# REPRESENTING THE URBAN

## A POST-PROFESSIONAL URBAN DESIGN STUDIO

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In recent years, American architectural schools have begun to devote increasing amounts of attention to urban design. Interest in the field is evidenced by the formation of new graduate programs as well as the retooling of existing courses devoted to the study of urban scale problems. For example, University of Pennsylvania's expanding urban design certificate program; Harvard's recently restructured joint planning and design curriculum; Berkeley's interdisciplinary option allowing students to move between architecture, urban planning, and real estate; Yale's Urban Design Workshop; and Columbia's restructured post-professional degree program, now in its sixth year, are among the options available to those interested in pursuing urban design studies in the United States. This trend is part of broader cultural developments wherein issues related to the production of urban space are debated by contemporary thinkers across a wide range of professions and disciplines, including geography, political theory, cultural criticism, art theory, gender studies, economics and sociology.

It also reflects the existence of substantial design and planning problems associated with the growing density of traditional city centers; the continued growth of "lowdensity" cities in extensive "sprawl" conditions; the physical and economic decay of cities' older periphery areas; and the proliferation of new technologies actively restructuring relations between space and place-based conceptions of the urban. To meet these and other challenges of the late 20th-century city (each of which inflects differently upon the question of what that city is, and what it might become), contemporary urban design "practice" is actually developing as a collection of quite different practices, each with its own measures, methods and goals. Its heterogeneity has led to criticism of urban design as an unsystematic, or undisciplined "discipline." I would argue, however, that this multivalence is a strength, since in being heterogeneous and indeterminate, urban design "practice" is structurally akin to, and representative of, its subject — the city.

In American universities, urban design is typically presented as either systems-based, influenced by urban planning; regulation-based, grounded in public policy; or form-based, derived from architectural studies. This diversity is testimony to the futility of assuming a single idea of "the city," which as subject of reflection resists homologous definition. In the words of Robert Shields, "the city is 'aporetic' — a crisis object which destabilizes

our certainty about 'the real.' Accepting the impossibility of a fixed or fully determined urban situation, "Representing the Urban," the first design studio in the post-professional Masters of Architecture and Urban Design program at Columbia University, lays a methodological framework to address the late 20th century city as a constantly changing collection of physical constructs, abstract circumstances, and unpredictable events. It raises the questions of what urban design is and might do through intensive attention to representation and its role in the construction of knowledge of the urban site.

## Positioning the Studio: Main Arguments

"Representing the Urban" is highly directed in its two basic arguments. Ideologically, the studio proposes a critique of modern master-planning techniques by advocating site-sponsored design strategies and a multiscalar programming process. This involves a corollary reassessment of site descriptions and analysis techniques associated with the production of urban master-plans. Specifically, the studio is critical of representations that rationalize the urban site in an effort to prepare it for design controls imposed from "above." As many more architects confront urban design issues, the shortcomings of single-scaled and reductive approaches to the city have become increasingly evident. Their limitations can be traced to summary analyses and overly-generalized design processes (the two are directly related!) which dismiss and neutralize conflicts inherent to urban agglomeration. Master-plans based on schematic diagrams that attempt to organize information according to neat categorical distinctions exclude instances of overlap, interface, or reciprocity between different elements, systems or scales. Since urban sites are formed by myriad interactions between variable forces (physical, social, political, economic, etc.) and across multiple scales (local, metropolitan, regional and global), designers must strive towards inventive modes of site description that can capture the multivalent and multi-scalar bases of urban structure. To engage this challenge directly, the studio's work is phased to stress fundamental relations between how to describe and project the future of the city. It focuses on site representations and how they influence concepts of what an urban site is and might become; site interpretations, which identify relevant themes for urban transformation; and site programs, which specify possible

urban design strategies.

Urbanistically, the studio argues for the positive valuation of existing situations (another counterpoint to master-planning ideology). Central to this effort is an urban-research process intent upon gleaning materials, both conceptual and physical, directly from the site that can contribute to the formation of urban programming and design strategies. Thus, one of the studio's innovations resides in its use of appreciative inquiry to build site-sponsored urban design actions upon the potential detected in existing urban sites. This endeavor also involves close critical attention to modes of description and techniques of analysis, both of which determine the type and quality of urban site knowledge available to the designer.

Our goal is to encourage student awareness of the interaction between different forms of representation and the resulting kind and quality of urban design they produce. Interms of the broader field of current practices, the studio's thesis is that by working with the urban site "from the ground up," architecture's traditional concerns for site specificity, spatial experience and physical form contribute substantially to urban design.

## The Studio Project: Sites and Sequencing

"Representing the Urban" has four components: an introductory symposium, a series of guest lectures, and three programming seminars, all in support of a 10-week design project. The studio begins with a public symposium to initiate a culture of critical thinking with respect to conventions of representation and design method. In conjunction with this event, which draws speakers from different fields concerned with the city (historians, sociologists, design practitioners, art theorists, planners, etc.), students work on a short design esquisse. This first exercise, to represent Robert Moses's 1963 Panorama of the New York, introduces the city as the studio's site of investigation, and urban representation as its theme. For the remainder of the semester, students are asked to create complex urban design proposals with clear spatial logics and conceptually coherent intentions for one of three locales in the New York area.

#### **Sites**

To expose the complexities of the late 20th-century city, the studio uses the entire New York City region as a laboratory for research. Three particular study areas are chosen in keeping with the degree program's general concern for the revitalization of undervalued and underutilized sites, and its interest in examining the re-use of outdated infrastructures. By learning how these areas differ, and discerning issues that are common to all, students build a broad base of understanding from which to approach contemporary urban design problems. The three locales, each with a particular urban density and condition, bracket an investigation of conceptual and physical relations between the city's core, edge and outer reaches. They also foreground how economic practices such as hyper-development and disinvestment and political practices such as community design reviews effect the shape of a contemporary city region. In 1996,

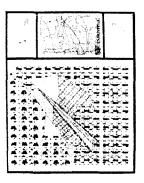




Fig. 1. Long Island "Main Street," Eric Brewer, 1995.

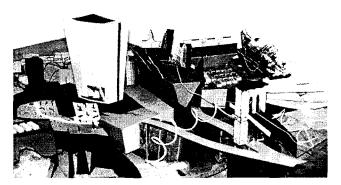


Fig. 2: Brooklyn Site Construction: Anat Banin, Emilio Chacon, Petra Kempf, Albert Marichal, 1996.

the studio worked on Manhattan's West Side Waterfront from 42nd Street to Battery Park (currently under redevelopment by the City and State of New York); Downtown Brooklyn (the subject of a recent Borough and Regional Plan Association urban design study); and an inoperative 600 acre Industrial Facility located adjacent to the original Levittown site in Bethpage, Long Island (on the market for sale and redevelopment).

Three pedagogical intentions influence the choice of study areas: First, each provides a specific set of urban issues to guide the articulation of design proposals, presenting abstract circumstances and physical constraints particular to its locale within the larger city region. Second, each invokes a generalizable urban condition, or "thematic site" (urban waterfront, low-density city, satellite center, etc.) necessary to provoke discussion of urban design issues that transcend local circumstances, and to situate the studio endeavors in a broader theoretical context. Third, the study areas expose students to the realities of contemporary urban design projects, since each one is either being considered for (or is already in the midst of) large-scale urban redesign.

### Sequencing

The main studio project is roughly divided into three phases of equal length: site definition and site programming, the development of an urban design strategy, and the testing and elaboration of an urban design proposal. The first phase, Site Construction/Site Programming, combines teamwork to define the limits of the site with individual research to articulate urban programming issues. The second two phases, Remappings/ Urban Transformation (when students develop an urban design strategy in physical and spatial terms) and Probes/Revisitations (which entails in-depth sectional and spatial design development of limited parts of the overall scheme) are both done individually. Throughout the whole process, design actions are considered at the multiple scales constituting the urban site (local, metropolitan, regional and global).

Central to the studio's position to argue against the master-plan and for a positively valued urban site is the work of Site Construction — a process of transforming the given study area into a "site" through "a designed understanding" of the existing condition. This is done (in small teams of 4-5 students) during the phase of work typically associated with preliminary site documentation and analysis. However, Site Construction differs from conventional analysis in specific ways. Taken together, these have profound implications for urban design because they directly inform the representational practices that shape programming decisions, which in turn, structure design actions. First, Site Construction is an extractive method. Instead of imposing generic rules, it derives precise measures from a site's inherent, if not immediately apparent, orders. Second, Site Construction strives toward multiple representations rather than a single authoritative view. By admitting conflicting and possibly incommensurate site interpretations, site constructions initiate design strategies that include densely layered temporal and spatial figures at many interrelated scales. Third, Site Construction confronts the urban site not as an empty vessel but a source of meaning. For urban design practice, this suggests existing conditions be respected and reutilized rather than treated as dispensable obstacles standing in the way of some predetermined plan.

The development of the Site Construction process as an alternative to conventional analysis techniques has two pedagogical aims: to demonstrate the influence of analytic methods on how design problems are framed, and to illustrate the multivalent character of urban sites. In the studio, two teams produce a "Constructed Site" for each study area. Since any urban situation is open to many interpretations and valuations, disagreements between members within a group (and discrepancies between the two groups) are explicitly addressed as an important part of the urban design process. The goal is to finds and expose divergent site readings in support of urban complexity. Rather than dismiss opposing viewpoints as irreconcilable, the challenge is to find modes of representation that can evoke the incommensurate aspects of the sites themselves. Drawing comparisons between how various teams address the three sites prompts open, studio-wide discussions on how specific approaches to site analysis and description differently influence subsequent programming decisions and design actions. The resulting Constructed Sites presented by each team in models and drawings mark the studios' first urban design action: drafting site boundaries. The study areas are redefined as specifically bounded territories for urban intervention. In pedagogical terms, making the distinction between Study Area (as "given") and Site (as constructed through critical interpretation) reinforces the urban designer's responsibility to actively address how sites are constituted, rather than passively accept them as given conditions.

Three seminars on urban site programming run concurrently with the group Site Construction work. In these sessions, programming is presented as a process of positing values with respect to possible future uses of urban space — inclusive of, but not limited to, the designation of use-function. Emphasis is placed on the urban as a space construed at multiple scales, and on developing urban programs that envisage a site's future potential differently at each of its various scales of impact (local, metropolitan, regional, and global). This notion of multiple programs operating simultaneously on one site is proposed to remedy the reductive aspects of the master-plan. Using the seminars to augment their own site research, individual students negotiate between different interests acting on their site articulated through the Site Construction. By engaging in this programming process at the same time as the collaborative Site Construction, students can use the group dynamic (with its inevitable conflicts) to test and refine urban agendas against those of their peers. The resulting written statement outlining individual site-sponsored design intentions (programming narratives) and schematic drawings/ models depicting these in spatial terms are then used to formulate a particular urban design strategy.

In the Remapping and Urban Transformation phase, aspects of the group Site Construction are reappropriated to identify specific site figures (infrastructural, commercial, residential, civic, etc.) that can spark a new urban situation in keeping with individual programming goals. Site and program are used here as materials to formulate physical and spatial urban-design strategies that account for local, metropolitan, regional and resonances on site. Developed in model and composite drawing, this work elaborates the interplay of spatial characteristics and programmatic layering within the urban proposals. To invest the design process with conceptual rigor, students critically reexamine their proposals using parameters derived from urban design paradigms (historic and contemporary American urban conditions). The paradigms function as catalytic design tools (not as formal or stylistic models) containing strategies, logics, and generative orders provocative specifically in relation to a student's individual programming intentions. Using conceptual design techniques to transform both site and paradigm, students arrive at a more refined and critical understanding of their project's urban potential. What follows is an in-depth design inquiry developed through collage, composite drawing and model.

These larger-scale *Probes* are used to measure the weight and range of imagined physical urban conditions,

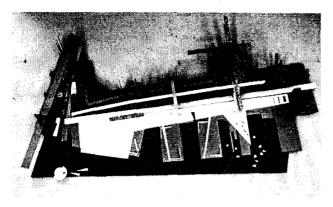


Fig. 3. Brooklyn Waterfront: Petra Kempf, 1996.

in a way that suggests the intentions for the whole site while only addressing a limited area. They take the form of close-up representations of two moments within the proposal, each envisioned at the level of direct human experience, with an emphasis on clarifying connections and urban relationships. By introducing this design development as partial, proposals can be articulated with precision without having to assume comprehensive control over the full extent of the urban site. In the last phase, students redescribe their initial site thinking to show how it has developed and been enhanced by the subsequent, in-depth studies. At the final review, the semester's work is presented as a concerted, albeit incomplete, effort of possible city making, with particular emphasis on the interactive relationship between modes of urban design representation, production and discussion.

#### **Educational Goals**

Pedagogically, this design studio works within the larger agenda of Columbia's Urban Design Master's Program to negotiate a territory between architectural design and issues more typically associated with planning, challenging the academy's conventional separation of these approaches. While studio work is developed through architecturally-based inquiry (site description, analysis, programming and design) it is supported by other types of research. The goal is to foster concrete urban design interventions that are grounded in the more abstract forces influencing contemporary spatial relations. As a whole, Columbia's program is dedicated to engaging both the daily reality of the urban condition and the theoretical abstraction of current academic debate. In addition, it is strongly committed to creating links between the academy and government agencies and public interest groups from around the New York City region.

Within this context, the educational goals and teaching strategies of "Representing the Urban" are shaped by two equally important factors. One is that the program's focus, urban design, is an as-yet codified area of design education. Therefore, we are particularly interested in examining how urban design methods are distinguished from an architectural-scale design process. The importance placed on representation as formative to the design thought process reflects this concern to go beyond a simple "scaling-up" of architectural conventions to discover, through the studio research, modes of site

description and critical analysis that engage directly with the complexities and often conflicting aspects of urban sites. Positioned consciously as a partial endeavor both biased and incomplete, the studio does not posit its exploratory method as either comprehensive or universally applicable, since these claims run counter to a belief in city-making as an open-ended project. Crucial to its organization and pedagogical aims is the fact that like the city, its results stand as provisional frameworks. Student projects are put forth as conceptually driven design-based research that accepts the impossibility of a "finished" city, rather than as object-oriented and finite solutions to narrowly defined design problems. The other factor influencing the studio's curriculum is its role in initiating design studies in a post-professional degree program.

Columbia offers the only American urban design program with a sequentially-conceived design curriculum, strictly devoted to urban design students.3 Its three studios are orchestrated to provide a concentrated educational experience, where urban issues articulated during the first semester (such as the critique of masterplanning and the focus on under-utilized sites) continue to be explored in the subsequent two design studios. Because the program's pedagogical objectives are also considered in terms of the three semester sequence, "Representing the Urban" is viewed as foundational. Its explicit attention to the fundamentals of an urban design thought process, and its continual stress on critical reflection grow out of its placement within the program as a whole. By the end of the first semester, students realize their responsibility (prompted by the educational setting) to critically reassess their existing design skills, methodological assumptions, and preconceptions about design in the contemporary urban condition.

#### Contributions to Design Education

"Representing the Urban" exposes fundamental but often overlooked relationships operating in the urban design process. Two things in particular merit attention: Its work reveals the impact of site study on design thinking, demonstrating how sites are constituted through analysis techniques rather than being passively received; and resulting projects address the scalar complexity of urban interventions — how, at each scale (local, metropolitan and regional), one project can fulfill different urban functions. Other important curricular innovations include encouraging positive valuation of existing urban situations through the use of new terminology and emphasis on inventive modes of representation; instigating critical reflection at numerous points in the design process through sequencing of project); attending to the collaborative nature of large scale design projects (utilizing conflicts between studio team-members to strengthen individual positions); and profiting from differences between the academy and the profession by bringing external players with diverse agendas into the studio environment.

The studio's value in the context of changing practice consists in its direct engagement with the question of the role of the urban designer today. Given the nature of urban design - the broad reach of its concerns, its multiple

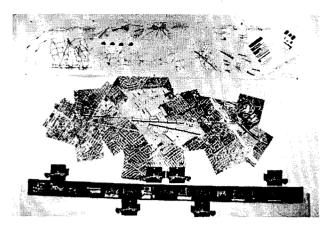


Fig. 4. Long Island "Main Street", Eric Brewer, 1995.

scales of operation and the variety of actors involved in the making and inhabitation of urban situations - the "realism" of an urban design project cannot be defined simply in terms of a finite solution to a given problem. Rather, the degree of realism is a function of a structured relation between physical, programmatic and political aspects of urban reality. Depending on who looks at an urban site's development, the interactions of site elements and forces shift as a direct result of ever-present ideological biases. Urban designers must therefore be clear about their intentions. In a limited pedagogical frame, this means avoiding a passive "problem-solving" role; in a broader sense, it means admitting that design development always involves adjustments to meet changing circumstances — that physical solutions must be capable of accommodating those inevitable future modifications that characterize a vital city. In this studio, we ask our students to position themselves as urban designers who do more than operate as service professionals to developers. We urge them to see the larger scale implications of their work and to critique imagistic and stylistic approaches to urban design, which limit the study of contemporary urban development to a superficial aspect of townscape.

At the final review students present the full semester's endeavor. Diverse programming and design strategies emerge from their interpretations of existing conditions, and from their efforts to represent these in specific terms. Design proposals build upon figural traces surveyed throughout the term and differences between individual student's work are explored in positive terms as potential enhancements to existing urban design practices. Critics knowledgeable about the sites assess proposals in terms of how well new urban conditions and orders account for what already exists. A critical aspect of the studio is its engagement at many levels with public and private urban professionals. Early on, students are introduced to

the range of players active in the city's development with an emphasis on agents currently working on urban proposals for the studio's selected study areas. In a mutual exchange, the studio learns firsthand about the conflicting interests acting on a given urban site, while site representatives benefit from its investigations and interpretations of the study areas. Through this process, students realize the importance of positioning themselves with respect to existing site problems and programs in their design work. Student work is evaluated in terms of its critical understanding of existing urban conditions and orders.

To conclude, "Representing The Urban" is structured to raise critical awareness of pedagogy in two ways: first, by proposing an expanded architecturally-based teaching model for urban design which merges the study of contemporary urban reality with more theoretical approaches; and second, by exploiting the educational potential of the second degree program, to encourage the post-professional student to develop skills necessary to critically reflect upon their own preexisting design habits. The studio's output serves as an example to students, teachers, and professionals because of its unique combination of critical thinking and commitment to transform real conditions in the city. The quality of the materials - richly programmed and spatially conceived approaches to urban design — resides in their distinction from both conventional master plans and aestheticized objects. This studio fosters a collective spirit about the city.

#### **NOTES**

- <sup>1</sup> Robert Shields, "A Guide to Urban Representation and What to Do About It: Alternative Traditions to Urban Theory," in ed. Anthony King, *Re-Presenting the City: Ethnicity, Capital and Culture in the 21st Century Metropolis* (New York: New York University Press, 1996), p. 227.
- <sup>2</sup> The studio described in this presentation was initiated in 1991, as part of the general restructuring of Columbia's Post-professional Master of Architecture and Urban Design degree program under its Director, Richard Plunz. Its curriculum has been refined over the past six years. For the past three years, I have co-taught with Sandro Marpillero, who has contributed to an ongoing effort to clarify the course structure in relation to its pedagogical goals.
- <sup>3</sup> Harvard's advanced Urban Design degree program, for example, limits is program-specific studios offerings to one introductory design course, "Elements." After completing this studio, students are then expected to find urban-oriented studio offerings from the general pool of courses available to all of the advanced design degree students at the school. Similarly, the requirements for the Urban Design Certificate program at Penn require students to take one "Urban Design" studio, and find among the general architectural studio offerings design problems which involve attention to urban issues.