A Case for the Sublime Uselessness of Graphic Design

David Cabianca

Published online: 04 Apr 2016.

Submit your article to this journal ⬈

Article views: 350

View related articles ⬈

View Crossmark data ⬈

DESIGN AND ACADEME

A Case for the Sublime Uselessness of Graphic Design

David Cabianca

David Cabianca completed an undergraduate degree in environmental studies at the University of Manitoba (1990) and a Master of Architecture degree from Princeton University (1995). This was followed by an MFA 2D Design from Cranbrook Academy of Art (2001); an MA in Typeface Design from the University of Reading (2005); and, most recently, an MA in Design Writing Criticism, London College of Communication (2012). Initially designed while attending Reading, his typeface Cardea was released by Emigre Fonts in 2014. In 2012, he was one of the organizers of the AIGA Design Educators Conference, "Blunt: Explicit and Graphic Design Criticism Now." His writing has appeared in *Emigre, Idea, Visible Language and Design Observer*. He has taught at the University of Manitoba, University of Michigan, OCAD University, CalArts and Cranbrook

ABSTRACT   Facing increased calls for "practical skills," the arts and humanities are under immense pressure to demonstrate their value to a public that demands measurable metrics. As a response, graphic design has adopted the language of "research" as a way to engage with tangible benefits. Research, in turn, has emphasized applied learning and the field of engineering has been suggested by some as a possible model for graphic design education. This paper instead proposes architecture as a more aligned disciplinary model for education, practice, and research. During the late 1960s and early 1970s, architecture faced a crisis very similar to the one affecting graphic design today. But rather than relinquish disciplinary control to the positivist scientism of behavioral science, operational research, and design methods as they asserted control over the codes of architectural practice, a number of architects and educators

Academy of Art and has held a fulltime position teaching graphic design at York University in Toronto, Canada, since 2005.
cabianca@yorku.ca

sought architecture's autonomy, an inward reflection on the methods, techniques, and questions that were restricted to how architecture sees itself. Architecture's inward turn, or "criticism from within," was ultimately responsible for its return to cultural significance.

Design's ability to solve problems is both its strength – and for the purposes outlined below – its curse. Graphic design, as we understand the practice today, was born from a convergence of industrial processes and the nascent promises of mass media communications. It has always been considered an "applied art" – one whose raison d'être was linked to a functional validation. This applied or functional justification for graphic design continues to exert a significant influence upon the discipline, perhaps more so today than ever before. From private practice (where clients are only concerned with outcomes) to education (where programs in higher learning are increasingly charged with responding to labor market pressures while faculty are similarly tasked with attracting research funding), graphic design is facing a crisis of accountability guided by budgetary and market imperatives. And so, as graphic design edges increasingly toward choices that enhance its accountability in the mind of the public, one might look to the field of engineering as a possible model for the future of graphic design: engineering is a form of applied knowledge, it offers a model for research, and it has the ability to attract funding. However, I believe that architecture offers a better option for consideration.

As a (relatively) contemporary practice, graphic design's arrival on the scene of material production coincides with the same historical avant-garde that gave us Modernism in its myriad forms – from architecture, through industrial and graphic design. Indeed, two years after the 1925 introduction of the Bauhaus "Printing Workshop," in a move in line with an overall restructuring of the school, Professor Hannes Meyer changed the workshop's name to "Advertising Workshop." Meyer's name change was more than an exercise in semantics. In what may be considered an early example of a corporate mindset annexing higher learning, Meyer's actions signified the Bauhaus's break from an emphasis on the production of objects to one on the application of practical skills (Droste 2002, 134, 180).[1]

Such was the promise of Modernism. Design has the ability to act in a transformative manner (think of Le Corbusier's 1922 exhortation: "Architecture or Revolution!") and graphic design, like architecture, was no less shaped by a desire for social change (think of Jan Tschichold's 1928 treatise, *The New Typography*).[2] But the question remains whether architecture and/or graphic design fully satisfies the needs of society when concrete application or instrumental-

Figure 1
James B. Hunt, Jr. Library, exterior, at North Carolina State University, Snøhetta, design architect (2008–13). Photo: Jeff Goldberg/Esto.

ity is prioritized. In 1990, while speaking at an event organized to examine the architectural production of John Hejduk (1929–2000),[3] theorist Jeffrey Kipnis raised the ire of many by openly questioning the assumption that architecture discourse should be addressing society's more utilitarian needs. A number of critics in attendance suggested that Hejduk's retreat to "narrative" and "myth" was politically distasteful because it suggested a retreat from the real, a rejection of architecture's obligations to the social good. Rather than fault Hejduk's refusal to take up architecture in a more prosaic form:

> Kipnis reminded the colloquium that the political problem may be caused rather by the fact that we insist on positing "solutions" at all, by the modernist-functionalist arrogance that allows us to think that solutions are, in fact, possible when dealing with the problems of the real city. (Kipnis 1996, 12)

Hejduk's "wrestling with angels" is not a rejection of responsibility but a dissatisfaction with the state of practice, "a critique of the discipline's mediocrity and compromises," exposing architecture's complicity in ideologically framed choices which shape contemporary society (Kaminer 2011, 88). Hejduk's architectural output engaged a form of research whose purpose did not suit the conventional parameters of practice.

The term "research" has become topical in graphic design education as programs continue to experience budget pressures and

Figure 2
James B. Hunt, Jr. Library, the "bookBot" book storage and retrieval system, at North Carolina State University, Snøhetta, design architect (2008–13). Photo: Mark Herboth.

institutions feel the need to justify their existence to a public desiring measurable results, i.e., directly marketable skills, the number and value of grants awarded to faculty, postmatriculation employment metrics, etc. Additional pressure is felt by many newly minted design faculty who are faced with tenure and promotion requirements that entail a research component. But in this atmosphere of empirical scientism, the Arts and Humanities are increasingly deemed irrelevant because the correlation between learning and application is not directly measurable (Hutner and Mohamed 2013; Ramsay 2013; Wolff 2010). I teach at the third largest university in Canada – more than 55,000 students study here – and it is generally considered a research-oriented institution. At my own institution and likely abroad, "research" has replaced "scholarship" as the preferred measure of intellectual achievement precisely because it harbors a connotative overtone of external sponsorship and quantifiable value. Within this research imperative, one might feel the need to consider a direction that aligns with the goals of engineering – a discipline that some consider one of our closest application-oriented academic models. Instead, I would suggest the discipline of architecture as a possible fount from which to evaluate the research potentials of graphic design. My position here is not intended to be exhaustive or definitive. Rather, it is intended to provoke discussion and support the position of graphic design (practice and artifacts) as a form of research investigation.[4]

One may compare graphic design practice to engineering, but doing so only addresses a specific facet of graphic design's value. Although graphic design does have the ability to solve problems, limiting its value to its immediate, instrumental function is an artificially imposed myopia. Few engineering programs are interested in cultural practices and while they may require their students to enroll in humanities courses by necessity, these classes hardly form the core of each program's mandate. Advocates of an engineering model for graphic design emphasize its "application orientation" and I agree that this is a positive benefit.[5] From where I stand, this functionalist and instrumentalist outlook is being embraced by an increasing number of institutions as they emphasize graphic design as a user-centered practice and service schema. Moreover, this is taking place against a backdrop of fundable research opportunities that partake in the view that design is a quantifiable commodity. This aspect of graphic design has always been there. But I must protest with some vigor: the sense that knowledge and understanding in an absence of tangible and quantifiable outcomes is to be dismissed.[6]

From the humanist's perspective, graphic design practice is a form of knowledge generation, i.e. research. This assertion may be presumptuous, but I doubt that persons such as Lorraine Wild, Ed Fella, Michael Rock, Paula Scher, or Karel Martens would disagree. Leaders in the graphic design profession – to which I would extend, leaders in our discipline – see the value of interpreting a communication message as both a functional and a cultural quandary. When it comes to problem-solving, there is a reason why we do not reuse historic solutions to solve contemporary problems in visual communication design: at face value the message may be similar, but the society and culture tasked with receiving the message have changed. It is part of the graphic designer's challenge to interpret current societal norms to determine the most effective means to communicate visually, and that requires an understanding of culture.[7] And unlike engineering, graphic design is driven by a balance between both technological development *and* cultural concern. While I am not interested in what researchers in anthropology, informatics, or medicine – or engineers for that matter – might view of this discussion, architects might find echoes of a similar debate from their own recent history.

Indeed, one such debate proved a crucible in architecture discourse more than forty years ago. For example, in a special 1990 issue of *Journal of Architectural Education* (*JAE*) devoted to architectural research, architect and educator John Templer described the changes transpiring on many university campuses in the 1970s. This change in architecture's standing was largely driven by the view that it had achieved disciplinary status and could also serve as a source of research funding:

Partly because they saw research as an integral part of their mission and partly under the pressure of financial stringencies, many universities began to build sponsored research emphases. A measure of faculty success in many places was (and is) determined in terms of research dollars generated ... To some architecture faculty, particularly those with a background in the sciences, this new emphasis on research was opportune, and they quickly found ways to tap funding agencies. Their academic strengths in building science, psychology, and human factors suddenly acquired an unusual level of respect from the university and school administrations; with this esteem came influence in the affairs of the schools. (Templer 1990, 3)

But as architecture relinquished its own means of research inquiry and adopted the methods of other disciplines – and did so *in service to* those disciplines – it also gave up its own disciplinary specificity, a view Templer describes whereby architecture as a humanist practice was threatened by "an insidious, mechanistic fifth column" (3). The end result was certainly disastrous. Architectural historian K. Michael Hays observed in the late 1990s that the threat posed by disciplinary annexation was:

nothing less than the unhinging of architecture from the very codes that constitute it as a functional part of culture – a rationalizing, quantifying, leveling operation that would, on the one hand, reduce architecture to a bloodless pseudo-science and, on the other, serve it up raw, as it were, as a mere condiment for the full optimizing appetite of consumer capital. (Hays 1998a, xii)

Today, graphic design is facing the same dilemma. While graphic design education will necessarily continue to evolve, graphic design as a disciplinary practice has its own interests, biases, and points of continuity that define it as a valid and distinct field. The pressure to instrumentalize graphic design solely on the basis of value as determined by quantifiable measures only serves to sever the link between our discipline and its social and cultural relevance.

Writing ten years earlier than Templer at a time when Postmodernism was gaining significant traction in architectural discourse, Ellen K. Morris and Edward Levin presented "On the Discipline of Architecture" in *JAE*. As editors of the journal, they defined architecture as a discipline; doing so allowed practitioners and academics to question the parameters that shaped its existence. "The interpretation of architecture as a discipline assumes certain paradigmatic premises and certain rules of procedure. Although these assumptions and rules are rooted in neither caprice nor fashion, neither are they a product of natural law" (Morris and Levin 1982, 1). Exploring

the possibility that there is a form of knowledge specific to architectural thought, the editors use the notion of building typology or the "architectural type" as an example of design defining its own disciplinary limits. To be sure, "type" and "typology" in architecture and urban design refer to a taxonomic system of physical characteristics, usually at the scale of a building – the single-family residence, the row house, the wall-shaped apartment block, or the "U"-shaped apartment block, for example. Different forms for the same program will have different effects on street life: the wall-shaped apartment block may support street-level retail activity but the "U"-shaped apartment block may not. Ultimately, architectural typology does have instrumental value, but its application cannot be decided by abstractly determined, codified means: knowledge, experience, and context combine in varying degrees to inform an architect's choices. *JAE*'s editors uphold typology's qualitative emphasis when they point out: "as the architectural representation of cultural continuity, typology is fundamentally artifice; it convinces out of rigor, pedigree, and rhetoric, rather than 'truth'" (Morris and Levin 1982, 1).

Of course, the "truth" or knowledge to which the editors of *JAE* refer is a concept liable to constant scrutiny. For example, I continue to be fascinated by how Rem Koolhaas, Zaha Hadid, or Steven Holl respond to the questions of contemporary architectural practice as their discipline continues to evolve. And I doubt that the institutions where these individuals teach – Harvard, Yale, and Columbia universities, respectively – would see their contributions to their field as illegitimate or unproven forms of knowledge creation given the impact their work has had on their profession, or the fact that their "industry sponsored research funding" is, in fact, a client-based fee structure and external to the accounting mechanisms of an academic institution. A more concrete example is the terrific new James Hunt Jr. Library on the North Carolina State University campus. This building is a product of Norwegian architecture firm Snøhetta's reimagining of the conditions of a library (Figures 1 and 2). By making use of a robotic book storage and retrieval system that houses most of the building's collections, the building is not simply a response to satisfying a client brief, but is a contemporary probing of a very old question achieved though design practice: "what is a library?" This is both an architectural *and* a philosophical question. And it is the humanities that foster the critical thinking skills used to probe the values of a practice and ask such a question.

My position is neither regressive nor conservative (or perhaps conservative in the literal sense, that is, *to retain*). But I am informed by the devastation wrought upon architecture starting in the 1960s as it forfeited its own hard-earned disciplinary knowledge it had attained in previous decades. Texts such as Christopher Alexander's *Notes on the Synthesis of Form* (1964) and John Christopher Jones' *Design Methods: Seeds of Human Futures* (1970) sought to rationalize the design process,[8,9] but in so doing they reduced respective

practices to serving the positivist scientism of behavioral science, operational research, and design methods as they asserted control over the disciplinary codes of architectural practice.[10,11] Perhaps the most notorious example is the Pruitt-Igoe housing development whose blind faith in economic justifications and positivist rationalizations of human behavior contributed to its ultimate demise.[12]

Beginning in the 1970s, it took the efforts of practitioners, scholars, and critics such as Peter Eisenman, Bernard Tschumi, Kenneth Frampton, Diana Agrest, and many others to re-theorize and re-territorialize architecture's spatial and formal means to signification, i.e., its autonomy.[13] "Autonomy" is a contested term. Used here, the term describes an apartness of art – or in this case, architecture or graphic design – from the praxis of life. Simultaneously "autonomy" points to a suspension of this rift because the "essence" of art – which guides any notion of "autonomy" – is dependent upon its bond with historical determination.[14] Theorist and critic Tahl Kaminer has written an extensive study of this period. Kaminer notes that in turning away from rationalizing strictures, architecture turned to qualitative means "to regenerate architecture, to discover new modes of expression and restructure the discipline's methodologies" (Kaminer 2011, 96).[15] These remedies included turns to language (as in Libeskind's reading and writing machines; Tschumi's use of *Finnegan's Wake* in his Joyce's Garden project; Coop Himmelb(l)au's repurposing of Tzara's "automatic writing"; Hejduk's narrative mythologies; and Eisenman's reliance on Chomsky's linguistics, and later Derrida's Deconstruction), to art theory (as in Eisenman's foray into methods of conceptual art), and to film theory (as in Tschumi's pursuit of play, decay, rot) (Kaminer 2011, 102–104). Kaminer makes note that "The remedies sought by the neo-avant-garde required a form of introspection, a perspective that emphasized those aspects of which the architect has the most control, banishing from the equation everything that lies outside architecture's immediate sphere of influence" (96). This reinvestment in architecture as a cultural practice enabled its return to a viable contributor to society:

> The interest in the "social," including class interests and class identity, was now replaced by "the cultural." […] The architectural movement that evolved from the paper architecture of the 1970s aided the restoration of the self-confidence and credibility of the discipline and propelled it to a popular status, positioning architecture at the fore of culture. (4–5)

Critics of those who would interpret architecture as a cultural practice claim that doing so does not do enough to address the ills plaguing society: that it puts too much emphasis on "star architects," that it is too object oriented, or that it minimizes the collective potentials of public space.[16] Such criticisms may at times be warranted, but without room for architecture's resistance to the flattening effects

of commodification and the brute reductiveness of instrumentalism, architecture (to which I would extend, graphic design and other forms of applied cultural practice) is unhinged from what makes it unique (even, "special").[17] We are left with little or no social and cultural relevance. Design practice is a context specific act. Particularly in the case of architecture and graphic design, effective applied solutions are not suited for use as blind abstract principles. In an essay that compared the notions of "design discipline" against "design science," Cross observed that "[Theorist Donald Schön] criticized [Herbert] Simon's view of a 'science of design' for being based on approaches to solving well-formed problems, whereas professional practice throughout design and technology and elsewhere has to face and deal with 'messy, problematic situations'" (Cross 2001, 53).[18] It is in the best interest of disciplines external to design to reduce our expertise to mere technique, to annex design in support of the advancement of what one may consider – for lack of a better term – the *parasitic* discipline.[19] Subjected to a secondary position as the mere instrument of other disciplines, we relinquish any claims to disciplinarity.[20]

Ultimately, is creative practice a form of research? *Yes*. From my perspective it is. From the perspective of the social and hard sciences, *no,* it is not. But I do not need to appeal to the sciences to find legitimacy for my practice, even if that means relinquishing access to capital or relegating myself to what is increasingly a trivialized position. In fact, I welcome what Manfredo Tafuri describes as the "sublime uselessness" (Tafuri 1976; 1998, 148–173) of a practice concerned with "criticism from within,"[21] or Daniël van der Velden's clarion call for "knowledge that no one has asked for" (Van der Velden 2011, 16–18).[22] Ultimately, the prospect of modeling graphic design's future on engineering may prove to be too great a Faustian bargain.

Disclosure statement

No potential conflict of interest was reported by the author.

Notes

1. In fact, the ability of graphic design to generate revenue was of particular importance: "Even more than the other workshops, Meyer considered it the task of 'advertising' to earn money from commissions for advertising and exhibitions" (Droste 2002, 180).
2. However, an English translation of Tschichold's manifesto did not appear until 1994 (Tschichold 1994). The original German 1928 title is *Die neue Typographie, Ein Handbuch für zeitgemäss Schaffende*.

3. Hejduk is better known for his poetry, evocative drawings ("paper architecture"), and installation work ("masques"), and as his influence as an educator and dean of the Cooper Union School of Architecture, than for his few built works, a number of which were constructed *post mortem*.

4. The question of what constitutes research in design has been explored to varying degrees in numerous texts including Berthod (2014), Grocott (2012), Bühlmann and Wiedmer (2008), Michel (2007), Cross (2001), and Schön (1984). While a link with the natural and social sciences and engineering seems the most obvious direction for the future of graphic design, some institutions *have* endorsed visual production as a form of research. For example, in 2013 the Bauhaus-University Weimar established the Space for Visual Research as a workshop and laboratory for experimental research into new graphic, abstract, and visual worlds (Weisbeck, Schmitt, and Ott 2014). Similarly, the Visual Communication Institute/The Basel School of Design and École Cantonale d'Art de Lausanne (ÉCAL) have actively pursued visual communication creation, yielding a number of investigative projects (Van der Meulen 2012; Paradis, Früh, and Rappo 2013).

5. Nigel Cross gives a brief outline of the attempt to apply more formalized methods to everyday design practice and a note on the ensuing dissatisfaction with the results as expressed by a number of researchers (Cross 2001). He also published a volume that applied design methods in engineering (Cross 1989), a book he now includes in his criticism noted in Cross (2001).

6. For a number of reasons, not the least of which is an inability to explain their value in an age when tuition fees have far exceeded the rate of inflation, the humanities have seen declining enrolments for quite some time (Rawlings 2014; Pinker and Wieseltier 2013; Wieseltier 2013; Fish 2013; Commission on the Humanities and Social Sciences 2013). In the span of two pages, former president of Princeton University, Harold Shapiro, succinctly identifies the benefits of the liberal arts education as an ability to impart "the freeing of the individual from previous ideas, the disinterested search for truth, the pursuit of alternative ideas, the development and integrity of the individual, and the centrality of the power of reason" (Shapiro 1995a, 57; Shapiro 1995b, 55).

7. "It is precisely due to our distance from the subject of study, i.e. the texts and artifacts of our architectural tradition, that we can find possibilities for the present" (Pérez-Gómez 1999, 79). This quotation appeared in a special issue of *Design Issues* devoted to design research covering a wide spectrum of design disciplines. It is not difficult to conceive of substituting his term "architectural" with "graphic design." Pérez-Gómez has also written extensively about the emotive and phenomeno-

logical ability of architecture to bring joy and substance to the experience of life (Pérez-Gómez 1983).

8. A brief history of the attempt to engender scientific approaches to "design methods" and "design science" in the name of design research has been written by the scholar Nigan Bayazit (Bayazit 2004). While she provides some insightful context, the essay treats "design" as a generic category encompassing a multitude of various practices: from industrial design, through engineering, architecture, design management, and design policy, among others. An indifference toward the distinctions that constitute the disciplinary knowledge of respective design practices is a flaw of research carried out in design in general, but this indifference is also what permits external disciplines to dismiss design research because it does not "fit" their methods (Bayazit 2004).

9. Architectural publication during this period was not entirely devoid of disciplinary investigation. The year 1966 also saw the publication of Robert Venturi's *Complexity and Contradiction in Architecture* (Venturi 1966), and in Italy, Aldo Rossi's *L'architettura della città*. The English translation, *The Architecture of the City*, would not appear until 1982 (Rossi 1982); but in the interim the publication of Rossi's built work would have a greater influence in North America. Additionally, the opposing ideologies that came to fore when *Learning from Las Vegas* (Venturi, Brown, and Izenour 1972) and *Five Architects: Eisenman, Graves, Gwathmey, Hejduk, Meier* (*Five Architects* 1972) were published added momentum to the growing disciplinary discourse in architecture. The efforts of the New York Five to reconnect with the architectural pursuits of the 1920s' historical avant-garde are not unlike the efforts of Wolfgang Weingart, whose letterpress explorations of the late 1960s and early 1970s mirror graphic design's own period of the historical avant-garde via Piet Zwart and Kurt Schwitters.

10. Serge Chermayeff and Christopher Alexander's *Community and Privacy: Toward a New Architecture of Humanism* (1963) was one of the earliest works to inject sociology into the design process. However, even in 1966, reviewers of the book were hardly generous: "The authors confuse fact and value, propose a naïve theory of human nature, and completely ignore the role of culture and social structure in human affairs" (Key 1966, 106). A year after his co-authored publication with Chermayeff, Alexander would publish *Notes on the Synthesis of Form* (Alexander 1964) – a study attempting to apply the rigors of mathematical logic to design. Critics from both sides of the ideological spectrum assailed Alexander's attempt to rationalize design methods in architecture. M.A. Milne and C.W. Rusch said of his work: "The ['traditional right'] accuses the method of being partial in that it addresses itself primarily to the functional side of the problem

and neglects the esthetic [*sic*] and culturally symbolic aspects of architectural solutions an aspect to which the traditional right gives primary emphasis. From the other side, the 'new left' attacks the method as systematically unreliable since it does not contain the rigor of scientific method" (Milne and Rusch 1968, 22). At the same time, Milne and Rusch recognize the immense influence of Alexander's treatise by noting its publication history: "Four years have passed since the publication of Christopher Alexander's *Notes on the Synthesis of Form*. And already the book has gone through two printings and been translated into Italian and Japanese." But by 1971, Alexander had very much rejected his earlier work, stating: "I've disassociated myself from the field. […] There is so little in what is called 'design methods' that has anything useful to say about how to design buildings that I never even read the literature anymore. […] I would say forget it, forget the whole thing" (Alexander 1971, 3–7). Similarly, Jones, whose *Design Methods* became a staple in the field, also distanced himself from his earlier position: "In the 1970s, I reacted against design methods. I dislike the machine language, the behaviorism, the continual attempt to fix the whole of life into a logical framework" (Jones 1977, cited in Cross 2001, 50).

11. In *A Second Modernism: MIT, Architecture, and the "Techno-Social" Movement*, editor historian Arindam Dutta provides an excellent overview of the postwar emphasis MIT's School of Architecture placed on applied research and the School's turn away from the "vagaries of aesthetic formalism" (Dutta 2013, 2). While at times verging on the hagiographic, the book's collection of twenty-four essays presents a robust view of MIT and the influence that external funding had on its development as an institution – a point bluntly presented in Dutta's introduction: "At the end of the Second World War, top American universities received federal monies for (military-related) R&D [research and development] contracts that dwarfed those given to individual corporations: MIT, the highest in the list, received $117 million and Caltech $83 million, while Western Electric (AT&T), GE, RCA, Du Pont, and Westinghouse received no more than $7 million on average" (3). In an interview conducted by Peter Dizikes, Dutta states: "They were heavily influenced by sociological models, but also by behaviorist models, systems theory, and so on, to the extent that some […] saw conventional architecture as too aestheticized. They did not see aesthetics or formal questions as a place for the strong exploration of critical issues" (Dutta 2014).

12. Katharine G. Bristol has made a shrewd observation about the failure of the Pruitt-Igoe housing project. The commonly accepted understanding for its failure lies with its architectural design and faith in modernist principles, but Bristol takes that interpretation one step further by highlighting how those "principles"

were in fact determined by social and economic factors that are *external* to the design process: "By placing the responsibility for the failure of public housing on designers, the [Pruitt-Igoe] myth shifts attention from the institutional or structural sources of public housing problems. Simultaneously it legitimates the architecture profession by implying that deeply embedded social problems are caused, and therefore solved, by architectural design" (Bristol 1991, 163–171).

13. In North America, The Institute of Architecture and Urban Studies (1967–84) published twenty-six issues of the *Oppositions* journal from 1973 until the institute's closure in 1984. Both the institute and the journal served as a platform to disseminate theory and criticism within architectural culture. Its own editorial statements make it clear that the editors of the journal sought to "link the present with the past," (No. 1, 1973) to reassess the "past as a means of determining the necessary relationships existing between built form and social values" and to "advance scholarship and thought" (No. 2, 1974). In addition to the authors mentioned above, the journal also published articles by Stanford Anderson, Giorgio Ciucci, Alan Colquhoun, Francesco Dal Co, Kurt W. Forster, Mario Gandelsonas, Giorgio Grassi, Rem Koolhaas, Léon Krier, Mary McLeod, Rafael Moneo, Joan Ockman, Aldo Rossi, Colin Rowe, Denise Scott Brown, Jorge Silvetti, Ignasi de Solà-Morales, Manfredo Tafuri, and Anthony Vidler. On the other side of the Atlantic, Alvin Boyarsky, Chair of the Architectural Association (AA) from 1971 until his death in 1990, was instrumental in championing a highly ambitious program of exhibitions, catalogs, and publications that served to disseminate the state of contemporary architectural discourse at the AA at the time. The AA Folio series was particularly suited to casting architecture as a product conceptual investigation. Each folio presented the work of one architect (or, in the case of Eduardo Paolozzi, an artist) and consisted of varying visual techniques including pattern drawings (Daniel Libeskind, *Chamber Works: Architectural Meditations on Themes from Heraclitus* (1983)); reproductions of acrylic paintings (Zaha Hadid, *Planetary Architecture Two* (1983)); silkscreen prints onto cotton rag paper (Bernard Tschumi, *La Case Vide* (1985)) or acetate sheets (Peter Eisenman, *Moving Arrows, Eros and Other Errors* (1986)); drawings blind embossed onto cotton paper (Peter Eisenman, *Fin d'Ou T Hou S* (1985)); and conceptual sketches printed onto vellum to overlay photographs of experimental models (Coop Himmelb(l)au, *Blaubox* (1988)). In terms of research, each folio used non-traditional methods to represent architecture, and in so doing presented new methods to conceive its form – today we would describe such representational experimentation as a form of data visualization. Architecture schools were fertile grounds for experimentation in the late 1970s and early

1980s as they sought to manifest ideas using techniques beyond traditional modes of drawing and model-building. A good introduction on such experimentation can be found in the exhibit catalog, *Themes III: The Discourse of Events*. Bernard Tschumi writes: "Most colleagues described our work as 'enigmatic' in front of us and 'mumbo-jumbo' behind our backs. Of course the codes used in the students' work differed sharply from the ones seen in schools and architectural offices at the time. […] Any new attitude to architecture *had* to question its mode of representation" (Tschumi 1983, 8, original emphasis; and reprinted in a less colloquial form in Tschumi 1994, 139–49). Coates writes: "[Architecture] therefore had to consider fleeting meanings as well as solid architectural forms, movement as well as the volumes that contained them, the subjective as well as the rational. […] This resulted in using techniques not seen in the AA before – arranging photographs on a street so that they functioned like words or forming sequences of drawings, that built up an increasingly abstract set of commentaries on architecture" (Coates 1983, 13).

14. Cf. Bürger's paradox of autonomy (Bürger 1984, 46) with Paul de Man's prerequisite for modernity: de Man notes, "The more radical the rejection of anything that came before, the greater the dependence on the past" (de Man 1983, 161). For both Bürger and de Man, *change* is dependent upon an awareness of one's discipline (which of course, presumes that it exists as a discipline) and a desire to operate at its limits.

15. Kaminer's text is a reflection of architecture's growing attempt to assess the period from 1970 to 1990. Other recent studies include Förster (forthcoming), Allais (2010), Frank (2010), Hays (1998b, 2009), and also the 2013 documentary film directed by former IAUS participant Diana Agrest, *The Making of an Avant-Garde: The Institute for Architecture and Urban Studies 1967–1984* (2013).

16. See, for example, Stevens (1998), Levinson (2005), Ghirardo (1984), Cuff and Wriedt (2010), and Gutman (1996). John Brodie paints a rather satirical portrait of the vanity present among architects which may in fact, not be too far from reality (Brodie 1991). While the title is somewhat tongue in cheek, the essays edited in Davies and Schmiedeknecht (2005) present a number of very good studies that examine the symbiotic relationship between architects and the media.

17. Indeed, *Oppositions* editor and contributor Kenneth Frampton was unrelenting in his attack on the rationalizing tenets of industrialized society, tenets which value efficiency and instrumentality over qualitative and ontological practices. Following lines of thought laid down by Hannah Arendt, Frampton confronted the notion of "value" that exists only to the extent that activity can be directed to quantifiable ends: "The cyclical processes of

modern production and consumption seems to be more than adequately matched for the exhaustion of every resource and for the laying waste to all production irrespective of the rate at which it is generated. To rationalize this so-called optimization in the name of human adaptability and progress is to ideologize the self alienation of man" (Frampton 1974, 6). More recently, theorist Louise Pelletier has suggested a nuanced reinterpretation of functionalism, noting that the perceived polarity between "function" and "expression" are relatively recent phenomena: "Providing a sense of orientation is an implicit role of architecture. Yet, with the rise of functionalism at the beginning of the twentieth century, this role seems to have been neglected. If we look at the problem historically, we realize that the complex paradox between function and expression in architecture is a relatively recent problem" (Pelletier 2012, 59).

18. In an earlier iteration of his essay "Designerly Ways of Knowing: Design Discipline versus Design Science" (2001), Cross was more explicit about design thinking involving its own disciplinary expertise when he restates a conception of design from a research report completed by the Royal College of Art (Archer, Baynes, and Langdon 1979) concern of Design is "the conception and realization of new things." (b) It encompasses the appreciation of "material culture" and the application of "the arts of planning, inventing, making and doing." (c) At its core is the "language" of "modelling"; it is possible to develop students' aptitudes in this "language," equivalent to aptitudes in the "language" of the sciences – numeracy – and the "language" of humanities – literacy. (d) Design has its own distinct "things to know, ways of knowing them, and ways of finding out about them" (Cross 1982, 221–27).

19. Theorist Alain Findeli has written extensively about research methods, and is quite critical about the annexation of design by other disciplines carried out in the name of "design research." "The problem we encounter with this kind of research is its relative lack of relevance for design. By 'design' is here meant design practice, design education or design research. Why is that so? Well, because the research is carried out about design (i.e. about its objects, its processes, its actors and stakeholders, its meaning and significance for society, business, culture, etc.) by scientists (like anthropologists, archaeologists, historians, cognitive psychologists, management scientists, semioticists and many others) whose main goal is to contribute to the advancement of their own discipline, not particularly of design" (Findeli et al. 2008, 71).

20. Gunnar Swanson has touched upon many of the issues being raised here, specifically, the notion of graphic design as a humanist practice, but I think it is time to rethink the claim he made in 1994 that graphic "design does not have a subject

matter of its own – it exists in practice only in relation to the requirements of given projects." In the twenty-two years since his essay first appeared, I believe that we have gained sufficient understanding of how graphic designers practice in terms of thought processes, data visualization (what we once termed "image-making"), and other forms of codifying information, that we can legitimately claim the status of a discipline (Swanson 1994, 53–63).

21. This phrase is borrowed from Jorge Silvetti, architect and former Chair of the Department of Architecture at Harvard University's Graduate School of Design. Silvetti's essay looks to the operations of language to pursue a subversion of existing knowledge structures. Theorist K. Michael Hays characterizes Silvetti's proposition as "making use of the Foucauldian distinction between commentary and criticism – the first of which essentially reproduces and legitimizes the work or language under analysis, the latter of which 'judges' the language itself and 'profanes it.' Criticism from within is both a *re*presentation of architectural language and a subversion of architecture's conventional 'linguistic' material or design procedures – what Barthes calls 'a mask which points to itself'" (Hays 1998c, 262, original emphasis). According to Silvetti, "Perhaps what is most promising about [criticism from within] is precisely the awareness that we will not gain from it access to objective, scientific knowledge […], but rather that through it we may aim at unfolding the imaginary-symbolic universe that architecture simultaneously proposes and represses" (Silvetti 1998, 273). Criticism from within is reflected in the notion that the production of meaning is understandable only as the transformation of a meaning already emergent. Meaning is never just *there*; rather, meaning is always already given in the process of its transformation into another meaning. It is during this transformative process that the taint of ideology is exposed (Hays 1998c, 262; and see Silvetti 1998, 266–282).

22. In language that echoes Jeff Kipnis' questioning of the hubris of modernism, Van der Velden asks what happens to graphic design when there is no problem to solve?

References

Alexander, Christopher. 1964. *Notes on the Synthesis of Form*. Cambridge, MA: Harvard University Press.

Alexander, Christopher. 1971. "The State of the Art in Design Methodology: Interview with C. Alexander." *DMG Newsletter* 5 (3): 3–7.

Allais, Lucia. 2010. "The Real and the Theoretical, 1968." *Perspecta* 42: 27–41.

Archer, Bruce, Ken Baynes, and Richard Langdon. 1979. *Design in General Education: The Report of an Enquiry Conducted by the*

Royal College of Art for the Secretary of State for Education and Science, edited by Phil Roberts. London: Royal College of Art.

Bayazit, Nigan. 2004. "Investigating Design: A Review of Forty Years of Design Research." *Design Issues* 20 (1): 16–39.

Berthod, Jonas. 2014. "Researching within Design?" *IDPure* 34: 72–77.

Bristol, Katharine G. 1991. "The Pruitt-Igoe Myth." *Journal of Architectural Education* 44 (3): 163–171.

Brodie, John. 1991. "Master Philip and the Boys." *Spy* (May): 50–58.

Bühlmann, Vera, and Martin Wiedmer, eds. 2008. *Pre-Specifics: Some Comparatistic Investigations on Research in Design and Art*. Zurich: JRP Ringier.

Bürger, Peter. 1984. *Theory of the Avant-Garde*. Minneapolis, MN: University of Minnesota Press.

Chermayeff, Serge, and Christopher Alexander. 1963. *Community and Privacy: Toward a New Architecture of Humanism*. Garden City, NY: Doubleday.

Coates, Nigel. 1983. "Narrative Break-up." In *Themes III: The Discourse of Events*. London: Architectural Association.

Commission on the Humanities and Social Sciences. 2013. *The Heart of the Matter*. Cambridge, MA: American Academy of Arts & Sciences. www.humanitiescommission.org/_pdf/hss_report.pdf.

Cross, Nigel. 1982. "Designerly Ways of Knowing." *Design Studies* 3 (4): 221–227.

Cross, Nigel. 1989. *Engineering Design Methods*. Chichester: Wiley.

Cross, Nigel. 2001. "Designerly Ways of Knowing: Design Discipline versus Design Science." *Design Issues* 17 (3): 49–55.

Cuff, Dana, and John Wriedt, eds. 2010. "Architecture From the Outside." In: *Selected Essays by Robert Gutman*. New York, NY: Princeton Architectural Press.

Davies, Paul, and Torste Schmiedeknecht. 2005. *An Architect's Guide to Fame*. Oxford: Architectural Press.

de Man, Paul. 1983. "Literary History and Literary Modernity." In *Blindness and Insight: Essays in the Rhetoric of Contemporary Criticism*, 142–165. Minneapolis, MN: University of Minnesota.

Droste, Magdalena. 2002. "The Advertising Workshop." In *Bauhaus*, 1919–1933. Berlin: Taschen/Bauhaus-Archiv.

Dutta, Arindam. 2013. *A Second Modernism: MIT, Architecture, and the 'Techno-Social' Movement*. Cambridge, MA: MIT Press.

Dutta, Arindam. 2014. "3 Questions: Arindam Dutta on MIT and Architectural Modernism." Interview by Peter Dizikes. MIT News (blog). January 9. http://newsoffice.mit.edu/2014/3q-arindam-dutta-on-mit-and-architectural-modernism-0109.

Findeli, Alain, Denis Brouillet, Sophie Martin, Christophe Moineau, and Richard Tarrago. 2008. "Research through Design and Transdisciplinarity: A Tentative Contribution to the Methodology of Design Research." Conference proceedings from *"FOCUSED"*

– *Current Design Research Projects and Methods*, 67–91. Swiss Design Network Symposium.

Fish, Stanley. 2013. "A Case for the Humanities Not Made." *The New York Times*. June 24. http://nyti.ms/1k368k4.

Five Architects: Eisenman, Graves, Gwathmey, Hejduk, Meier. 1972. New York: Wittenborn & Co.

Förster, Kim. Forthcoming. *The Institute for Architecture and Urban Studies (New York, 1965–1985): Networks of Cultural Production*. Zurich: gta.

Frampton, Kenneth. 1974. "On Reading Heidegger." *Oppositions* 4 (October): 3–6.

Frank, Suzanne. 2010. *IAUS: An Insider's Memoir*. Bloomington, IN: Authorhouse.

Ghirardo, Diane. 1984. "Architecture of Deceit." *Perspecta* 21: 110–15.

Grocott, Lisa. 2012. "Designerly Ways of Researching: Design Knowing and the Practice of Researching." *Studies in Material Thinking* 6: 2–24.

Gutman, Robert. 1996. *Architectural Practice: A Critical View*, 5th ed. New York: Princeton Architectural Press.

Hays, K. Michael. 1998a. "The Oppositions of Autonomy and History." In *Oppositions Reader: Selected Readings from a Journal for Ideas and Criticism in Architecture 1973–1984*, edited by K. Michael Hays, ix–xiv. New York: Princeton Architectural Press.

Hays, K. Michael, ed. 1998b. *Oppositions Reader: Selected Readings from a Journal for Ideas and Criticism in Architecture 1973–1984*. New York: Princeton Architectural Press.

Hays, K. Michael. 1998c. "Introduction to the Beauty of Shadows." In *Architecture Theory since 1968*, edited by K. Michael Hays, 262–264. Cambridge, MA: MIT Press.

Hays, K. Michael. 2009. *Architecture's Desire: Reading the Late Avant-Garde*. Cambridge, MA: MIT Press.

Hutner, Gordon, and Feisal G. Mohamed. 2013. "The Real Humanities Crisis is Happening at Public Universities." *The New Republic*. September 6. http://www.newrepublic.com/article/114616/public-universities-hurt-humanities-crisis.

Jones, John Christopher. 1970. *Design Methods: Seeds of Human Futures*. London: Wiley-Interscience.

Jones, John Christopher. 1977. "How My Thoughts about Design Methods Have Changed during the Years." *Design Methods and Theories: Journal of DMG and DRS* 11 (1): 48–62.

Kaminer, Tahl. 2011. *Architecture, Crisis and Resuscitation: The Reproduction of Post-Fordism in Late-Twentieth-Century Architecture*. New York: Routledge.

Key, William H. 1966. "Review of *Community and Privacy: Toward a New Architecture of Humanism* by Serge Chermayeff and Christopher Alexander." *The Sociological Quarterly*. 7 (1).

Kipnis, Jeffery. 1996. "Hejduk's Chronotope (an Introduction)." In *Hejduk's Chronotope*, edited by K. Michael Hays, 106. New York: Princeton Architectural Press.

Levinson, Nancy. 2005. "Notes on Fame." *Perspecta* 37: 18–23.

Michel, Ralf, ed. 2007. *Design Research Now*. Basel: Birkhäuser.

Milne, M. A., and C. W. Rusch. 1968. "The Death of the Beaux Arts: The Cal-Oregon Experiment in Design Education." *Journal of Architectural Education* 22 (2/3): 22–27.

Morris, Ellen K., and Edward Levin. 1982. "On the Discipline of Architecture." *Journal of Architectural Education* 35 (2): 1.

Paradis, Louise, Roland Früh, and François Rappo, eds. 2013. *30 Years of Swiss Typographic Discourse in the Typografische Monatsblätter TM RSI SGM 1960–90*. Basel: Lars Müller.

Pelletier, Louise. 2012. "The Space of Fiction: On the Cultural Relevance of Architecture." In *The Cultural Role of Architecture*, edited by Paul Eammons, John Hendrix, and Jane Lomhold, 58–67. New York: Routledge.

Pérez-Gómez, Alberto. 1983. *Architecture and the Crisis of Modern Science*. PhD diss. Cambridge, MA: MIT Press.

Pérez-Gómez, Alberto. 1999. "Hermeneutics as Discourse in Design." *Design Issues* 15 (2): 71–79.

Pinker, Steven, and Leon Wieseltier. 2013. "Science vs. the Humanities, Round III." *The New Republic*. September 26. http://www.newrepublic.com/article/114754/steven-pinker-leon-wieseltier-debate-science-vs-humanities.

Ramsay, Caley. 2013. "U of A Moves to Suspend Admissions to 20 Arts Programs." August 19. http://globalnews.ca/news/787550/u-of-a-moves-to-suspend-admissions-to-20-arts-programs/.

Rawlings III, Hunter R. 2014. "Universities on the Defensive." *Princeton Alumni Weekly* 114 (April 2): 28–31.

Rossi, Aldo. (1966) 1982. *The Architecture of the City*. Rev. ed. Translated by Diane Ghirardo and Joan Ockman. Cambridge, MA: MIT Press. Originally published as *L'Architettura della Città*. Padua: Marsilio Editori.

Schön, Donald A. 1984. *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books.

Shapiro, Harold. 1995a. "Liberal Education – What is It? What is It for? (Part I)." *Princeton Alumni Weekly* 95 (February 22): 52.

Shapiro, Harold. 1995b. "Liberal Education – What is It? What is It for? (Part II)." *Princeton Alumni Weekly* 95 (March 1): 55.

Silvetti, Jorge. 1998. "The Beauty of Shadows." In *Architecture Theory since 1968*, edited by K. Michael Hays, 266–282. Cambridge, MA: MIT Press. Originally published in *Oppositions* 9 (Summer 1977): 43–61.

Stevens, Garry. 1998. *The Favored Circle: The Social Foundations of Architectural Distinction*. Cambridge, MA: MIT Press.

Swanson, Gunnar. 1994. "Graphic Design Education as a Liberal Art: Design and Knowledge in the University and the 'Real World'." *Design Issues* 10 (1): 53–63.

Tafuri, Manfredo. 1976. *Architecture and Utopia*. Cambridge, MA: MIT Press.

Tafuri, Manfredo. 1998. "Architecture dans le Boudoir: The Language of Criticism and the Criticism of Language." In *Architecture Theory since 1968*, edited by K. Michael Hays, 148–173. Cambridge, MA: MIT Press. Originally published in *Oppositions* (3) (1974).

Templer, John. 1990. "Architectural Research." *Journal of Architectural Education* 44 (1): 3.

Tschichold, Jan. [1928] 1994. *The New Typography: A Handbook for Modern Designers*. Translated by Ruari McLean. Berkeley: University of California Press.

Tschichold, Jan. 1928. *Die neue Typographie, Ein Handbuch für zeitgemäss Schaffende*. Berlin: des Bildungsverbandes der Deutschen Buchdrucker.

Tschumi, Bernard. 1983. "Spaces and Events." In *Themes III: The Discourse of Events*. London: Architectural Association.

Tschumi, Bernard. 1994. "Spaces and Events." In *Architecture and Disjunction*, 139–151. Cambridge, MA: MIT Press.

Van der Meulen, Nicolaj. "Shaping the Future: The Image as Generator of Innovation." Accessed January 7, 2015. http://www.fhnw.ch/hgk/ivk/research.

Van der Velden, Daniël. 2011. "Research and Destroy: Graphic Design as Investigation." In Ellen Lupton and Andrew Blauvelt, eds. *Graphic Design: Now In Production*, edited by Ellen Lupton and Andrew Blauvelt, 16–18. Minneapolis, MN: Walker Art Center. Originally published in *Metropolis M*. 2 (April/May 2006): 92.

Venturi, Robert. 1966. *Complexity and Contradiction in Architecture*. New York: The Museum of Modern Art Press.

Venturi, Robert, Denise Scott Brown, and Steven, Izenour. 1972. *Learning From Las Vegas: The Forgotten Symbolism of Architectural Form*. Cambridge, MA: MIT Press.

Weisbeck, Markus, Mathias Schmitt, and Michael Ott, eds. 2014. *Space for Visual Research*. Leipzig: Spector Books.

Wieseltier, Leon. 2013. "Crimes against Humanities." *The New Republic*. September 3. http://www.newrepublic.com/article/114548/leon-wieseltier-responds-steven-pinkers-scientism.

Wolff, Jonathan. 2010. "Why is Middlesex University Philosophy Department Closing?" *The Guardian*. May 17. http://www.theguardian.com/education/2010/may/17/philosophy-closure-middlesex-university.