioned the assumptions and values underlying their theories-in-use. Over time, a kind of "mastery-mystery game" tacitly evolved, where "mystery began to be taken as a symptom of mastery."²⁴ Argyris found that rarely did professors

"help the students recognize the ideas and theories that were embedded in their work or make explicit their own ideas, or reflect about their own work and thinking in a way that would help the students understand the discovery-invention-production processes."²⁵

IV. Towards a Transformative Pedagogy

The thrust of the above analysis shows that through the means by which knowledge and social relationships are structured, the hidden curricula of schools

and design studios play a sizable role in reinforcing ways of life while making others invisible. Herein lies a more profound understanding of curriculum (both formal and hidden): the introduction to and affirmation of "forms of knowledge and social practices that legitimate and reproduce particular forms of social life."²⁶ That schools do this is not a matter of debate. They do it, and the task confronting educators is to recognize this and act consciously to structure knowledge and practices in ways very different from those which tend to reproduce the authoritative and competitive patterns of American schooling and society.

Thus this analysis is not to declare that design studios simply reproduce a social order twisted by class power and other organizational forms of power characterized by asymmetrical relations. Schools and studios are contradictory sites; that while there are currents of societal reproduction in schools, such reproduction is never all encompassing. Schools can be (and in many ways are) sites for the production of new forms of knowledge and social relationships.

Studio Model

What follows, then, is a discussion of a studio pedagogy that I have been experimenting with for some years and which attempts to respond to the analysis I have set forth. While this pedagogy does not solve all the problems of the design studio, it

1. utilizes the subjects of housing design and urban development to confront directly the value systems of students and
2. structures the studio to attempt a break-down in the social relations of hierarchy and competition.

The project title of the studio is "Housing/Mixed Use Development in Downtown Cincinnati." Structured into small groups of five to eight persons, the task set before the students is to develop an urban site collectively, devoting a significant amount of space to residential use. The project fills the semester. Two stipulations must be followed:

1. each student must be responsible for an individually designed component of a larger group scheme, and
2. in all decision-making matters there must be a consensus within the group.

Thus unlike typical "group" projects where many individuals work on one scheme, this model comprises many individuals working on their own schemes but all must combine to form a larger whole. Beyond these stipulations, and within the parameters of the general topic area, each group generates its own program and focus of knowledge, determines its mode of operation, sets its own due dates, and selects its own site from a set of preselected sites. These sites are not arbitrary. At the scale of a downtown block they ensure a close proximity between individual projects, necessitating collaboration of the interfaces. Also, all the sites are in the "in-between" zones of the city—places where there is a mixture of social classes, functional uses, new and old buildings, vacant lots and buildings, etc.

This studio marks a different pedagogical stance regarding how content and social relations are structured in order to facilitate effective learning among students and teachers. This, I believe, can be illustrated by the following four points. Common to all the points, however, and standing at the heart of this pedagogy is the primary issue of power.

First, there is the attempt to balance the maldistribution of power between students and professor in order to democratize the studio. Though a full democratization will likely never be achieved, any attempt at democratization without a redistribution of power would be a sham. My efforts at redistribution take the form of facilitating equal deliberation in all areas of studio life: the conditions of work, programmatic considerations, the direction of the project, the scope of readings, the lectures that may be necessary, studio scheduling, and especially the determination of the student's grade. The granting of the grade is clearly one of the most formidable weapons in the professor's arsenal. No

matter how thorough or sensitive a professor is in approaching grading, there is no shift in power if the determination of the grade remains solely within the hands of the professor. The grading process, as it has evolved in the pedagogy I am describing, is such that every student of the group, along with myself, has a direct say in his or her own as well as every other student's grade. To put it simply, the final grade represents an equal combination of self-evaluation, peer evaluation, and my evaluation.

Second, with regard to power and my role in other realms of studio experience, I spend most of my time working with each group, as a group. Much of my effort is in trying to shift the locus of, and responsibility for, discussion and interaction from the typical teacher/student relationship to that of student to student. Shifting social dynamics in this way attempts to establish the conditions whereby students are encouraged to take on the primary responsibility to critique one another, and to learn what it means to critique and how it might be done effectively. Giving criticism is perhaps central to what architectural professors do but it cannot be a practice monopolized by them. To evaluate and interpret someone's work (as well as one's own) and to do these well, are indispensable attributes of a critical consciousness. Acquiring these attributes does not come naturally. They have to be learned, and structuring a context whereby students have to rely upon one another for guidance, support, and criticism helps to facilitate this learning. Working in these ways, to these ends, constitutes the major reason why I avoid individual desk crits as much as possible. I have found that after working to get students to overcome their personal anxieties in order to form some kind of trust, to turn around and conduct individual crits undermines that trust and any growth toward it. Individual crits tend to privilege my perceptions and criticism to the detriment of a student's peers. This is not to say that I abstain from discussion altogether, or worse, that I see myself as a benign facilitator. My role is still one of critic, but in a context where all participants are struggling to become

critics. This pedagogy really begins to work when my comments are finally considered simply as one of many biased observations, and where students come to realize that all assertions, including mine, can only be accepted critically.

Third, overcoming the power differential between students and teacher is paralleled by similar efforts to balance power among students. This is the primary reason for consensus decision-making where now each student has veto power: equal power. Consensus decision-making forms a context where majority rule has little or no meaning because any student at any moment can sanction, modify, or alter the group's process, direction, field of investigation, goals and objectives, etc. As one can imagine, student reaction to this context is varied. Some students attempt to dominate, others remain passive. Some try to push the group beyond its boundaries, others feel comfortable within them. But in time, as students test the limits of their individual maneuverability by pursuing directions they find personally relevant, they also come to realize their responsibility to the overall project. This means they participate to the extent they desire, but they know full well they have only themselves to blame for any undesired outcome.

Fourth, the pedagogy facilitates the investigation of that which students deem important. The studio starts with their subjectivities, with the meanings they hold and the interpretations they have about urban life and the design and provision of shelter. However, because the studio is an argumentative process, the pursuit of one's own goals confronts that of the larger social group. Students learn to make decisions with others who disagree with their values, and by necessity, develop the mechanisms, both verbal and graphic, to expose and explore differences of opinion. For some this is a painful process, as it is often painful to reveal inner sentiment in any public context. But to be effective and successful in having students examine their subjectivities in a manner as explicitly as possible, such an investigation has to be more than private introspection; it has

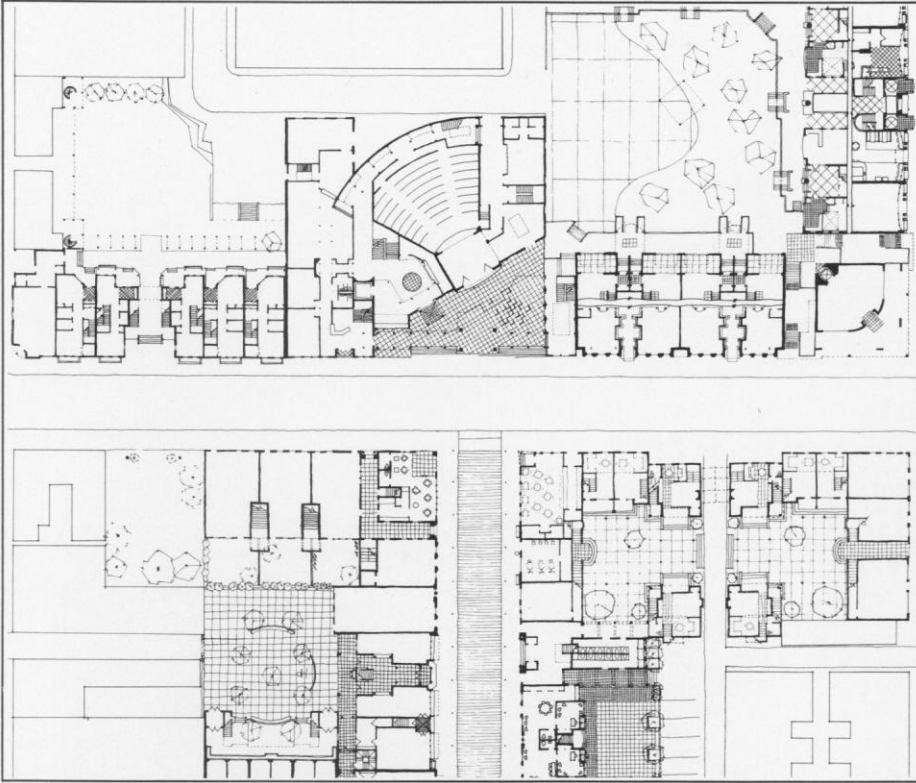
to be social. In this way, what is produced by the students as meaning and knowledge is forged on public terrain where it is engaged critically, individually and collectively. When this process is at its best, the exposure and exploration of opinions unravel the ideological assumptions and the political, economic and cultural values underlying such opinions.

In sum, I have found that non-authoritarian relationships, which tend to spring from consensus decision-making, have been indispensable for the nurturing of dialog and critical thinking to a significant degree. Characterized by a rough equality of participants engaged in dialog, the critical appraisal of knowledge is paralleled by social practices based upon reciprocity.

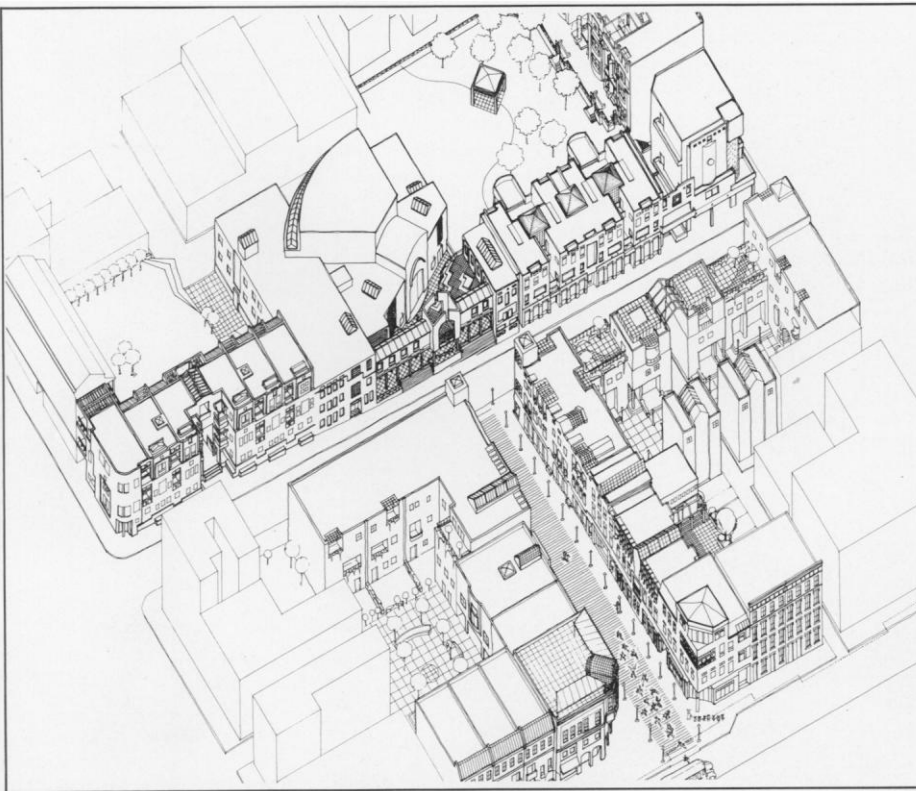
V. The Projects

The subject of housing design takes on an instrumental role in this studio. Because housing is a key barometer of the state of American society, its critical investigation on the part of students in a collective fashion exposes not only a range of assumptions about shelter design and its provision and linkages to the workings of society, but the organization and direction of society itself. In the quest to have students learn something about their inner selves, to see where they stand in relation to societal currents and tendencies, and to perceive themselves as active agents in the production of meaning and knowledge, the subject of housing design provides a special means of achieving this.

It is not the only means, however. This pedagogy could work very well with other building types and design problems as long as the parameters are explicitly clear as to what constitutes a student's individual design responsibility. If this stipulation is met, this pedagogy is quite possible in various levels of the curriculum. For instance, I have utilized this pedagogy with freshman students where the group design problem was to create a sculpture to which each member had to contribute a moving part. For upper-year students this pedagogy could work



1 GROUP PLAN (Fall 1983). Situated in a neighborhood comprised mostly of pre-1900 tenant flats and townhouses over small shops, the design scheme makes use of a large area of vacant land, made so by years of neglect and demolition. Responding to the axis created by the Center for Performing Arts—a large magnet school for the entire metropolitan region—the eight person group created a pedestrian street along which is placed civic functions, small businesses, and residential units on upper floors for differing incomes. The street is terminated by a community theatre which jointly serves the community and the school. Students: Matt Beahm, Steve Brown, Peter Califiura, Randy Carey, Mark Koeninger, Michael Konzen, Susan Strange.



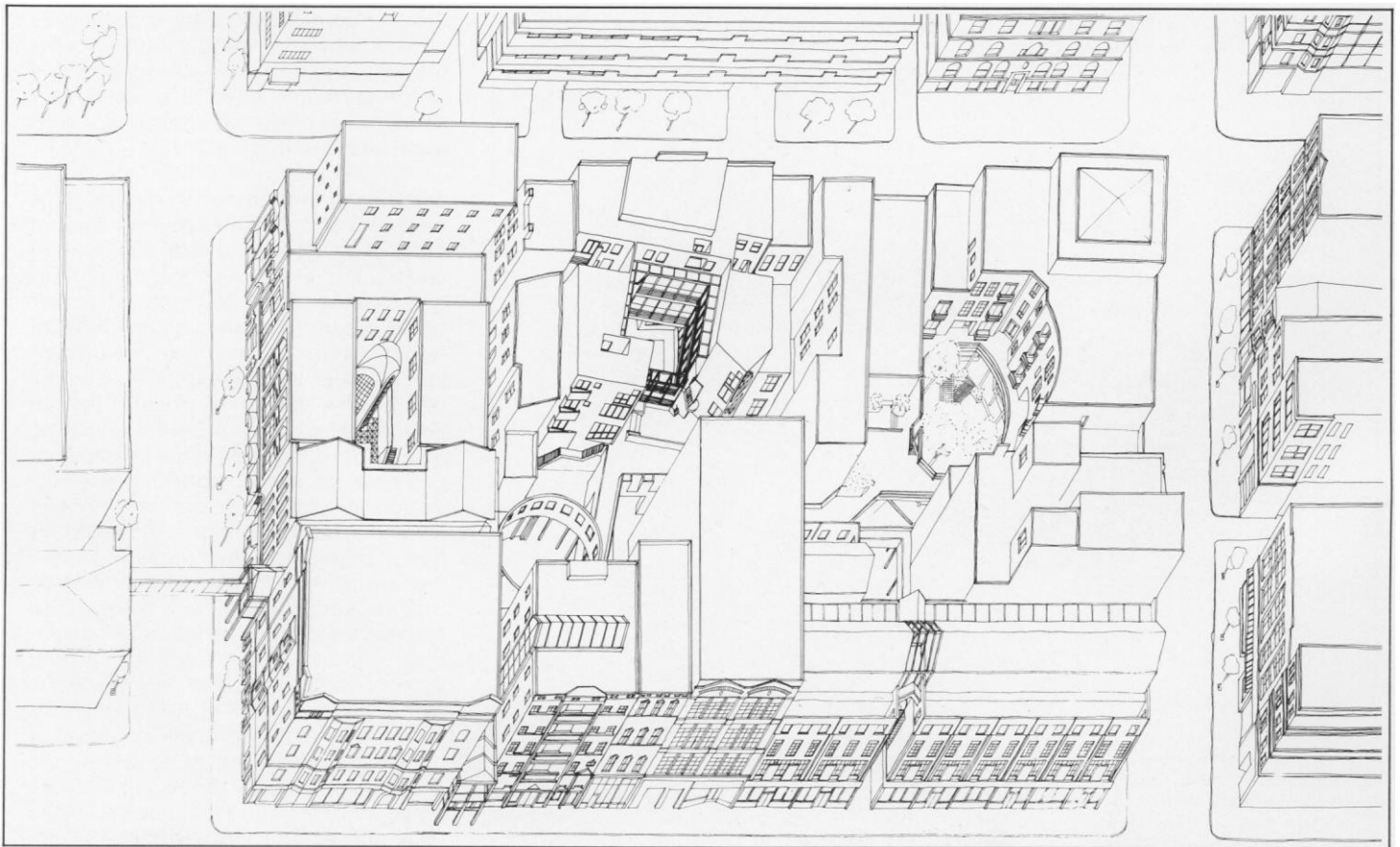
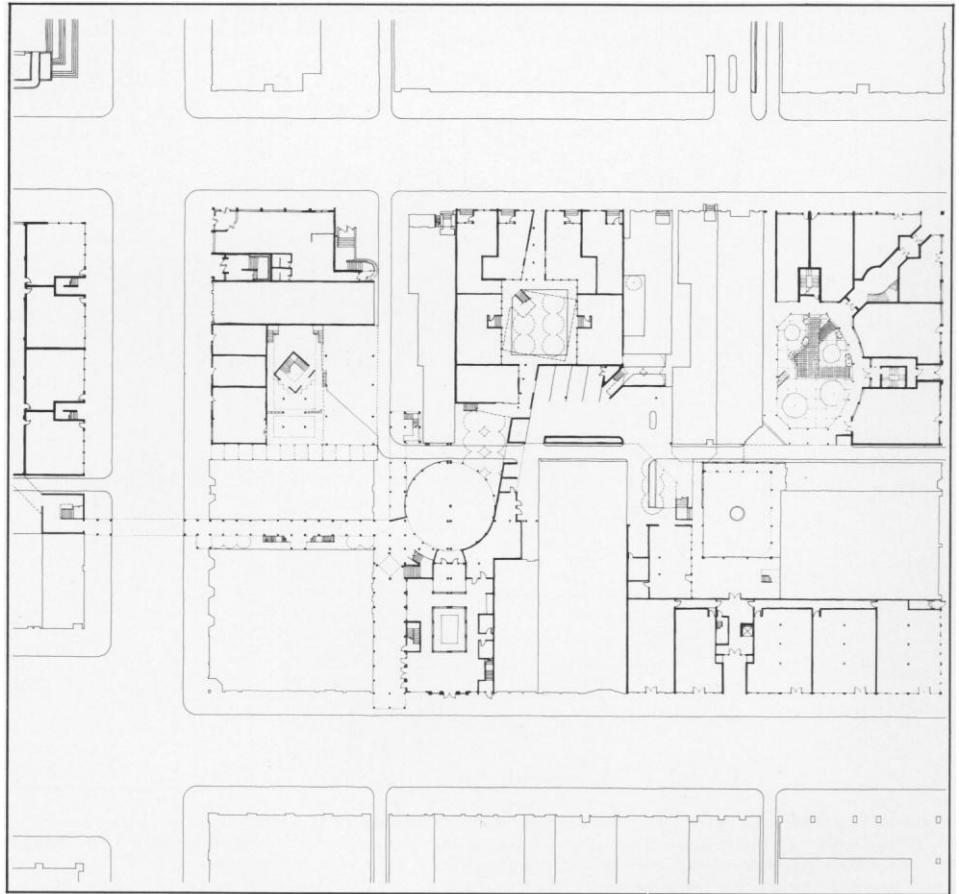
2 GROUP AXONOMETRIC (Fall 1983). One stipulation regarding group dynamics is that each student is responsible for an individually designed component of the overall scheme. The tension between design rules and controls mandated by the group on the one hand and individual expression on the other is readily seen in the axonometric. This specific group collectively generated guidelines about edges, heights, the use and hierarchy of interior-block courtyards and their accessibility from the street, the role of corners, and the proportion of windows and the relationship between window and wall. Nevertheless, individuality is clearly expressed. The overall scheme has the look of many hands—a fact that evokes the appearances and processes characteristic of 19th century city making—and not just of one as is so typical of contemporary urban development. Students: Matt Beahm, Steve Brown, Peter Califiura, Randy Carey, Mark Koeninger, Michael Konzen, Susan Strange.

for design programs that require spatial separation or distinction, as in a complex of buildings, for example. I can imagine this pedagogy happening as well with the design of one building when each student takes responsibility for a different kind of design investigation, each of which is invariably a part of any building design: urban design, landscape design, architectural design, structural design, interior design, furniture design, etc.

This point is that a transformative pedagogy is not exclusive to the design of housing for it to be successful. I like using the subject of housing design because it falls within my bailiwick, it fuels the fire of conflict and deliberation, and it does not provide for easy consensus. Housing, by virtue of being deeply influenced by the workings of society in its production, distribution, and design, constitutes a fountainhead of volatile issues, not the least of which are the strong personal opinions people have of housing, due to their intimate associations and experiences with it.

Turning toward the designs specifically, an important concern beyond that of generating good physical design is to understand the institutional limitations constraining the allocation of major resources in the context under study, of which housing is only one. Thus issues that are debated and explored at length include the ones regarding physical design and also the ones that illustrate housing as a form of culture production. Examples of issues regarding physical design include the response to context in its physical dimensions, the designation of edge, the reinforcement of activities of the street, and the definition of public and private space and the sequence from one to the other. Examples of issues illustrating housing as a form of cultural production include the response to context in its social, economic, and cultural dimensions, ways of integrating differing socio-economic groups, the means of financing, the role of governments and developers in the provision of housing and city-making, and the appropriate response to special user groups such as the elderly, single-parent families, and unrelated singles.

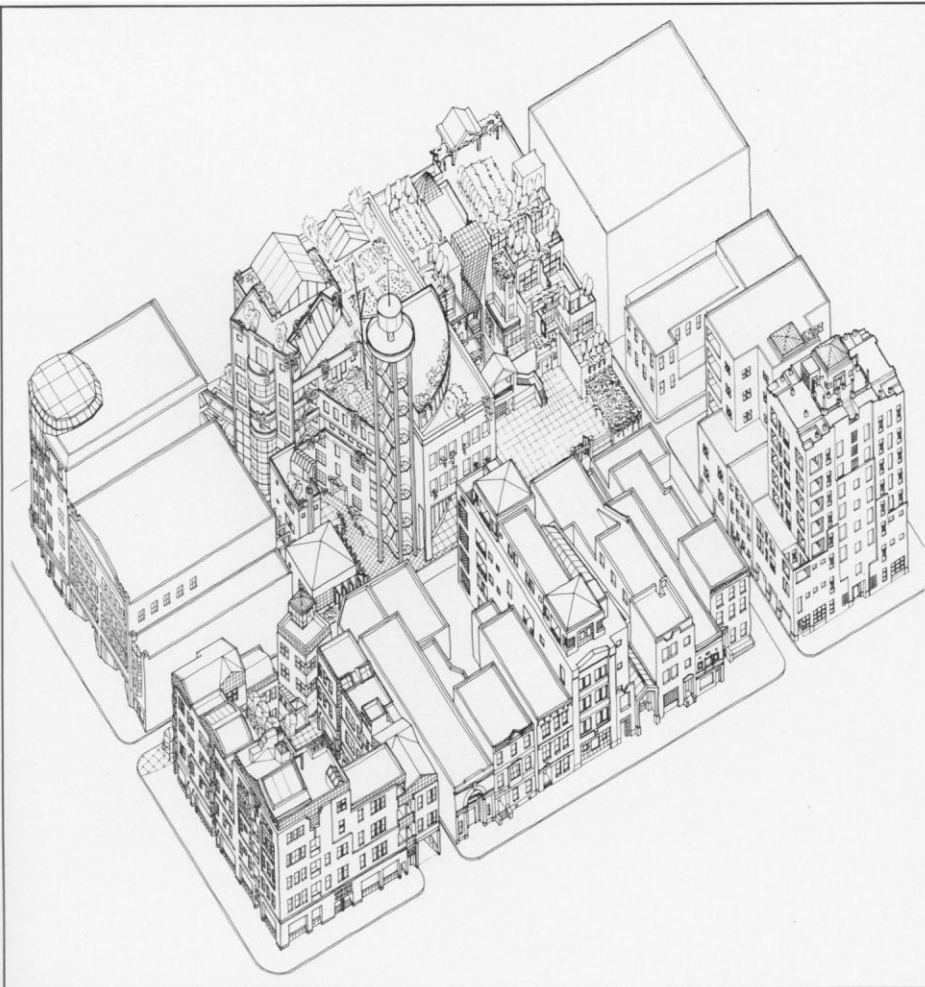
4 GROUP PLAN (Spring 1987). The specific character of this site proved to be a significant factor affecting the group's overall dynamics. This area of the city is comprised of free-standing buildings that were once a part of a continuous fabric. Though the students attempted to establish a collective focus for the block by introducing semi-public spaces in the block interior fed by pathways along alleyways and through key buildings, their collective intentions were overcome by the piecemeal nature of the context itself. Outside of general guidelines concerning building heights, scale, and the reinstatement of street edges, the group scheme stands as a statement of individual pieces. Students: Olasunkanmi Dada, Manoj Dalaya, Matt Ploucha, Terry Scott, Brent Wilcox.



5 GROUP AXONOMETRIC (Spring 1987). Students: Olasunkanmi Dada, Manoj Dalaya, Matt Ploucha, Terry Scott, Brent Wilcox.



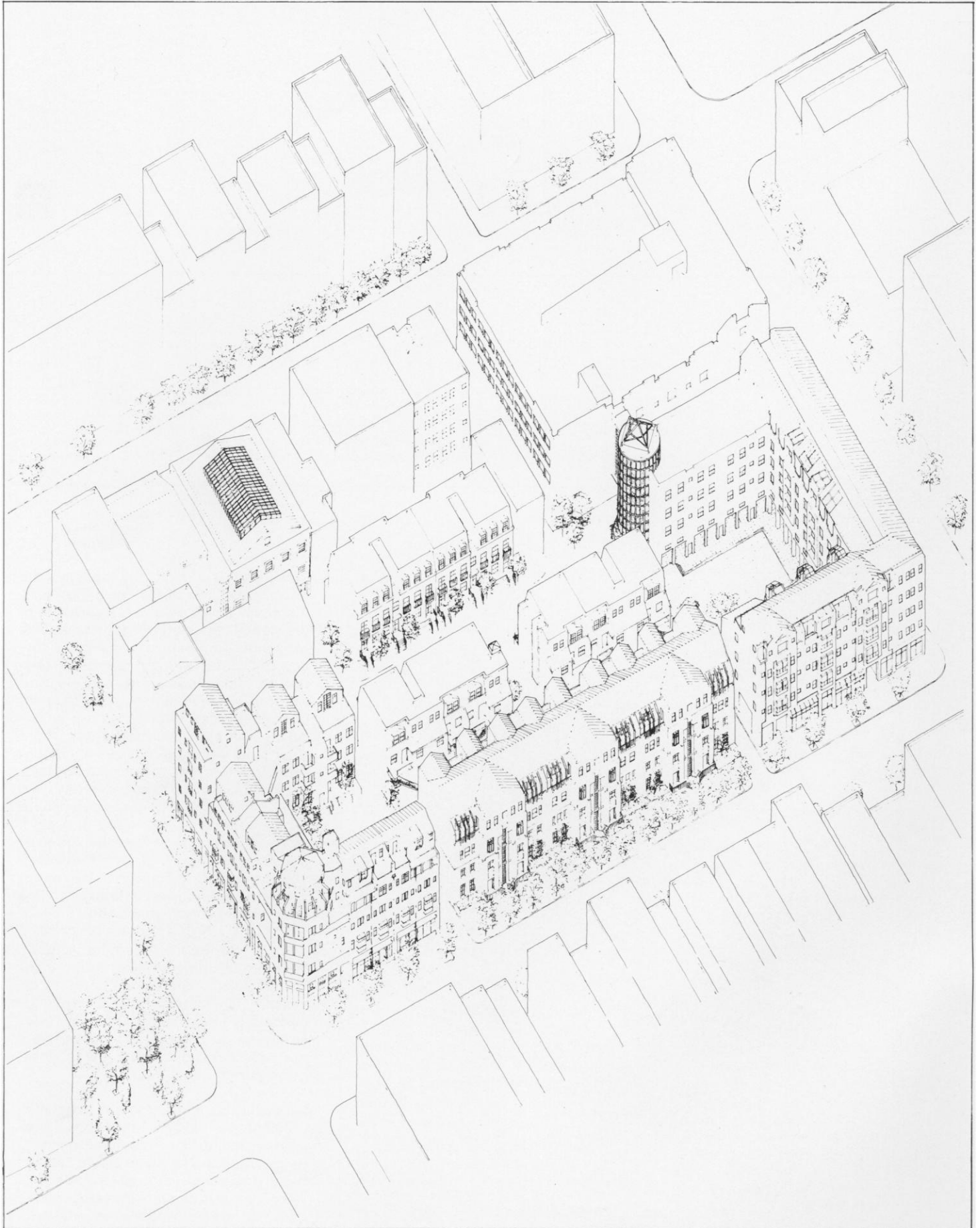
3 SECTION (Fall 1983). This section cuts through the main pedestrian street with the new community theatre on the left and the existing Center for Performing Arts on the right. Students: Matt Beahm, Peter Califiura, Susan Strange.



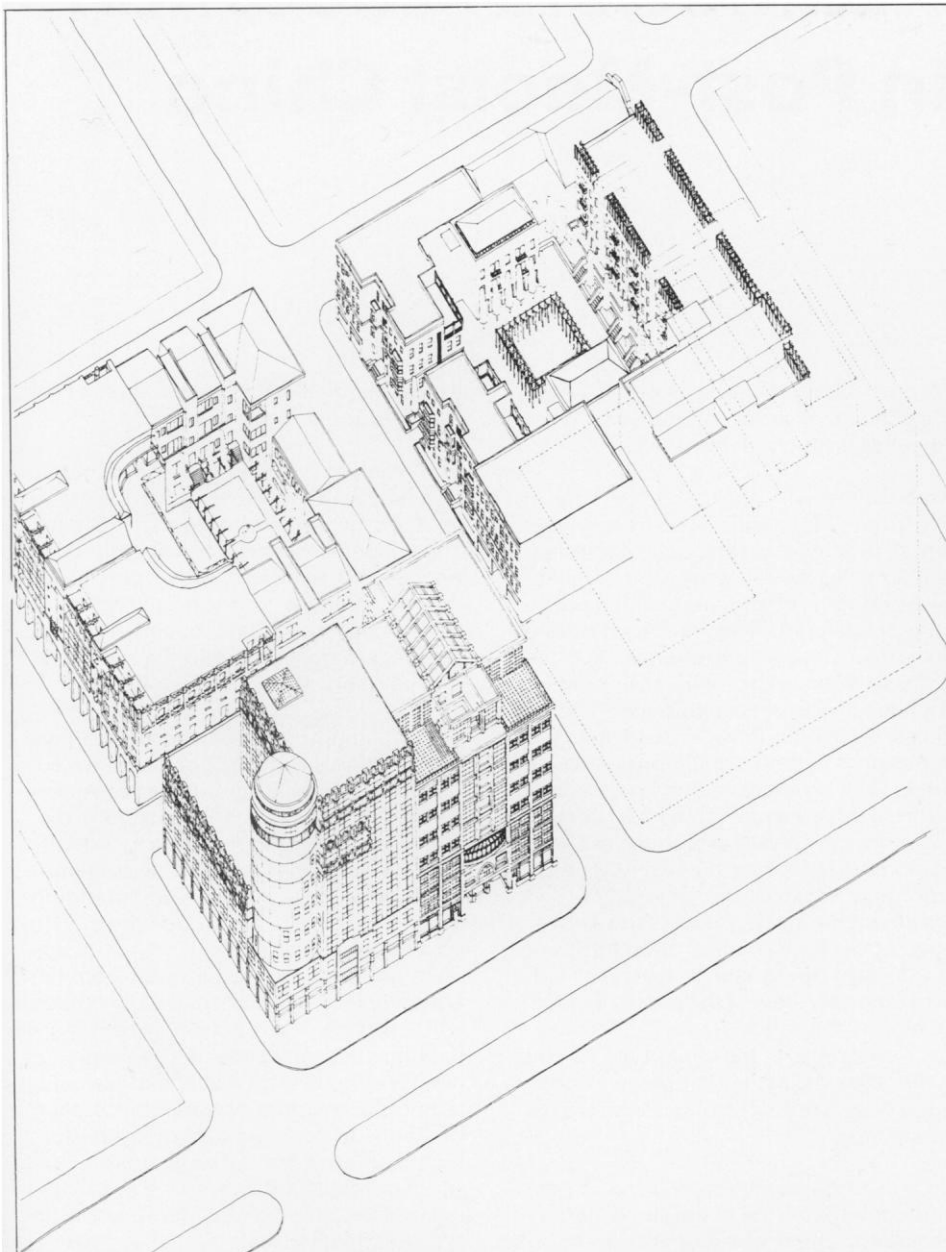
6 GROUP AXONOMETRIC (Fall 1983). Students: Mark Barnhardt, Chris Diehl, Michael Dingeldein, Michael Fernbacher, Jeff Hunter, Steve Scheer, Rick Tripp.

While all this is so, it may seem that the design schemes look rather conventional. In some ways this is true. Much of the student work affirms those qualities seemingly dominant in architectural discourse today: historical reference, contextualism, classicism, streets and squares, public realm, etc. But this is not a problem, and is certainly not incongruous with the studio pedagogy. There is nothing in the pedagogy which suggests that student projects should automatically look exceedingly different from other studios and pedagogies where urban housing is a primary feature. It would be wrong to assume that different pedagogies neatly generate different images, forms, or schemes. Arriving at similar visual images and forms can come about through many pedagogies. All of which is to say that beyond the product itself all pedagogies must take seriously the kind of studio process that is constructed and experienced. And to be specific, the benefits of this particular pedagogy lie in the practices of cooperation, participation, and reciprocity that are collectively attempted, out of which good design can evolve.

In conclusion, in all its social, economic, political, and design dimensions, housing touches all our lives in more than a tangential way. The studio tries to address these dimensions through a pedagogy where students and teachers can engage critically the knowledge forms and social relationships which circumscribe the nature of their work. Certainly it is important for students to generate a



7 GROUP AXONOMETRIC (Spring 1984). Students: David Engelhard, Kevin Gannon, Pat Moore, Jim Singleton, Rob Steinkamp.



8 GROUP AXONOMETRIC (Spring 1985). Students: Charles Boshane, Michael Dingeldein, Pat Hansford, Gregg Olmstead, Alex Szewczuk, Rob Wanderman.

handsome physical design, but more it is to understand how the design scheme itself is a social, economic, and political entity; a value statement about how society operates—or might operate—and their role within it. In a very real way, then, the design of housing becomes an instrument for how students come to understand themselves in their perception of the world. What is more, it is hoped that such an understanding can illuminate the hidden curriculum of knowledge and social relations in those realms beyond the studio and university. In this way, the contribution of this pedagogy lies in its attempt to produce forms

of knowledge and dialog useful for the critique and transformation of education, and to make clear that these same forms represent valid political tools in the formation of a better society.

Notes

- 1 Deans of the Consortium of Eastern Schools of Architecture "The Challenge to Schools of Architecture" *Architecture Education Study, Vol. 1: The Papers* The Andrew Mellon Foundation and the Consortium of Eastern Schools of Architecture (distributed by the MIT Laboratory of Architecture and Planning, Publications Program) 1981, p. 826
- 2 *ibid.*
- 3 For a greater discussion on the dialectical relationship between pedagogy and politics, see Aronowitz, Stanley and Henry A. Giroux *Education Under Siege* Bergin and Garvey Publishers (Massachusetts) 1985.

- 4 For discussion on the hidden curriculum see Giroux, Henry A. *Theory and Resistance in Education* Bergin and Garvey Publishers (Massachusetts) 1983, especially Chap. 2; Giroux, Henry A. and David Purpel, eds. *The Hidden Curriculum and Moral Education* McCutchan Publishing (Berkeley) 1983; Bowles, Samuel and Herbert Gintis *Schooling in Capitalist America* Basic Books (New York) 1976.
- 5 While the use of the hidden curriculum is invaluable in unraveling the ideological assumptions of classroom knowledge, it seems that most of the critique of schooling from the viewpoint of the hidden curriculum has stressed the day-to-day social practices of schools and classrooms in their role in imparting skills, knowledge, and beliefs which are internalized by students. By focusing on the everyday lived experiences of the classroom—the structuring of the learning process, the modes of producing knowledge, the routines of students and teachers, and the rules that govern their interrelations—educational critics have argued that these practices, at the very least, are equally as influential as any formal curriculum. While this is certainly so, what must be given equal emphasis is an investigation into classroom knowledge in terms of its ideological inclinations and its sanctioned "legitimacy" due to its relationship to the distribution of power in society. See Giroux, Henry A. *Ideology, Culture, and the Process of Schooling* Temple University Press (Philadelphia) 1981 pp. 63–89.
- 6 Fitzclarence, Lindsay and Henry A. Giroux "The Paradox of Power in Educational Theory and Practice," *Language Arts*, Vol. 61, No. 5 (September 1984) p. 462
- 7 Giroux, Henry A. *Theory and Resistance in Education*, p. 198
- 8 Giroux, Henry A. *Ideology, Culture, and the Process of Schooling*, p. 72
- 9 See Campbell, Robert, "Harvard GSD: You Ask Questions," and Vilecco, Marguerite, "Princeton: The Exploration of Ideas," in *Architecture* (August 1984)
- 10 Tzonis, Alexander and Liane Lefaivre "The Narcissist Phase in Architecture" *The Harvard Architecture Review*, Vol. 1. (Spring 1980) p. 55
- 11 Huxtable, Ada Louise "The Troubled State of Modern Architecture," *Architectural Record* (January 1981) p. 79
- 12 Tzonis and Lefaivre, *op cit.*, p. 54
- 13 *ibid.*, p. 58
- 14 Tzonis, Alexander *Towards a Non-Oppressive Environment*, George Braziller (New York) 1972, p. 109
- 15 See Gouldner, Alvin W. *The Dialectic of Ideology and Technology* The Seabury Press (New York) 1976, p. 252
- 16 Baum, Gregory *Truth Beyond Relativism: Karl Mannheim's Sociology of Knowledge* Marquette University Press (Milwaukee) 1977, pp. 43–44
- 17 Goulet, Denis "Introduction" Paulo Freire, *Education For Critical Consciousness* The Seabury Press (New York) 1973, p. xiii
- 18 For more on the effects of competition, see Dutton, Thomas A. and William B. Stiles, "The Process is the Product," *Cela 84: Teaching on the Crest of the Third Wave* (proceedings) School of Landscape Architecture (University of Guelph) 1984, pp. 292–299
- 19 Argyris, Chris "Teaching and Learning in Design Settings" *Architecture Education Study Vol. 1: The Papers*, pp. 551–660
- 20 Argyris, Chris and Donald A. Schön *Theory in Practice* Jossey-Bass Publishers (San Francisco) 1974, pp. 6–7
- 21 *ibid.*, p. 560
- 22 *ibid.*, pp. 657–658
- 23 *ibid.*, p. 582
- 24 *ibid.*, p. 575
- 25 *ibid.*, pp. 589–590
- 26 Giroux, Henry A. and Roger Sim "Curriculum Study and Cultural Politics," *Journal of Education*, Vol. 166, No. 3 (Fall 1984) p. 231