The

Education

OF A

GRAPHIC DESIGNER

edited by

STEVEN HELLER



The Education of a Graphic Designer

SECOND EDITION

edited by Steven Heller





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Contents

- vii Acknowledgments
- ix Introduction Steven Heller



1. HOW WE LEARN WHAT WE LEARN

- 3 Education in an Adolescent Profession Katherine McCoy
- 13 Raising the Bar for Higher Education Meredith Davis
- 19 Liberal Arts Is Old News Frank Baseman
- 22 Graphic Design Education as a Liberal Art: Design and Knowledge in the University and the "Real World" Gunnar Swanson
- 33 Liberal Arts and Graphic Design: Six Cautionary Questions Gunnar Swanson
- 38 Anxious about the Future? Ken Garland
- 41 That Was Then: Corrections & Amplifications Lorraine Wild
- 55 Catching Up with the Past: Shifting the Pedagogical Paradigm Leslie Becker
- 57 Legacy of a 1960s Credo Kenneth Hiebert
- 63 Graphic Design Family Values Paul J. Nini
- 66 What Is "Professional" about Professional Education? Meredith Davis
- 74 Emptying the Spoon, Enlarging the Plate: Some Thoughts on Graphic Design Education
 Warren Lehrer
- 81 Design Rockism Nick Currie
- 84 From Form to Context: Teaching a Different Type of Design History Prasad Boradkar
- 89 Principles Before Style: Questions in Design History Richard Hollis
- 92 The Case for Critical History Steven Heller
- 98 Putting Criticism into Critique Nancy Mayer
- 102 Remaking Theory, Rethinking Practice Andrew Blauvelt
- 109 Talking Theory / Teaching Practice Johanna Drucker
- 116 Writing Now: Journalism, Criticism, Critical Journalism Rick Poynor
- 125 Circling the Desert: The Illusion of Progress William Longhauser
- 128 What This Country Needs Is a Good Five-Year Design Program Steven Heller

- 131 Distinctive Opportunities Omar Vulpinari
- 133 What's Right with Design Education and Wrong with the "Real World"? Susan Agre-Kippenhan and Mike Kippenhan
- 136 Experience Versus Education Jeffrey Keedy
- 141 Traversing Edge and Center: A Spatial Approach to Design Research Katie Salen
- 145 The Problem with Problem Solving Julie Lasky
- 148 Ricochet Critique: Improvisation in Design Teaching Roy R. Behrens
- 151 Making Connections Scott Santoro
- 153 Self-Taught Teacher Marian Bantjes
- 157 Hybrid Teaching: From Practitioner to Professor Catherine Jo Ishino
- 160 An Instructor of Concern Kenneth Fitzgerald
- 163 Memory, Instinct, and Design: Beyond Paul Rand's "Play Principle" Michael Golec
- 168 Some Things Change . . . Chris Pullman
- 172 The Last Slide Show Alice Twemlow
- 175 Design Interactive Education Max Bruinsma
- 181 Motion Literacy Jan Kubasiewicz
- 184 Computers Don't Speak, Type Does Michael Worthington
- 189 Writing: The Future of Digital Media David Womack
- 192 Starting from Zero: Teaching Writing to Designers Warren Lehrer
- 197 Is Learning Stealing? Robert Appleton
- 200 Graphic Authorship Michael Rock
- 210 The Blogucation of a Graphic Designer Armin Vit
- 214 The Designer as Producer Ellen Lupton
- 220 History with Attitude: A Subjective Tour of Studies in American Graphic Design Education
 Ellen Mazur Thomson
- 225 **Tear It Down** Virginia Smith
- How We Teach. How We Learn What Is Taught Hank Richardson
- 232 Graphic Design Curricula: Visualizing Design Processes and Skills Thomas Briggs
- 236 Visual Literacy: The College Course Richard Wilde and Judith Wilde
- 238 Worth a Thousand Words ... Brian Lucid
- 240 Believing Is Seeing Elizabeth Resnick
- 243 2001: A Design Odyssey Stephen Skaggs
- 251 Be Selfish Maud Lavin
- 253 In Praise of Doubt Mark Kingsley
- 255 Learning through a Collaborative Project: A Case Study in Visual Communication
 Heather Corcoran
- 259 A Collage Education Thomas Wedell and Nancy Skolos
- 262 What Can Students Learn from Studying Misinformation? Colin Berry
- 264 Have Sign, Will Travel: Cultural Issues in Design Education Ellen McMahon and Karen White
- 269 Searching for a Black Aesthetic in American Graphic Design Sylvia Harris
- 274 For the Sake of Humanity: Teaching Cross-Cultural Design with Empirical Inquiry
 Audrey Bennett
- 279 Maximize the Message: Tailoring Designs for Your Audience in a Multicultural Era Katherine McCoy

- 284 Who's Afraid of the Big Brand Wolf? Marty Neumeier
- 287 Design Studies for a New Doctorate Victor Margolin



2. HOW WE TEACH WHAT WE TEACH

- 297 Graphic Design as Cognitive Artifact Meredith Davis
- 301 History Theory and Undergraduate Education Ellen Lupton and J. Abbott Miller
- 308 Hyperarchitexture: Marked Typography and the Hypertextual Landscape Katie Salen
- 313 Visual Literacy Richard Wilde and Judith Wilde
- 318 Designing with Self-Authored Text Paula J. Curran
- 323 Off the Page and Into the Streets: Communication and Activism Sharyn O'Mara
- 329 Green Graphic Design Seminar Lisa Fontaine
- 335 Introduction to Designing with Movement and Sound/Designing in Time and Space Jay Chapman
- 341 Contributors
- 351 Credits
- 353 Index

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STEVEN HELLER

Introduction Steven Heller

The introduction to the first edition of *The Education of a Graphic Designer* began this way:

Before isms, ologies, and otics. Before the Chicago Bauhaus, Yale, RISD, Cranbrook, CalArts, and the School of Visual Arts, the correspondence school was the leading academy of what we now call graphic design. When advertising became a viable industry in America at the turn of the century, commercial artists—including illustrators, boardmen, and letterers—were in great demand. Advertisements for home schooling offered aspirants a chance to earn "\$65, \$80 and more a week" in "a pleasant, profitable art career." And while these ads shared space in pulp magazines and comic books with schemes to learn dentistry and brain surgery, they nonetheless provided a legitimate way for anyone with a modicum of talent to learn a new profession in their spare time.

Today who has spare time? There are not even enough days in an average undergraduate four-year graphic design program to develop the skills and foster the talents necessary to become a viable practitioner. Any individuals or institutions that claim to impart total mastery of graphic design (with all its multidisciplinary complexities) in less than four years are kidding themselves and everyone else. What they really mean is that technique and technology can be taught through intensive classes in a limited timeframe (actually, anywhere from six months to four years), but that is only one part of the total requisite comprising the education of a contemporary graphic designer. Conceptual, strategic, psychological, marketing, and other abstract and practical issues are key.

Design pedagogy long ago moved out of the proverbial one-room schoolhouse onto a labyrinthine campus of departments and workshops awarding degrees and honors. In fact, considerable time has gone by since the formal word "pedagogy" was substituted in certain circles for the more pedestrian (though straightforward) "teaching." Which is not a complaint, mind you, but an observation that design education has a lofty status now. It means that in many institutions it is no longer adequate to simply have a marketable portfolio—graduates must acquire bona fides through internships, apprenticeships, work

studies, and anything else that bulks their résumés. They must have certificates, diplomas, degrees, awards, and scads more evidence that they are designers with a capital *D* rather than mere mouse-pushers.

Nonetheless, the very existence of the old correspondence schools, some of them quite prestigious in their respective days, upheld the belief back in the nascent era of graphic design that a formal education was as necessary, if not more so, than on-the-job training. It was impossible to achieve proficiency without any instruction whatsoever, and the more one sat at the feet of master/teacher typographers and illustrators either in classrooms or through correspondence school letters and booklets, the better the chance of becoming one at some time in the future. Although commercial art purportedly could be learned in one's spare time, the requisite skills were nevertheless imparted through studiously planned courses of logical study. Today these courses have exponentially grown and are well attended by students who seek to enter a respected profession that is both business and art. As this second edition of *The Education of a Graphic Designer* reveals, the intensity devoted to designing design education programs will not be left to chance.

Today the many years and high tuitions invested in earning undergrad and graduate college and art school degrees are commensurate with increased demands that business, technology, and even culture have made on incoming professionals. Moreover, our innate egotistical need to be viewed by society (if not also by our parents) as professionals has raised the stakes and costs. The fragmentation and specialization of design and related fields have also demanded increased educational rigor. Some design institutions even push conventions so that they might attain the equivalent of ivy-league status within their academic universe, which in turn attracts a high caliber of student. Despite steadily growing production demands now placed on graphic designers, we do have higher status when employed as conceptualists, strategists, and a slew of other ists, as well as managers and consultants—a far cry from yesteryear's piece-worker (although there are proportionally just as many freelancers today as ever, only they are more specialized). Arguably, an undergraduate education imparts barely enough practical instruction to keep up with an everwidening practice that has come to include multimedia as a major component. This is one reason why schools that embrace variegated media, as well as the marriage of practice and theory in these areas, provide better long-term opportunities. Once inside the field, of course, talented practitioners can grow into whatever is thrown their way (and there are always continuing education classes), but, like other professions where technology, art, and science intersect, the complexities involved in becoming a graphic designer will forever require solid educational foundations that can only emerge from intense study in a serious academic environment.

While this may sound like a hard sales pitch for higher education, it is actually a reality check. Wannabe graphic designers must understand: There can be no free academic passes in graphic design. Partygoers need not apply. Gone are the days when someone (like me, for instance) stumbled into the field, learned totally by doing, and got a great job almost by accident (sure it can happen, but the odds are better for winning *American Idol*). Declaring a major in this field is a major commitment.

Yet, that said, with various specialties (corporate, retail, editorial, Web, etc.) and subspecialties (direct mail, promotion, packaging, environmental, etc.) to choose from, the education of a graphic designer can also be fraught with confusion. Unlike degree programs for professions governed by established standards and standardized tests (i.e., law, medicine, engineering, psychology, economics), graphic design—which does not, and perhaps may never, necessitate board-tested certification—has very few strict curriculum conventions and hardly any blanket requirements (other than "knowing" the computer and being "fluent" in type). Basic undergraduate design programs offer more or less the same basic courses, but levels of teaching excellence vary between institutions. Advanced courses differ more widely depending on the expertise of either the permanent or adjunct faculties. In fact, this is both positive and negative. Without standardized certification testing teachers are free to pepper their classes with unique beneficial content, while at the same time, some students may get short shrift if that content is too idiosyncratic. Of course, in schools with tenure tracks, teacher oversight tends to balance out the necessary classes with the quirky ones, but at times graphic design education still seems like a crapshoot.

Despite the tremendous increase in the number of college, university, and art school design programs over the past two decades, it's has been difficult to impose a formula that ensures a solid core curriculum, and a general handbook for how graphic design should be taught (and learned) has eluded those who have made valiant attempts to quantifiably define it. *The Education of a Graphic Designer, Second Edition*, does not presume to be such a bible, but it is a critical survey of how design educators both practically and theoretically consider how pedagogical problems and solutions might be addressed in undergraduate and graduate programs now and in the future. This book is, then, a compilation of theories, proposals, manifestos, and practicum, covering a wide range of educational concerns from those pesky dichotomies like theory versus practice and art versus commerce to debates about classicism versus postmodernism. It promotes contemporary definitions of graphic design, traces the evolution of the field from production artists to author/producers, and considers such topics as ethnicity, eccentricity, and social responsibility within and outside the academy's walls.

The first edition of *The Education of a Graphic Designer* was loosely based on the 1997 education conference that I co-chaired called *How We Learn What We Learn*, sponsored by the School of Visual Arts, which examined how the confluence of history, theory/practice, and new media could be taught in various educational models. The previous edition was divided into three sections: "How We Learn What We Learn," which included critical essays on the essence of learning and teaching; "How I Learned What I Learned," which included interviews with designers and educators on how *they* were educated; and "How I Teach What I Teach," a selection of ideal syllabuses. This last section was so popular it was spun off into an entire book titled *Teaching Graphic Design: Course Offerings and Class Projects from the Leading Undergraduate and Graduate Programs* (Allworth Press, 2003).

Much has changed since 1998 when the first edition of The Education of a

Graphic Designer was published. Computer technology and its ramifications on creative and production practice are only one large part of the changes affecting this field. Although the Internet bubble burst, the Web medium has become increasingly more fertile for designers who, in turn, require more technical education. Motion has become integrated into design and demands that the designer be conceptually astute. And let's not forget branding: Since the first edition, the word has become more ingrained in designers (with good and bad results), and although the basic practice was around for most of the twentieth century, in its current branded form it is a dubious mantra for design students. And finally, the designer as entrepreneur is on the rise, and even cottage industries benefit from media and marketing studies that are being included in design curricula.

So to address the new, retain the old, and perhaps foretell the future, this edition has been revised in the following ways: The syllabus section remains, while the interview section was removed to make room for more than forty new essays, some written especially for this volume. In the years since the How We Learn conference, other events sponsored by the American Institute of Graphic Arts, the College Art Association, and various other educational organizations have sought to examine the present and future trends in education. In addition to sparking forthright discussions, the conference has prompted the presentation of various research and policy papers (many of them subsequently published), which now serve as the bedrock of contemporary educational theory. For this revised edition I have tapped this rich vein and scoured design magazines and journals. Of course, a few of the out-of-date essays were eliminated, while evergreens were retained for those who missed the first edition. Finally, this book attempts to show the evolution of educational ideas: Gunnar Swanson candidly recants his 1998 essay on the importance of liberal arts in design education (which can be found on page 22) with a more recent commentary written for this book (page 33). These essays as well as criticism about educational standards that suggest alternative paradigms play significant roles in this volume.

The final paragraph of the introduction to the first edition of *The Education* of a *Graphic Designer* began this way and it is still a viable penultimate ending:

Taken as a whole, this book is both a white paper on the state of today's design pedagogy and a potential guide for both student and teacher searching for viable methods and progressive ideas. Read individually, each essay . . . and syllabus provide possible models for individuals and institutions.

As a white paper, this book provides possibilities. As a guide it reveals how educators navigate a complex field. But all the contributors have one thing in common that *The Education of a Graphic Designer* ties together: commitment to a process that provides encouragement, inspiration, and insight that will be a solid foundation for future generations of designers on which to practice, teach, and continually learn.

1. How We Learn What We Learn





Education in an Adolescent Profession

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Katherine McCoy

A discussion of graphic design education necessarily expands to include professional practice and theoretical research. These three components—education, practice, and theory—are interactive and describe the scope of any profession.

But is graphic design a profession? The field did not exist at the beginning of this century, and still there is little agreement on the proper nomenclature. Are we graphic designers, graphic artists, commercial artists, visual communicators, communication designers, or simply layout men and pasteup artists? These are just some of the English-language possibilities, and every language shares a similar lack of agreement on terminology. Graphic designers themselves are not the only ones having difficulty defining their role. Graphic design's professional status is by no means universally accepted. For instance, the U.S. Immigration Service and Department of Labor remain uncertain if graphic design is a profession, although they clearly recognize the professional status of other design fields, including architecture and industrial design.

ADVERTISING AND THE INDUSTRIAL REVOLUTION

Graphic design was a spontaneous response to the communication needs of the industrial revolution in capitalist market-based economies, invented to sell the fruits of mass production in growing consumer societies. This has led to the unfortunate assumption that visual communications is a subset of advertising. Many schools in the United States persist in defining the whole field of activity as advertising design or commercial art. Yet, all societies have far broader communication needs than strictly commercial ones. Marxist and socialist political and economic systems have not labored under such a definition, as they have not had the same needs for market-based commercial messages. It seems that the more socialized a country, the more graphic design is associated with cultural and political roles on the side of either propaganda or resistance. In the past three decades, many free-market countries have gradually recognized that there are graphic needs beyond advertising, leading to a split between advertising art direction and "pure" graphic design.

EDUCATION THROUGH IMITATION

As the fledgling field of graphic communications developed, knowledge, mainly of graphic arts techniques, was assimilated on the job, through apprenticeships or trial and error. The new graphic artists used intuition and common sense to solve their communication problems for the first half of this century. Although art schools existed in this time period, the emphasis was on fine art with little interest in applied design. It was professional practice, not education, that developed spontaneously as the first phase of graphic design's professional development.

The early luminaries of graphic design that today's design history books venerate were nearly all self-taught visionaries who relied on their exceptional creative abilities to produce their design solutions—landmarks of originality, power, and inventiveness. In fact, this early reliance on the individual's brilliance remains a significant value among many designers today. Through the years, any education policy discussion at a graphic design professional organization board meeting usually included forceful comments favoring the continuing tradition of the self-trained graphic designer as the best source of innovation and excellence. The concern seems to be that the establishment of educational standards would result in a bland homogeneity of practice—that, in raising the bottom levels of education, we might lose the peaks of brilliance.

This distrust of structured education seems anachronistic to many of us who have seen the substantial growth of design education since World War II, and particularly in the last twenty-five years. Although, until recently, education has lagged behind the development of professional practice, it has produced some excellent models for basic standards and methods for undergraduate education, and is now well into exploring the possibilities of postgraduate education. At least, this is true in our more distinguished schools.

Art schools and university art departments have been slow to realize that design is not simply a commercial application of fine arts ideas and processes. Acceptance of graphic design as a separate and distinct discipline—with significantly different intentions, history, theory, methods, and processes—has been quite slow. Compounding the problem has been growing eagerness among university art departments to compensate for shrinking fine arts enrollments with graphic design programs, whether prepared or not. Entrenched fine arts faculty are teaching graphic design and many start-up graphic design programs rely on just one inexperienced M.F.A. design graduate. As a result, the number of mediocre university-level graphic design programs has grown drastically in recent years, diluting significant progress in the graphic design education community.

APPRENTICESHIPS, ABSTRACTION, AND SIMULATED PROFESSIONAL PRACTICE

Graphic design education has had few models to follow. Before the twentieth century and the industrial revolution's division of labor, which separated conception from production, the European typefounder and printshop apprenticeship were our

only precedents. Architecture, the only design field to predate the century, provides us with the French Beaux-Arts model of architectural education. Although the atelier was often formalized into something close to a small-scale "school" setting, students emulated the master and reiterated the classical orders. This could be interpreted as an imitation of the "professional practice" of the time. Students repeatedly practiced on increasingly complex projects until they acquired the skills of the master. In some smaller ateliers, the students acted much like apprentices, contributing to the more mechanical and elementary portions of the master's professional projects.

The Bauhaus, while it used the master/apprentice workshop method, was a revolutionary school model that contributed much to design education. The Bauhaus attempted to organize and codify the revolutionary ideas of the early twentieth-century "isms" and protomodern experiments into an educational method for the new industrial era. The modernist imperative for abstraction and experimentation was applied to a system of design education fundamentals. The Bauhaus Basic Course was the first in design education to declare that basic design principles underlie all design disciplines, that primary design education should begin with abstract problems to introduce these universal elements before students proceed to tackle programmatic design problems applied to specific scales, needs, and media. This emphasis on abstraction and experimentation, and the rejection of accepted traditional formulas, represented a radical new attitude in education.

After World War II, the Bauhaus idea had a major impact on design schools in the United States. Many adopted the model in its pure form, requiring design students in all disciplines to begin with the system. Today, if one peels away the layers in any design program, the persistent residue of this movement is evident.

Yet, the Bauhaus lessons of the 1920s took a surprisingly long time to be established in European and U.S. schools, largely due to the limited resources of the Depression years, German politics of the 1930s, and World War II. Before the war, the United States benefitted from the arrival of a number of Bauhaus émigrés who introduced these revolutionary ideas to both established universities and new schools. Ludwig Mies van der Rohe, László Moholy-Nagy, and Herbert Bayer settled in Chicago, where Moholy-Nagy began his New Bauhaus. After World War II, Mies's Armour Institute and Moholy-Nagy's Institute of Design (as it was later called) were soon integrated into the new Illinois Institute of Technology, where much of Mies's influence remains in the architecture program, but little beyond Moholy-Nagy's memory remains at the Institute of Design. Walter Gropius and Marcel Breuer went to Harvard's school of architecture, and Josef Albers to Yale. Their influence today might come only from the momentum they gave to those institutions, enabling them to grow and prosper into the present.

Unfortunately, the Bauhaus idea that design fundamentals should precede applied design has been limited mainly to introductory art and design courses, after which design students rapidly move into their areas of specialization. Once in specialized graphic design courses, most schools immediately focus students on applied projects that simulate or imitate professional practice—a modern version of

the apprentice system—rather than continuing an orderly sequence of fundamental design concepts and methods.

INTUITION AND INDIVIDUALISM

This lack of a formalized method has been almost universal in our art schools and university art departments until recently. The typical approach has placed a premium on creativity, a flash of intuition, the Big Idea—and educators have encouraged this through exposure to "samples and examples," as one of our best U.S. educational thinkers has described it. Graphic design magazines and competition annuals have been most students' only resource. Emulating the work of renowned designers could be seen as a weak continuation of the master/apprentice system without the benefit of personal contact between student and master. The Big Idea's reliance on personal intuition and creativity makes it difficult to formalize a codified educational method; educational success is limited to the level of brilliance in both teacher and student.

Following the examples of the great pre- and postwar graphic art pioneers, the Big Idea approach relies primarily on image associations. Drawing on surrealism, it employs unexpected combinations of images and/or contexts to create ambiguity and surprise—"a picture is worth a thousand words." As this approach is essentially semantic, typographic expression becomes a consideration only when used semantically as an image element, with little attention to page structure or systematic message organization. This approach was brilliantly employed by the best of New York advertising in the 1950s and 1960s. But as advertising and "serious" graphic design diverged in the succeeding decades, this approach became associated with advertising's commercialism. (Polish, German, and Japanese poster designers are notable, however, for their continuing powerful use of this imagery—and perhaps it is time for a reappreciation of this rich form of imagery.)

THE NEW STRUCTURED EDUCATIONAL METHOD

Fortunately, the past twenty years have seen a number of American graphic design programs develop carefully structured curricula based on educational methods that go far beyond the superficial simulation of professional practice and the "aha" intuitive approach. This new development is another descendant of the Bauhaus as well, but by way of the "Swiss school" of graphic design. The great Swiss innovators of the 1950s and 1960s can be seen as representing the classic phase of modernism, the heirs to Bauhaus graphic design and other early modern European graphic designers. These Swiss innovators applied the Bauhaus functionalist ethic to a systematic graphic method that shared the Bauhaus values of minimalism, universality, rationality, abstraction, and structural expressionism.

This fresh and highly professional graphic design was first transmitted beyond Switzerland to the rest of Europe and the United States through Swiss design magazines and a few books, notably *Graphis* and the Swiss bibles by Müller-

Brockmann, Gerstner, Hofmann, and Ruder. Then, in the late 1960s, several professional offices began to practice these ideas to solve the needs of large corporate clients in Holland, Great Britain, Canada, and the United States. The method, symbolized by the typeface Helvetica, was enthusiastically adopted by several corporate and institutional design groups, including Container Corporation, Ciba-Geigy, Herman Miller, IBM, and Massachusetts Institute of Technology. Montreal's Expo '67 was a feast of Helvetica and systematic environmental signage, as well as advanced architecture. Eventually, American corporate culture embraced Swiss school graphic design as the ideal corporate style.

Although Swiss school graphic design was first adopted in the United States by professionals in their design practices, soon several leading U.S. graphic design schools followed suit, going directly to the source. A number of Swiss teachers and their graduates, from Armin Hofmann's Basel school in particular, put down roots in schools including Philadelphia College of Art, University of Cincinnati, and Yale. (The Swiss influence seems to have been particularly strong in U.S. and Canadian schools; Europeans have often expressed a certain mystification at this North American reverence for the Basel method.) Manfred Maier's book, Basic Principles of Design, on the Basel foundation program was finally available in the United States in 1977, spreading this method further. Under the influence of this highly structured educational method and its emphasis on the prolonged study of abstract design and typographic form, these American schools began to carefully structure their curricula. Based on objectivity and rationalism, this educational system produced a codified method that was easy to communicate to students, giving them a foundation for a visual design process and composition that went far beyond the superficial emulation of their heroes.

This classic modernist graphic aesthetic is distinctly different from the predominantly semantic imagery of the Big Idea. It stresses the grammar of design and is rather neutral to content. Regrettably, this language of structural geometry has often resulted in a sameness of form that is more the look of function than truly communicative function—an emphasis on formal purity rather than on content. As this aesthetic spread, however, a number of Europeans, particularly in conjunction with the Ulm school in West Germany, began to apply semiotics to visual communications problems. Related explorations in the science of signs were taking place in structuralist philosophy, linguistics, literature, and film theory. Other efforts to develop scientific design processes through communication theory and computer design method began in Great Britain and at the Illinois Institute of Technology during this period. Although the Swiss school never embraced these communication theories, some of the sounder graphic design schools outside Switzerland have gradually begun to incorporate theory into their curricula, providing some foundation for their syntactic formal experiments.

DESIGN HISTORY

Soon after the advent of more structured curricula, design history entered the scene, becoming another major new influence in graphic design education in the 1980s. Until the past few years, U.S. students received instruction only in the history of fine art—a few were lucky enough to study some architectural history. Although today a number of U.S. schools have design history courses, most of these have only one survey course. And it is likely that the vast majority of graphic design programs still have none. Although the British seemed well into this new field when U.S. educators became aware of it, there were virtually no texts available until the publication of Philip Meggs's book, A History of Graphic Design, in 1983. The first graphic design history conference, held also in 1983 at Rochester Institute of Technology, drew attention to the idea that graphic design had a history—a revelation, and an unfortunate testimony to the adolescent state of our profession. A field without a formalized body of history and a community of academic historians could hardly be called a profession.

A concern is the impact that graphic history continues to have on graphic designers' formal vocabularies. From the outset of the discovery of our history, both students and professionals have avidly examined historical graphic styles. In fact, graphic design history too often seems like one big garden of juicy styles ripe for appropriation, resulting in a rather empty graphic eclecticism in the field. Too often, current history courses are taught as superficial surveys of graphic style with no examinations of social, cultural, and political contexts. This only furthers many graphic design students' tendency to stylistic imitation. On the other hand, the discovery of historical design forms was an important element in the development of a graphic postmodernism in which the field shed its preoccupation with modernism, an obsession with perpetual "newness," and expanded its vocabulary of forms beyond the strict minimalism of the Swiss school.

True academic graphic design historians in the United States today could probably be counted on one hand, perhaps two. For the first twenty years of graphic design history courses, the faculty, having never taken such a course themselves, had to become instant self-educated experts. Presently, most faculty teaching history have had only one undergraduate course during their own educations. Sadly, it is still nearly impossible to pursue a graduate degree in graphic design history in the United States—some Americans seek advanced degrees from British universities with well-developed design history programs.

GRADUATE STUDY

A major increase in graduate programs and their enrollments is a healthy indication of our growth. In the past twenty-five years, graduate study has become recognized both by young designers and their potential employers as a valuable asset for professional practice. But the greater significance of graduate schools is their contribution of research and theoretical exploration. Whereas undergraduate

schools must necessarily concentrate on a broad spectrum of fundamentals, graduate programs provide specialized focus and faculty resources. These graduate programs are developing much-needed theory that will, in turn, advance the level of graphic design's professional practice and produce far better educators with advanced degrees.

A number of promising programs are now offering graduate students opportunities to pursue in-depth research and experimentation in design theory, methodology, philosophy, history, criticism, technology, and new design languages. Graduate study should never imitate professional practice; rather, it should challenge students to look deeply into the discipline and into themselves to connect design to its culture, its history, its users, its society, and its technology. A problem yet to be corrected is the persistence of many small, mediocre graduate programs attached to large (and equally mediocre) undergraduate university programs, where graduate study is largely a remedial extension of insufficient undergraduate work.

Ironically, the increasing quality of undergraduate education is proving to limit somewhat the number of prospective graduate students. Many students now leave undergraduate school with impressive portfolios that demonstrate well-developed formal sensibilities, particularly in typography and computer skills. The downside of this success is a tendency for these graduates to regard education as a passive process, spoon-fed from teacher to student and complete in four years, rather than lifelong self-initiated learning. This attitude can lead to a plateau of competence—resulting in the predictably slick work we see around the world—and discourages further growth in challenging graduate study.

ACADEMIC POSTMODERNISM

In the late 1970s, for the first time in the United States, education began to lead rather than to follow professional practice. No sooner had the rules of the Swiss method begun to be taught in U.S. design programs than they began to be broken by a movement that has been described by many terms, but most often as "postmodernism" or "new wave." As professionals and their clients in the United States grew increasingly committed to the Swiss school, certain educators—often early proponents of the Swiss school themselves—began to experiment in their personal graphic design practices, questioning the rigidity and minimalism of graphic modernism.

Working from a modernist foundation, they began to dissect, to multiply, or to ignore the grid, and to explore new spatial sensibilities, introducing layered complexity, pattern, and, frankly, nonfunctional design elements with references to historical design forms. This postmodern (or "late modern" or "decadent modern") wave began outside the corporate and professional mainstream, causing a great deal of debate in the graphic design press for a time. These educator/designers had the independence and experimental attitude necessary to move into new realms, as well as a new awareness of design history and contact with Switzerland's enfant terrible, Wolfgang Weingart, also primarily an educator. They also benefited from their

tolerant cultural and educational clients who were willing to take risks with topics appropriate for experimental solutions. The professional design community began to look to art school publications for new ideas, as educators' work appeared in national design exhibitions with increasing frequency.

These experimentally inclined educator/designers applied their discoveries to their teaching and their teaching experiments to their personal design work. With liaisons made with a few notable young professionals engaged in similar experiments, their academic postmodernism provided a model for a new generation of design students who are now in the mainstream of professional practice in the United States, still filling the graphic design magazines and annuals with examples of what (for better or worse) has become another accepted graphic style.

NEW THEORIES

New wave graphic design was an experiment in formal issues, often indulgent, frequently analogous to the postmodern movement in architecture, and equally controversial at its inception. Yet, even as postmodernism spread quickly throughout all the arts-including music, literature, fine arts, and theater-a new influence arrived in design education. Poststructuralist critical theories, including deconstruction, began to find their way out of literary criticism and into several of the more theoretical and experimental of U.S. graphic design programs. Coming largely out of French literary theory, the emphasis here is not on the author/creator (as in new wave) or on the scientific construction of the design solution itself (as in functional modernism), but rather on the reader/viewer and the possibility of multiple interpretations. Applications of these theories offer the opportunity for other, more subjective and personal layers of meaning, in addition to the purely objective and the informational. These strategies encourage new wave graphic designers to work with layers of meaning and content, as well as layers of form. In addition, this new focus on audience interpretation challenges designers to tailor their visual messages to the special characteristics of each project's target audience.

The deconstruction of meaning holds important lessons about our audiences for visual communicators, but poses some problems as well. While these theories applaud the existence of unstable meaning because of audiences' varying cultural contexts and personal experiences, this can be at odds with the client's need for a single, clear interpretation of the message. Designers find themselves cast in an authoritarian role within this critique. And this focus on theoretical and critical language dynamics sometimes seems to diminish visual values in graphic design, leading to a predominantly verbal approach, as copywriting's dominance has done in advertising design.

Most importantly, we now have a community of educators who not only teach, but also practice experimentally and initiate original theory and research in graduate studies. We seem finally to have reached a fair consensus that graphic design is not commercial art but a true professional discipline encompassing practice, education, and theory. But we hear a continuing debate as to whether this

profession should lean toward art or toward science. The most recent influences add a third contender to the art/science debate. Literary and critical theorists see design as a language to be read—that graphic design might be considered a form of visual literature.

Although all three orientations are preoccupied with communication and meaning, each stresses a different component of the sender-transmitter-receiver communication model. Design as art is concerned with personal content and expression; design as science is concerned with the systematic presentation of objective information; and design as language is concerned with the audience's reading or interpretation of text and content. It would seem that the answer to this debate is that all three components are valuable—that nearly every communication problem requires an understanding of all three. In a mature profession, there is both the room and the need for specialized inquiry, and our schools can offer intensive investigations of the entire spectrum, each choosing its orientation based on its resources and potential. Certainly, graphic design will be the richer for the exploration of all three directions.

THE TECHNOLOGICAL FUTURE

As for the future, we must first look back to the past. The division of labor that separated the specialized graphic designer from the technologies of reproduction may come to an abrupt end, thanks to the computer revolution's impact on design, reproduction processes, media, and distribution channels. Professional boundaries are blurring between client, author, designer, reproduction specialist, and audience. Writing, designing, and publishing are converging; many designers are publishing, many clients are relying on nonprofessional desktop publishing, and many audience members are building personal Web sites.

Just as graphic design has reached some consensus on the parameters of our profession, technology is transforming visual communications. A postindustrial information economy, the successor to the industrial revolution's belching smokestacks, has new enlarged design requirements that go far beyond the print-based commercial communications of manufacturing-based economies. Interactive information and communication technologies require substantial, new visual communication strategies and theory. The incredibly rapid technological advance in the past fifteen years of computer-related design is severely challenging educators to respond and to incorporate these new dimensions into graphic design curricula.

A profession specializing in visual communication would seem to be centrally located in this communications revolution. In the explosion of information breaking over us, there are tremendous quantities of data in need of processing. Computer technologies can fulfill the role of modernist Swiss school objective systems design, as we have seen in desktop publishing. The question posed is, How can all this data be turned into information, and the information into communication and meaningful messages? How can design assist our audiences to turn knowledge into wisdom? It may be that within an environment of abstracted technologically

generated data, the designer's personal viewpoint and interpretive forms may be the humanizing element essential to make the vast quantities of abstract data meaningful, useful, comprehensible, and compelling to our audiences.

But we need highly trained designers to apply visual communications expertise to the entire range of communications technologies, especially in time-based interactive media, computer interfaces, and software that incorporate new dimensions of sound, motion, time, and virtual space. We need graphic designers who are literate in computer science, and we need far more designers literate in cognitive theory and perceptual processes who can give comprehensible form to electronic virtual environments. Design for interactive communications may not be a subset of graphic design, but may in fact be a sister discipline. While design for new media originates in many of the same visual communications history, theory, and method, it must also reach far beyond. This expanded knowledge base points to the possibility that four-year degree programs may not provide a sufficient grounding for this incredibly wide and complex field. Educators are beginning to consider a new model based on a four-year predesign program followed by a two-or three-year professional degree, similar to law or medicine.

Our schools must contribute the training, theory, and research required for this revolutionary dimension of design—and very quickly too, because a number of other fields are moving into this domain very aggressively, in a number of other university programs including computer science, journalism, communications, technical writing, film, and photography. As educators respond, we must retain and enhance graphic design's core value as a cultural activity. Designers can offer a compensating balance to the coolness and the abstractions of technology. Educators puzzle over the best relation of new media design curricula to current visual communications curricula.

Emotion, subjective interpretation, and hand gestures are what humans can contribute and computers' expert systems cannot. Highly technological societies will likely put a premium on subjective human values. This suggests the possibility of a renewed appreciation and new applications of our earlier, intuitive, imageoriented, hand-generated design approaches. Design as a cultural activity, including aesthetic and personal expression, may be the essential source of values, emotions, and play that we all need in the digital domain.



Raising the Bar for Higher Education

Meredith Davis

Until recently, there were fairly clear expectations of design education programs. Designers were secure in the scope of their business; the body of knowledge necessary to practice graphic design was known. College and university graphic design programs expected to be judged on their ability to prepare graduates who could quickly enter the practice as inventive form makers and billable employees. Always subject to the successes or failures of the economy, designers took comfort in knowing their primary competition resided among other designers and that young professionals would work their way up through the ranks as had their predecessors. While all of us could point to "stars" who did not attend college, no one believed self-education to be a workable national strategy for educating young designers. During the last decade or two, however, these conditions have changed.

BACKGROUND

Several years ago, it was estimated by a well-known design employment agency in New York City that there were roughly 350,000 practicing graphic designers in the United States. This estimate is probably low and does not account for the cottage industry in graphic design made possible by easy access to computer hardware and design software. Because there is no licensing or certification in graphic design (as there is in architecture), these 350,000 practitioners may or may not hold degrees in design. It is very unlikely that many of them hold graduate degrees in their discipline. Anyone can call him- or herself a graphic designer, regardless of academic preparation for professional practice. In fact, the U.S. Department of Labor, in its *Index of Occupational Titles*, classifies graphic design as a "trade" that does not require college study.

On the other hand, graphic design has been firmly established as a discipline on college campuses since the 1950s and accounts for increasingly high proportions of student enrollment in art schools and universities. In the best graphic design departments in the country, selective admissions practices turn away as many as ten students for each freshman admitted to degree programs. The introduction of

computers and design software in high schools and the workplace, as well as high visibility for new media, are likely to produce burgeoning interest in college and university graphic design programs well beyond the next decade and well in excess of growth in the field.

It used to be that colleges served the profession by educating intuitive problem solvers in the principles of visual composition, technical understanding of typesetting and printing, and presentation skills. The dilemma for contemporary graphic design educators is the expanding and shifting definitions of the profession for which it prepares young designers. Rapidly changing technological, economic, and social forces demand different design responses than those society expected decades ago. Entirely new areas of practice emerged in the past five years, some of them not well served by the traditional art-based education of most designers. At the same time, many employers lament the poor quality of students' general education and problem solving in other academic areas (such as writing, history, computer science, and the social sciences), which suffer as schools sacrifice one set of skills and knowledge in favor of another. What should constitute the content of a first professional degree in design is now very much the subject of debate.

If one were to believe college catalogs, however, the mission of the nearly two thousand undergraduate design programs around the country¹ are roughly the same: to produce a fully prepared, entry-level design professional. Whether a two- or four-year program, art school, or university, schools claim to provide a comprehensive design education matched to almost any area of graphic design practice. Most two-year programs have abandoned their original technical/vocational missions and purport to substitute for two to four years of education in a bachelor's degree program. Despite the fact that the number and background of faculty, curricular offerings, facilities, and resources greatly influence the quality of educational experiences in these two thousand two- and four-year programs, college catalogs present convincing arguments that there are no professional limits on what their graduates know and can do in design. Only the most design-savvy prospective student, parent, guidance counselor, or employer can cut through the rhetoric of admissions offices to assess the appropriateness of one program over another.

At the graduate level, where the number of programs is growing, the same confusion about mission occurs. Students enroll in these programs to compensate for poor undergraduate preparation, to specialize or refine skills, to change careers after baccalaureate study in another discipline, to upgrade methods and knowledge that did not exist during their time in undergraduate school, to focus on theory and research, and/or to qualify for university teaching careers. The pedagogy in these programs varies from independent study in which students meet only periodically with individual faculty, to piggybacked undergraduate and graduate registration in the same courses, to fully developed graduate-level curricula that speculate on the future of practice and attempt to build a research culture in the field. There is one PhD program in visual communications in the United States (at the Institute of Design) and several in development at other universities. Clearly, schools are

struggling to determine the appropriate models for graduate education and to address the growing need for research and advanced study in the field.

In most professional fields, accreditation standards address the difficult problems of defining appropriate minimum criteria for the evaluation of educational programs and providing some level of evaluation understood by the public. The National Association of Schools of Art and Design (NASAD)² is the government-authorized body for the accreditation of graphic design programs in U.S. colleges and universities. NASAD's overly general, fine arts–based criteria have handicapped efforts to improve the overall quality of design programs through rigorous assessment of success. Many of the best programs in the country forego NASAD accreditation in the belief that its standards bear little resemblance to the professional practice of graphic design and out of frustration that accreditation teams rarely even include designers. The American Institute of Graphic Arts (AIGA) recently worked with NASAD to revise guidelines and criteria for the accreditation of graphic design programs in hope that more comprehensive definitions of standards and review processes for professional design curricula will improve the overall quality of academic offerings.

FINDING THE "BIG IDEA"

When I attend meetings of designers, I hear the same complaints. "My client now has his secretary designing the newsletter." "I can't outbid those twentysomethings with Macs in their apartments." "My client wants a Web site but can't tell me why." The phrases are not-so-subtle indications of shifts in the profession and the expectations of clients. Computers and design software provide public access to the means of design and production, at whatever levels people deem satisfactory. And while designers lament significant losses of quality in many instances, the bottom line is that some clients can't see the difference, don't care, or are not willing to pay for it. It makes little sense, therefore, to continue to educate tens of thousands of students each year solely in the design and production of beautiful form. This is not to say that the need for inventive form will go away or that educational institutions should completely abandon this as an objective of their programs. But it does signal that the survival of the profession may depend less on its traditional education in art-based concepts and more on responding strategically to changes in the business, social, and communication environments. While many schools claim their graduates can handle the analysis and solution of large-scale or complex communication problems, rarely are their college experiences grounded in study that supports designer development of successful strategy at the levels demanded by today's design problems.

Design methodologist J. Christopher Jones describes a hierarchy of design problems. At the lowest levels are components and products. These represent the types of design problems that exist in simple societies like those in the early history of this country. At the upper levels of Jones's hierarchy are system-level problems (demanding related products or activities) and community-level problems (involving

related systems). Design problems at these higher levels are characteristic of complex postindustrial societies like the one in which we live.

While our design problems usually exist at the system and community levels, our design responses are not always congruent. The automobile, for example, was designed as a "product" for getting us from one place to another whenever we want to go. Because it was not conceived as a product nested within several related systems, it also created traffic jams, neighborhoods divided by interstates, and unprecedented levels of air pollution. Unfortunately, much of our graphic design activity (and design education) also approaches design problems at the product and component levels. We frequently define our task as simply designing a brochure or Web page. Even corporate identity—the classic "systems" problem in graphic design—is reduced to a product by most graphic designers, beginning with the components of logos and typefaces and expanding as a graphic standards manual. Rarely are these identities envisioned as part of a communication system that includes the needs of salespeople working with customers, the branding of products sold by the company, the place of design activity within the corporate hierarchy, and the technology used for communicating among employees.

The teaching strategies in most design schools discourage systems-level thinking by asking students to design products (a book, brochure, multimedia presentation, etc.), usually outside the context of the systems to which they belong and even, in some instances, outside the context of use. Project briefs are written by faculty, not students, and the criteria for success (legibility, good composition, original idea, etc.) are usually known before the student begins work. The outcome is usually critiqued by faculty and students or other designers (rarely by clients or audiences), using the language of the fine arts or the technology with which the design was produced. Students rarely ask whether the problem is worth solving, move beyond simple demographics in defining audience, or explore how the product fits into the larger context of the client's organization—let alone the audience's culture and everyday lives.

Innovative curricula, like the one at the Institute of Design, are beginning to tackle these issues. Coursework focuses on design planning and the development of large- and small-scale strategies that address complex communication and business problems. These are not classes about running design offices, like those one might find in the business components of many design curricula. Instead, this instruction prepares students to function at the highest levels of corporate decision making and in the solution of complex problems in the workplace and education. Practical methods for defining and assessing design problems and the audiences they serve are at the core of these curricula. New technology is not seen as a means for replicating traditional design processes (such as pasteup and photo retouching), but as a means for addressing audience needs and business processes.

WHO'S OUT THERE?

It is difficult to practice design today without confronting marketing data as the mantra for successful communication solutions. Focus groups, usually defined in broad demographic terms, dominate our lives, expressing their preferences in response to questions most designers find confining. If you are not convinced that the age of the mass audience is dead, visit your local newsstand to see magazines targeted so narrowly that teenage boys who surf in southern California now have several reading choices. Ironically, at a time when technology makes it possible to reach unprecedented numbers of people with massive amounts of information at exactly the same time, we recognize the need to tailor communication for increasingly specific definitions of audience.

If, as designers, we're not thrilled with the work of marketing specialists who poll audience opinion in terms of what already exists, what can we offer as an alternative? Where is the compelling research that supports our intuition that there are better ways to describe how people are different than by their past buying habits?

There is no deficit of theory or research about how audiences perceive and process information. Yet, these are rarely the content of a designer's education. Folklore and intuition dominate most designers' rationales and are poor ammunition in the face of marketing's numbers. Fields such as linguistics, cognitive psychology, anthropology, sociology, and other social science disciplines hold enormous insight for the work of graphic designers, yet most college graphic design curricula indirectly discourage enrollment in such classes by the few credits they make available for nondesign study. Furthermore, design schools do little to integrate social science issues into project briefs when students do engage in appropriate coursework. And issues of audience generally take second place to issues of aesthetics in most design critiques. It is little wonder that employers find young designers self-absorbed with making personal statements in client-based work and incapable of presenting convincing arguments for their design solutions to nondesigners.

At the same time, existing theories about how audiences interpret visual and verbal messages have rarely been evaluated within the context of design in ways that derive transferable principles. There is a need for considerable research to develop practical strategies for reaching conclusions about the design of information. In a handful of graduate programs, students and faculty work to move theory into practice. North Carolina State University, for example, divides its two-year master's curriculum into three critical content frameworks built around the issues of audience: cognition, culture, and new information environments. The first framework applies research—from cognitive science, linguistics, and learning theory to practical communications solutions that address differences in audiences' cognitive styles. It examines how recurring schemas and stereotypes exert powerful influences on social cognition. The second framework looks at how culture shapes and is reflected in communication artifacts, drawing heavily from social theory,

anthropology, criticism, and art and design history. The third framework explores the implications of study in cognition and culture for the design of human interaction with new technology and the building of communication communities. North Carolina State University will allow its students to extend such research through a PhD program in design that makes parallel coursework available in a variety of nondesign disciplines.

While the students who graduate from these advanced programs function well in contemporary design practice, the objective of their studies is speculative and focused on the future, not on staffing mainstream offices or redressing past deficiencies in the student's design education. The model for these programs is not the atelier or graduate study in painting or sculpture; it is the complex interdisciplinary environment in which design is likely to be practiced in the future and in which designers will play a formative role.

Clearly, the criteria against which the effectiveness of design education should be measured have changed. The diversity of these criteria signals the need for radically different programs from which students and employers may choose. It may no longer be possible to provide a "general" education in design and expect graduates of these programs to excel in practice. New standards of excellence encourage new methods of instruction and curricular innovation that are responsive to shifting definitions of professional practice. In other cases, schools push the profession to seize emerging areas of practice that are likely to dominate the future and that could be lost to less-creative problem solvers. Finally, schools recognize the need to study the discipline of graphic design as well as the practice, to add to the body of knowledge for which there may be no current practical use. As the profession prepares for practice in the next millennium, it must partner with schools and set high standards for both the field and education.

NOTES

- 1. There are only 110 architecture programs in the United States and forty-seven in industrial design. The ratio of students to professionals in graphic design far exceeds that of other design disciplines.
- 2. The word "Design" was added in the 1970s when graphic design enrollments began to skyrocket.



Frank Baseman

The debate over the importance of liberal arts within a graphic design curriculum may not be news—but it is time to listen. Each of three AIGA Design Education conferences in 2004 and 2005, included discussions urging the integration of liberal arts in design programs.¹ And in Jessica Helfand and William Drenttel's presentation, "Culture Is Not Always Popular," at the AIGA National Design Conference in Vancouver in 2003, Helfand asked the burning question, "Where does this come from—this notion that thinking and making are separate acts? That graphic design must be inherently anti-intellectual because it is a creative enterprise?"²

Drenttel added, "Designers talk about creating a body of work, but they seldom talk about acquiring a body of knowledge. They take pride in being makers, but seldom identify themselves as thinkers. They claim to be emissaries of communication—to give form to ideas. And while we would like to believe this is true, it seems to us that all too often, we, as designers, are called upon merely to make things look good—rather than contributing to the evolution and articulation of ideas themselves." Helfand concluded: "In most design schools, we discourage learning a second language because it requires too much time in the language lab and therefore away from the studio. Along the way, our young designers aren't expected to really study science or math; history or anthropology; economics; music theory or literature. They're not even really required to learn to write. How is this possible?"

Graphic design education has long been, in large part, concerned with form-making. But it must also embrace conceptual thinking, idea generation, and the communicating of messages. Form is important: The basic principles of color theory and composition, typography, the use of imagery and the techniques of image-making, and the like must be taught. But design must not be judged on form alone. What is the message to be conveyed? Was the audience considered in an appropriate way? Was proper research conducted regarding functionality, usability, and the culture and context of the problem/solution paradigm? These questions provide the conceptual foundation upon which every graphic design problem must be considered.

Moreover, graphic designers must be taught to gather information on the subject matter at hand so that they end up knowing the proverbial "little bit about a lot of things." They don't necessarily need to become experts on the relevant subject matter, but they must be able to achieve at least a working knowledge. A strong foundation in the liberal arts will help utilize communication skills and strengthen these information-gathering and research skills.

That design students must take courses providing general knowledge cannot be disputed. Anthropology, economics, history, language, literature, marketing, math, sciences, and sociology are viable and necessary. The challenge is to find ways to bring the content of the liberal arts coursework into the graphic design curriculum. In "Plain Talk about Learning and a Life—in Design," Sharon Poggenpohl discusses the process of bringing this material into the studio class: "In stronger undergraduate programs, these two worlds (art and science) become blended as students bring the content, methodology and philosophy of their world investigations into the design lab, yielding more ambitious and stronger investigations in design." 5

Writing (as noted elsewhere in this book) should be an integral part of a graphic design curriculum, not just an add-on. Students should be required to write more, incorporating writing into the curriculum wherever possible: from project briefs and proposals to the text for a book, from headlines to taglines and catchphrases. Reinforce the notion that writing is an essential part of being a graphic designer (it's not just the pictures). This can be accomplished right away in Typography 101. In addition to teaching the formal qualities of letterforms, also encourage students to see the letterforms as words and that those words can have meaning. In an Identity course, students should write a detailed position paper describing the kind of establishment or institution for which they will be creating an identity, thinking long and hard before they actually begin to "design" anything. Encourage this brainstorming, this conceptualization, and require students to do research on their projects even before they begin to design. Liberal arts should also be part of the Design Thesis or Capstone course (typically, in the senior year).

The study of language and cultures other than one's own has never been more important—not just for the greater global understanding and communicative knowledge that one acquires by studying a foreign culture and language, but also for the rudimentary aspects of language usage. With multiculturalism sweeping the world today and our age of global economies and high-speed information, this only makes more sense. A strong foundation in the liberal arts helps to foster this intellectual rigor, which will result in stronger thinkers.

With the advent of computers and their associated technologies, "Anyone can be a designer." As design educators, we see it all the time: the kid who had Photoshop in high school and so uses all the filters and effects because they look cool. But if there is no content, there is no meaning.

Graphic design education today is vastly different than—yet remarkably the same as—twenty years ago. Computers and digital technologies have changed our practice in dramatic ways, but the basic educational issues are the same. The

increasing complexity of the graphic design industry, the specialties in digital, multimedia, and Web-based work that have developed more recently, and the increased number of graphic design programs all lead to a highly competitive field. Yet, the need for clear, creative, effective communication is still the same—if not in higher demand—as corporations and institutions attempt to rise above the din of our inundated world.

The importance of strategic thinking within our profession in the future was emphasized by Patrick Whitney of the Institute of Design at the Illinois Institute of Technology in his presentation, "Designing as Strategy," at the AIGA Gain Conference in New York in 2004. He predicted that the growth areas within the graphic design profession would be in design planning and strategy.⁶ He suggested that "designers need to shift their design thinking to apply not just to communication problems, but to helping policy makers plan new policy."⁷

Who knows what new invention, issues, or ways of practicing will emerge in another ten, twenty, or thirty years and how this will affect design. Whatever changes lie ahead, students who are broadly educated, who understand the principles of how to address a communication problem effectively, and who are prepared to think strategically and with broad-based conceptual skills will be able to adapt to those changes. By embracing the liberal arts, design programs will train designers to become thinkers. And those thinkers will be the leaders of our profession in the future.

NOTES

- "FutureHistory, AIGA Design Education Conference," Chicago (October 2004)
 www.futurehistory.aiga.org; "Schools of Thoughts 2, AIGA Design Education
 Conference," Los Angeles (March 2005) www.schoolsofthoughts2.aiga.org; "Revolution: Philadelphia, AIGA Design Education Conference," Philadelphia (June 2005)
 www.revolutionphiladelphia.aiga.org.
- Jessica Helfand and William Drenttel, "Culture Is Not Always Popular," AIGA National Design Conference, Vancouver, B.C. (October 2003) www.designobserver.com/ archives/000048.html.
- 3. Ibid.
- 4. Ibid.
- 5. Sharon Helmer Poggenpohl, "Plain Talk about Learning and a Life—in Design," Voice: AIGA Journal of Design and Design Education, (September 18, 2004) www .journal.aiga.org.
- Patrick Whitney, "Designing as Strategy," presentation at AIGA Gain Conference, New York (October 2004).
- 7. Ibid.



Graphic Design Education as a Liberal Art: Design and Knowledge in the University and the "Real World"

Gunnar Swanson

Although this essay concentrates on issues of graphic design education, my arguments also pertain to education in other areas of design; most apply to arts education and many are relevant to postsecondary education in general. I assume a university setting, although many of the ideas presented in this essay apply equally to art schools. Finally, just as the essay calls for a broad view of design education and a broad context for design, I hope it will be read in a broad context and the arguments applied wherever appropriate.

INTRODUCTION

With all the pressures on higher education and all the questions facing graphic designers and design educators, why reconsider the basic premise of graphic design education? Since inertia tends to discourage basic change, why not concentrate on excellence within the current system?

The answers to those questions center on both fairness and survival. Ask most graphic design teachers what happens to their students who do not become graphic designers and you will get the same silence or lecture you hear from basketball coaches when someone asks about players who don't go on to the NBA. Not just the reaction is comparable, the whole situation is. Measuring the success of college sports by the number of players that go on to play professionally often leads to players being cheated out of a real education and a chance for a satisfying life. We need to consider whether our attitudes toward "professionalism" in design education do the same.

GRAPHIC DESIGN EDUCATION

Though hardly homogeneous, the vast majority of graphic design programs, whether in vocational schools, art schools, or universities, are, at least in concept, vocational training programs.

The Bauhaus, which was grounded in craft ideology and stressed intuitive solutions to design problems, provided the model for much of modern design

training.¹ Hannes Meyer, the architect who became director of the Bauhaus after Walter Gropius, brought in experts from other disciplines as speakers, but his tenure was too short to have established a design theory at the Bauhaus. When László Moholy-Nagy formed the New Bauhaus in Chicago in 1937 (which later became the Institute of Design at Illinois Institute of Technology), he included lectures by philosophers and scientists.² Since then, various other programs have introduced semiotics, literary theory, etc., to their curricula, and there is a growing recognition that a wide-ranging education is needed for a synthetic and integrative field such as design to progress.

By "synthetic" I mean that design does not have a subject matter of its own—it exists in practice only in relation to the requirements of given projects. The path of progress for the field is not defined by the next great unsolved design problem. Design is "integrative" in that, by its lack of specific subject matter, it has the potential to connect many disciplines.³

Even while some design programs are strengthening their liberal studies requirements, the tendency toward professional rather than general education at colleges and universities has been growing for the past two decades. Graphic design programs are, on the whole, doing well. Students and parents alike seem to be impressed with the idea that there will be a job waiting at the end of four years of study, and at many schools, graphic design has made up for declining enrollments in traditional fine arts programs.

As the estimated two thousand graphic design programs in the United States pump out more graduates than there are jobs in traditional graphic design firms and corporate design departments, the natural tendency may be toward entrenchment of professional training. Each school would reason that, in fairness to its students, it must do a better job of providing entry-level job skills so its graduates have a chance in this competitive job market.

In light of this tendency toward professionalism, it may seem counterintuitive that I suggest that we not only increase the augmentation of design training with more liberal studies, but also reconsider graphic design education as a liberal arts subject.

THE HISTORICAL CONTEXT OF THE LIBERAL ARTS

The concept of liberal arts was first delineated by Aristotle. He characterized liberal studies as those studies fitting for the education of a freeman. He made "a distinction between liberal and illiberal subjects," the latter being those that would "make the learner mechanical . . . [and] make the body, soul, or intellect of freemen unserviceable for the external exercise of goodness."⁴

Aristotle defined the liberal arts as having four points. First, they are not mechanical. Second, they are not utilitarian, i.e., they have intrinsic value; even if extrinsically useful, their pursuit is useful in and of itself. Third, if an area of study is undertaken as a liberal study, there must be no specializing that would restrict the mind. Finally, liberal arts study must be undertaken for its intrinsic value, not

merely to earn a living or to impress others. (Thus, intrinsically valuable studies undertaken for the wrong reasons would be disqualified as illiberal.)

It would be easy to dismiss this classical view of the liberal arts as a product of and for a society where routine work was left to slaves. Although the distinction of liberal versus illiberal studies came to light in that cultural context, the development of reason, moral grounding, and pursuit of truth was a prerequisite for citizenship in the fullest sense. Despite their primary interest being intrinsic, Aristotle recognized their utility in building a democratic society. Since our conception of democracy is broader based and more inclusive than that of the ancient Greeks, the current cultural context does not argue for the reduction of liberal studies, but rather for broadening their influence.

It is not clear what subjects Aristotle considered liberal, but the Greeks and, later, the Romans came to agree on seven liberal arts: the trivium of grammar, logic, and rhetoric and the quadrivium of arithmetic, geometry, music, and astronomy. In medieval times, reason was subordinated to revelation until St. Thomas Aquinas harmonized Christian doctrine and Aristotelian philosophy with the addition of theology—reason leading to the knowledge God had revealed. The humanism of the Renaissance rediscovered Aristotelian liberal education through the rediscovery of classical literature and came to equate liberal education with literary studies.

It was not until the nineteenth century that various concepts of liberal education akin to Aristotle's theories were reintroduced (reconsidered, of course, in the light of modern knowledge). Cardinal John Henry Newman's views are seen as more or less purely Aristotelian, but practical values played some part. In his lectures during his tenure as rector of the Catholic University of Ireland in the 1850s (published in 1873 as *The Idea of a University*), Newman claimed that "when the Church founds a university, she is not cherishing talent, genius, or knowledge for their own sake, but for the sake of her children . . . with the object of training them to fill their respective posts in life better, and of making them more intelligent, capable, active members of society," but his main emphasis was on purely intrinsic value. According to Newman, the University's "function is intellectual culture. . . . Intellect must have an excellence of its own . . . the word 'educate' would not be used of intellectual culture, as it is used, had not the intellect had an end of its own; that had it not such an end, there would be no meaning in calling certain intellectual exercises 'liberal,' in contrast with 'useful,' as is commonly done. . . . "6

The nineteenth-century English critic Matthew Arnold modified Aristotle's view that the pursuit of knowledge is intrinsically worthwhile and the fulfillment of man's rational nature. Arnold concentrated on *building* rationality—in his view, knowledge is important in that it allows one to develop abilities and live a harmonious natural life.⁷

The value of the liberal arts, however, was not universally assumed. Harvard instituted the elective system in 1883 with the purpose of allowing students to move in the direction of their future careers. Johns Hopkins University was founded in 1876 as the first research institute in the United States. In 1890, the Harvard Graduate School of Arts and Sciences was established in much the same

mode. Its main purpose was, and still is, the production of college teachers with doctoral degrees, while producing scholarly research that is, at least in the ideal, not solely utilitarian.

A movement for "liberal culture" in opposition to both utilitarianism and research was significant enough that, in 1909, Charles William Eliot, who instituted both the elective system and the graduate school, was replaced as Harvard president. Within a few years the debates over educational philosophy died down. Most universities soon accommodated utilitarianism of one sort or another and the liberal arts.⁸ The notion that professional training, general education, and research were incompatible lost most of its voice in the early part of the twentieth century. This accommodation of multiple approaches continued, expanding the nature(s) of the university. By the mid-1960s, Clark Kerr, then president of the University of California, coined the term "multiversity," comparing the "idea of a university" to a village with its priests, the idea of a modern university to a one-industry town with its intellectual oligarchy, and the idea of a multiversity to a city of infinite variety.⁹

In such a "city of infinite variety," which provides the football team for local and national entertainment, the hospital where babies are born, as well as scholarship, professional training, continuing education, and a multitude of other services to diverse publics, Kerr recognized that "there is less sense of purpose than within the town but there are more ways to excel." The clarity of Cardinal Newman's goals may be lost, but the opportunities are more numerous and varied.

COLLEGE EDUCATION TODAY

It may be that universities have survived by being, to a great extent, all things to all people. Higher education has largely escaped serious damage from parallel charges of elitism and abandonment of traditional standards, eggheadedness and mundaneness, or impracticality and bourgeois debasement by maintaining a wide variety of virtues, thus maintaining support of an eclectic plurality.

However, attempting to be all things to all people has produced some paradoxes. For example, the same psychology course may be a start toward the understanding of human behavior for one student, a "breadth" requirement for another, and an introduction to what will be a specialized field of study and research for a third. An art history course might add spiritual enlightenment to the psychology class's list of aspects; an English class might also provide remedial communication for native speakers and, increasingly, language training for foreign students.

Largely because standards of excellence and paths of career progress are more clear within the research/publishing/specialization path than they are in a teaching/personal enlightenment/broad education one, the liberal arts have become less an approach to integrated learning and more of a list of fields defining "broad education." Even though the vast majority of students have no intention of specializing in a given academic subject, classes tend to be preparatory for graduate study and, thus, preprofessional education.

Although there may be careerist tendencies, the system of students with traditional subject majors assumes preparation for life as well as vocation. Philosophy teachers, for example, do not measure their success based on whether the majority of their students become philosophers. Likewise, the goal in literature is not only to create producers of literature or literary critics, but to create literate people. By contrast, ask teachers of graphic design about students who don't make careers in design or a related field. Most often, those students are seen as failures. There is little feeling that graphic design education has prepared the student for life or a career other than design.

On the whole, design schooling has not helped students become broader-thinking people who can help shape a democratic society. The tools for analysis and insight of many disciplines have broad extra-disciplinary application for understanding the world. The tools of graphic design do not seem to serve much purpose beyond a graphic design career. Graphic design education is not, for the most part, education. It is vocational training, and rather narrow specialized training at that.

VOCATIONAL TRAINING FOR A CHANGING VOCATION

It has become a cliché of career counseling to point out that most of today's jobs won't exist in fifteen years and most jobs that will exist in fifteen years don't exist now. Certainly the changing names of programs—commercial art to advertising design to graphic design to visual communication and sometimes back to graphic design—testify to the fact that, although there may be graphic designers in fifteen years, graphic designers will likely be doing something very different from the present vocation of graphic design.

Most four-year graphic design programs try to teach something beyond "entry-level skills," but preparing students for their first job is often seen as practical education. It is questionable whether such job training could rightly be called education or even if it is rightly deemed practical. If simulating a "real-world" environment is the best preparation for a designer, design training should take the form of apprenticeships—what could be more real than the real world itself?

The entry-level jobs of the past were largely in production. Since pasteup artists are mostly a thing of the past, thanks to small computers, many programs now struggle to produce computer operators. It is only faith that makes us assume that upward mobility will be available to the contemporary version of the often-trapped (and now largely unemployed) pasteup artists. The Quark XPress®, Adobe Illustrator®, and Photoshop® jockeys, today's electronic pasteup artists, may soon find their skills obsolete in the next technological revolution.

Design teachers should teach basic principles of form and communication, but are, by teaching what *they* were taught, teaching the graphic designers of the twenty-first century how to be mid-twentieth-century graphic designers. Educators can and should examine trends (we know, for instance, that electronic communication will increase and become more flexible than it is currently) and

try to prepare themselves and their students for the future. There is only one thing, however, that we really know with precision about the future—it will be different from today. Therefore, the best thing we can do for design students is to make them adaptable.

GENERAL EDUCATION AND ADAPTABILITY

The correlation between general education and adaptability makes a belief in general education for designers widespread, although hardly ubiquitous. This belief is often tempered by a distinctly anti-intellectual streak in design teachers. In the mid-1970s, an industrial design teacher of mine told me I was "too articulate" and that great design happens when designers have no other way of expressing themselves than with form. Paul Rand, perhaps the best-known living graphic designer and design educator, recently wrote that a "student whose mind is cluttered with matters that have nothing directly to do with design . . . is a bewildered student." Clearly, many design teachers and many design students see "academic" classes as time stolen from their true purpose—the design studio.

Rand's denial of "matters that have nothing directly to do with design" places design education clearly in the realm of vocational training. In addition to his questionable assumptions about the separability of form from meaning, Rand's statement assumes that any current list of subjects that "have nothing directly to do with design" will apply in the future.

Sharon Poggenpohl, a professor at the Institute of Design at IIT, argued well for the opposite stance.¹² She adopted the term "contrarian" from Wall Street, where long-term players, recognizing the cyclical nature of the stock market, determine what everyone else is doing and then do the opposite. I believe design educators must be contrarians and look at the fact that "practical education" is neither practical nor education and move beyond, as Charles Bailey puts it, the present and particular.

GRAPHIC DESIGN AS A LIBERAL ART

What would graphic design as a liberal art entail? It would no doubt take a variety of forms. Certainly, the current trend toward history and theory would be an element, but the switch to "liberal" design will require a change in outlook. We must begin to believe our own rhetoric and see design as an integrative field that bridges many subjects that deal with communication, expression, interaction, and cognition.

Design should be about meaning and how meaning can be created. Design should be about the relationship of form and communication. It is one of the fields where science and literature meet. It can shine a light on hidden corners of sociology and history. Design's position as a conduit for and shaper of popular values can be a path between anthropology and political science. Art and education can both benefit through the perspective of a field that is about expression *and* the mass

dissemination of information. Designers, design educators, and design students are in a more important and interesting field than we seem to recognize.

DESIGN AND SCHOLARSHIP

What form the new liberal field of design would take is unclear. Currently, there is no clear role for design scholarship. Unlike most traditional fields of scholarship, design has no subject matter of its own, so it is hard to find models for this new approach. Design, in practice, exists primarily in response to an externally generated need or situation. Richard Buchanan, chair of the department of design at Carnegie Mellon University, pointed out that the "subject matter for the designer is an indeterminate problem, made only partly determinate by the interests and needs of clients, managers, and the designer." This contrasts with the more clearly defined subject matter found in other academic fields.

At present, design scholarship largely takes the form of historical analysis or criticism. Although there is a place for the history of design in and of itself (just as in the histories of science and many other academic fields), it would be absurd to suggest that any field abandon itself wholly to the contemplation of its own past. Design in any full sense will, of course, involve methodology and the creation of designed objects.

Clearly, most design programs would include a significant concentration on skills. This would hardly be unique to academia—language programs do not hesitate to have students conjugate verbs, chemistry students learn laboratory procedures, and there are professional aspects to social science classes. Technique will probably be a large part of any design program, but the meaning of techniques will take on more importance.

Buchanan has suggested rhetoric as the closest available model for design.¹⁴ Rhetoric, as a field of study, is both the practice of verbal persuasion and the formal study of persuasive verbal communication. Design may be seen as the visual counterpart to rhetoric. Buchanan is quite persuasive in his argument that through designed objects, "designers have directly influenced the actions of individuals and communities, changed attitudes and values, and shaped society in surprisingly fundamental ways."¹⁵ Buchanan writes primarily of what is usually called product design or industrial design, but the case for graphic design as a parallel to rhetoric is more obvious.

Graphic design, more than other design areas, is usually directly about persuasion—intellectual, logical, aesthetic, and emotional. Thus, the balance of practice and analysis of rhetoricians clearly makes sense for graphic design. This is not to say, however, that the formal procedures of rhetorical study should be applied to graphic design to the exclusion of all others. Grammatical, semiotic, theatrical, anthropological, psychological, physiological, philosophical, and political perspectives also need to be considered.

DESIGN AS A LIBERAL ART VERSUS DESIGN PLUS LIBERAL ARTS

Mark Salmon and Glenn Gritzer argue for integration of liberal arts, in general, and social sciences, in particular, into the professional design curriculum. ¹⁶ They reject the strategy of art faculty introducing social science material because of lack of academic preparation on the part of faculty, and that of team teaching with social scientists because of assumed lack of willingness on the part of faculty. Salmon and Gritzer advocate parallel content, where social science courses that correspond to the design curriculum are offered. For instance, interior design students would study courses on marriage and family, sociology, and occupations, while their design courses would cover domestic design, office design, etc.

Such courses are to be encouraged, but while parallel disciplines are the basis for understanding the context of design, we can hardly expect a real examination of design issues by nondesigners. Research into issues of typography and understanding, for instance, generally misses the questions a designer would ask. (Broad categories, such as sans serif typefaces, are often assumed to be homogeneous, alternative design solutions are rarely considered, etc.) Other fields can provide a framework for basic consideration of some design issues, but we cannot rely on them to advance design any more than medicine can rely solely on the work of biologists. The concerns of design will not be directly addressed by academia until it *becomes* an academic subject.

BALANCING SKILLS AND UNDERSTANDING

A primary task of design education is to find the balance between skills training and a general understanding that will benefit students, the field of graphic design, and working professionals. Bailey charts his ideal balance of skills and knowledge in British elementary and secondary education. Under his scheme, students in the earlier grades will be primarily involved in learning "serving competencies" or skills. Later, social sciences and other "inquiries into goings-on themselves manifestations of intelligence," will share the stage with, and ultimately take over from natural science and the like, or "inquiries into goings-on not themselves manifestations of intelligence." Bailey acknowledges that his allocation applies only to "a liberal and general education. Nothing is said . . . [about] specialist training." If for no other reason, Bailey's particular division cannot be applied directly to graphic design education because it ends at an age before most design training begins. It does, however, offer an analytical framework for considering components of an education.

It is too early to assign the activities of students in the hypothetical liberal field of design, but it is interesting to observe that the present pattern of education is often the opposite of the most common forms of professional training. At the risk of overcategorizing, most professional education begins with general knowledge, moves on to an overview of the profession's underpinnings, and concludes with specialized activity.

As a general pattern, design training runs in the opposite direction. Although

usually preceded by a "core" class, common to many of the arts, undergraduate training tends to be specialized design skills. It is only in the upper division, if at all, that undergraduates are introduced to history, theory, or a broader perspective on design. Early postgraduate work is often remedial skill enhancement, and it is only at the level of M.F.A. study that many design programs introduce what resembles the abstract overview provided a freshman in an introductory social science course.

IS DESIGN IMPORTANT?

Designers and design educators spend much time and energy talking about developing public awareness of design and how to gain recognition for design. Victor Margolin points out that arguments over legal theory and even literary theory appear in popular magazines because people can see their importance to their lives, but design remains unnoticed. Can studying design be of general, not just professional, interest? Can the study of design inform other areas of study? We assume that a design student would benefit from studying anthropology; we need to consider whether an anthropology student would benefit from the study of graphic design. Do we really have anything to offer outside of the sometimes questionable promise of a job?

Even a field as abstract, specialized, and self-referential as cosmology recognizes that its activity, in addition to its intrinsic value, ultimately matters because of its relation to general knowledge. In *A Brief History of Time*, Stephen Hawking writes:

What would it mean if we actually did discover the ultimate theory of the universe? . . . In Newton's time it was possible for an educated person to have a grasp of the whole of human knowledge, at least in outline. But since then, the pace of the development of science has made this impossible. . . . Seventy years ago, if Eddington is to be believed, only two people understood the general theory of relativity. ¹⁹

Hawking noted that relativity is now widely understood, at least in outline, and an ultimate theory of the universe could be absorbed by nonphysicists. The real importance of the goal of cosmology for the world's best-known cosmologist seems to be that philosophers could understand science as they did in the eighteenth century. Hawking bemoans the fact that science has become so technical and mathematical that only specialists can understand, and the scope of philosophy has been reduced from the great tradition of Aristotle and Kant to Wittgenstein's statement that "The sole remaining task for philosophy is the analysis of language." If a unified theory of the universe could be understood by everyone, Hawking suggests:

Then we shall all, philosophers, scientists, and just ordinary people, be able to take part in the discussion of the question of why it is that we and the universe

exist. If we find the answer to that, it would be the ultimate triumph of human reason—for then we would know the mind of God.²¹

The point is that, although each branch of study may be an end in itself, the progress of each field is doubly validated as it contributes to general knowledge. The revolutions in physics that Hawking seeks to surpass would not have come about without previous breakthroughs in mathematics. The revolution in literary criticism of the 1970s and 1980s would not have come about were it not for previous breakthroughs in linguistic theory.

In light of those linguistic and literary revolutions, I should point out that I don't share Dr. Hawking's disdain for Wittgenstein's goal of language analysis, although I do agree that a single task for any field might represent a too-narrow viewpoint. If the word "language" is used in the broadest sense, then language analysis is at the core of much of the humanities and social sciences. Design, and graphic design in particular, is in the position to be at the center of this study.²²

Design's past failure to have carved a proper academic niche for itself may, in the end, be one of its saving graces. Design as a professional practice has often bridged fields as diverse as engineering, marketing, education, and psychology. Design as an academic study can do no less.

NOTES

- 1. For a discussion of the development of modern design education, see Victor Margolin, "Design Studies and the Graphic Designer," *Proceedings of the Graphic Design Education Association 1990 Symposium*, 58–62.
- 2. Margolin, 60.
- 3. For an expanded discussion, see Richard Buchanan, "Design as a New Liberal Art," *Papers: The 1990 Conference on Design Education, Industrial Designers Society of America*, 15–16.
- 4. Aristotle, "Politics," in *Aristotle on Education*, trans. John Burnet (London: Cambridge University Press, 1903), 107–9.
- 5. Cardinal John Henry Newman, *The Idea of a University* (Garden City, N.Y.: Doubleday and Co., Image Books, 1959), 9.
- 6. Newman, 149.
- 7. Paul Hirst, "Liberal Education," in *The Encyclopedia of Education*, vol. 5, ed. Lee C. Deighton (New York: Macmillan Company & Free Press, 1971), 505–9.
- 8. Louis Menand, "What Are Universities For?" Harper's (December 1991), 283: 1699.
- 9. Clark Kerr, The Uses of the University (New York: Harper & Row, 1966), 39-40.
- 10. Kerr, 41.
- 11. Paul Rand, *Design*, *Form*, *and Chaos* (New Haven and London: Yale University Press, 1993), 217.
- 12. Sharon Poggenpohl, "A Contrarian Approach to Graphic Design Education," *GDEA Proceedings* 1990, Graphic Design Education Association.
- 13. Buchanan, 15-16.

- Richard Buchanan, "Declaration by Design: Rhetoric, Argument, and Demonstration in Design Practice," *Design Discourse, History, Theory, Criticism*, ed. Victor Margolin (Chicago: University of Chicago Press, 1989), 91–109.
- 15. Buchanan, 1989, 93.
- Mark Salmon and Glenn Gritzer, "Parallel Content: Social Sciences and the Design Curriculum," *Design Issues* (Fall 1992).
- 17. Charles Bailey, Beyond the Present and Particular: A Theory of Liberal Education, (London: Routledge & Kegan Paul, 1984), 114.
- 18. Margolin, 73.
- 19. It is said that, shortly after Einstein published his theory, Sir Arthur Stanley Eddington was asked if it were true that only three people really understood relativity and that he was one of them, he replied that he couldn't think who the third person might be. See Stephen Hawking, A Brief History of Time (New York: Bantam Books, 1988), 167–68.
- 20. Hawking, 174-75.
- 21. Hawking, 175.
- 22. The choice for design is not as simple as "do we want to become the center of the new academy or do we want to continue as we have?" Universities of all sizes are cutting budgets. Support staff reductions and across-the-board cuts can only go so far before the pain of cutbacks will be greater than the pain of making basic decisions. Universities looking at departments to eliminate will naturally choose the "lesser" professional programs. Design and nursing have been the first targets at more than one school.



Liberal Arts and Graphic Design: Six Cautionary Questions

Gunnar Swanson

Welve years ago I wrote an article with the unassuming title "Graphic Design Education as a Liberal Art: Design and Knowledge in the University and the 'Real World'" (see page 22). I think it has been quoted more than anything else I've written combined. It also may be my most broadly misinterpreted writing. For many who have cited the article, it has been a source of pithy quotes about design, but for most it's been a source to footnote for the idea that graphic design students should get more of a general education.

I don't disagree with the promotion of liberal education for graphic designers. Liberally educated people are likely to be more interesting people; interesting people are more likely to be interesting designers. Broad education is good for people and it's good for society. The only problem is that my article clearly and specifically stated that it wasn't about increasing liberal arts in graphic design education. It wasn't really even primarily about graphic design (although it was tangentially so.) It was about a crisis in liberal education. It did not propose augmenting vocational training; it proposed ignoring it. (I share some responsibility for the confusion. The article appeared in *Design Issues* and in several graphic design writing anthologies, so I shouldn't blame people for assuming that it was about graphic design education.)

Whether we view the relationship of graphic design training and liberal education with gleeful anticipation or with dismay, there are some questions we need to consider.

Q #1: WHO IS QUALIFIED AND HOW DO WE KNOW THAT?

I still think it's an interesting idea: reinventing liberal arts education using a subject like graphic design or multimedia as the nexus of broad knowledge. I'd love to work on such a project (although I doubt it's in the interest of any graphic design program to abandon professional education). I do have some worries about the implementation. The first is, who would teach in such a program? Why would they be qualified and how could we tell? It's not an insurmountable problem for the first small program, but it is a serious impediment to scaling design-as-liberal-art up to a size where it could have a real impact.

What many of us see as a crisis in liberal education has a lack of integration at its heart. Liberal arts used to be defined as everything an educated man (yes, they were pretty much all men back then) should know. Now there's almost nothing common to the knowledge base of all educated people. There's not even a lot of common ground within a given academic discipline. The liberal arts have become like an old-fashioned Chinese restaurant menu—take two from column A and one from column B. Nothing can restore universality—there's just too much to know—but a sense of coherence is important. Overspecialization seems to be the enemy of coherence.

But academic specialization has some distinct advantages. It promotes the goal of increasing knowledge and it helps ensure excellence. The concentration of knowledge raises standards in an era when complete general knowledge is an impossibility. As David Baker says about graphic design specializations, "There is something to be said for actual expertise."

What happens when graphic design faculty wander too far from teaching graphic design? These academic squatters can dilute graphic design education and provide substandard teaching of other subjects. By encouraging students to define their projects by personal interests, often far outside graphic design, a graphic design degree no longer certifies actual expertise. It needs to be clear exactly what it does mean. Academic squatting can undermine curriculum by substituting, say, political science in what was scheduled to be graphic design class. It is an ironic twist that designers, the very people who are supposed to understand systems, often undo curricular systems in this manner.

Q #2: WHO UNDERSTANDS AND SPEAKS FOR DESIGN?

Higher education is usually the purview of people with terminal degrees in the subject they are teaching. The nearly universal currency of specialized knowledge in academia is the PhD degree. Practice-based fields like art, law, and medicine have their own degrees. Design PhDs are becoming more common but are relatively rare and often based on research that is divorced from design practice. If graphic design education drifts away from specialization and a concentration on practice, then the imperative that design programs be run by designers with MFA degrees will not be as strong as it is now. This could encourage the academic bigotry that a PhD degree outranks other terminal degrees among university officials and that, in turn, could encourage academic carpetbaggers—PhDs from fields tangential to design and PhDs in design research who have no design experience—displacing designers in design programs.

Q #3: WHAT IS THE PRICE OF COHERENCE AND RELEVANCE?

How, then, can we promote liberal education for graphic designers in a manner that is more integrative and coherent? One solution is "parallel content," where liberal arts classes are timed to relate to the subject matter of a design curriculum.² I was

once on an advisory board for the animation program at East Los Angeles College, where they had a physics course specifically for animators. I'm sure the science department considered that strictly Newtonian world to be inadequate physics, but the class nonetheless seemed to be a success for everyone involved.

Physics for animators is a good example of the pitfall of such curricular customizing: While the approach can make the point that there is a world of knowledge out there that applies to design, both the subjects and the nature of general education are necessarily distorted by this approach. One admirable goal is to breed a generation of designers with a general craving for education and a broad perspective. It should be noted that a model of education as vocational support and the covert message that learning is worthwhile only when it serves design directly could undermine that goal.

Q #4: WHO WILL DO THE WORK?

Customizing classes for design students can be a substantial amount of work and requires insights into design to make it work well. The practicality of the parallel content approach depends on context. An art school that provides all general education classes as an auxiliary to a design curriculum can, perhaps, specify the content of social science classes to correspond to the students' current design issues. When humanities faculties are hired as support staff for the arts, they are likely to be willing to tailor their subjects to design students' needs.

Many general subject areas can be approached strictly from a design point of view, and a large population of students required to take a course can make such tailoring attractive to another department. In many cases, however, humanities faculty are no more likely to take the time to rework their specialties to conform to the desires of design students than designers are likely to jump at the chance of developing classes specifically for those with only a passing interest in design.

Anyone who has dealt with people from another discipline attempting to make their work "relevant" will recognize one of the pitfalls of this approach. It is too easy for an outsider to drift into specialized subjects and do damage to standards by advocating naïve approaches. "Parallel content" requires a high degree of cooperation and significant work on both sides of the parallel.

Q #5: ARE DESIGNERS WILLING TO LEAVE THEIR SPECIALIZATION?

In the end, are designers willing to do the work that they'd like others to do? Instead of consumers of liberal education, could designers be providers? What does graphic design have to offer to nondesigners? What is it that designers know that others don't?

A general awareness of design and design in culture is a fairly weak answer to those questions, and designers may tend to overrate their abilities in that arena anyway. Design as culture and cultural analysis may be better left to anthropologists and others with analytical frameworks that make them better equipped to deal with culture broadly.

By the nature of design practice, designers are ahead of many fields in dealing with complexity. Designers' iterative work patterns are well suited to dealing with uncertainty. Several years ago I was involved in a campus navigation system project that included computer science, business MIS, marketing, and graphic design students. Most of the students seemed to want to solve the problem during the first class, divide up the tasks, and reappear late in the semester to put it all together. Only the graphic designers were used to working in a manner where this week's work led to next week's discovery, which, in turn, led to throwing away last week's work. Although hardly unique to graphic design, experience in working concretely toward discovery for large, underdefined tasks is needed throughout a range of fields.

Finally, systemic thinking—an understanding that, as John Muir put it, "When we try to pick out anything by itself, we find it is bound fast, by a thousand invisible cords that cannot be broken, to everything in the universe"—is a hallmark of a design perspective. Although ecology is now an important part of biology, the discipline was slow to accept the approach of looking at organisms' common habitat and relationships. Many other areas of academia could benefit from the ecological understanding that comes with design practice.

Q #6: CAN DESIGN START SMALL?

It's clear that graphic design can make a real contribution to general education, but maybe before design declares itself to be the nexus, it should show itself to be one important part of liberal education.

No matter how graphic design programs resolve the question of the role of liberal education, two things are clear to me. The first is that the models of graphic design education as narrow craft training or as applied fine art are insufficient for the changing role of design. Increasing competition from software-savvy untrained designers is likely to continue eroding graphic design as limited object making. Whether liberally educated or vocationally broadened, graphic design must reach outside itself.

The second is that graphic design programs at universities will have to meet the same challenges as other subjects. For many years graphic design programs have expanded as other visual arts areas (and many traditional liberal arts subjects) have become less popular. Traditional graphic design programs are already finding themselves left behind by "computer graphics" and multimedia at some schools. Counting on recognition and program protection based on ever-increasing student numbers is not a viable long-term plan. Unless graphic design is visibly moving forward or engaging the university in some vital manner, then it will be vulnerable in the ever-changing budgetary landscape of higher education.

NOTES

1. Design Issues, MIT Press, X, no. 1 (Spring 1994); reprinted: The Education of a Graphic Designer, ed. Steven Heller, (New York: Allworth Press, 1998);

- reprinted: Looking Closer 2: Critical Writings on Graphic Design, ed. Bierut, Drenttel, Heller, & Holland (New York: Allworth Press, 1997).
- 2. See Mark Salmon and Glenn Gritzer, "Parallel Content: Social Sciences and the Design Curriculum," *Design Issues* (Fall 1992).



Anxious about the Future?

Ken Garland

t seems to me that our trade, craft, profession, or what have you, is in crisis. I know this sounds like the sort of gloomy prognostication you might expect from an old man (which, at seventy-five, I suppose I am, though I have the greatest difficulty accepting the role). It is indeed, much given to the elderly to bemoan the increasing deterioration of, well, just about everything. So here goes.

The crisis has two heads. One arises from the vast growth in the numbers of practitioners—the direct result of the success of the practice of design itself. We have proliferated; we're everywhere! And of course, there are even more of us on the way, through the educational system that has encouraged the increase in the size of student intakes. So what are we elders, the favored few, who graduated in the 1950s and 1960s, to say to the many now emerging from colleges of art and design in ever greater numbers?

The other head of the crisis, as I see it, relates to the universal acceptance of computer-driven design processes in the field of visual communication. Since the 1980s the introduction of user-friendly applications has enabled graphic designers to work more speedily and to control the processes of typesetting, and of the assembly of type and image, right up to the point of printing. The proud occupations of the compositor/typographer and the process engraver have long ago been subsumed into the general, all-inclusive category of prepress origination. In the not-too-distant future, the desktop publishing cycle will be completed by the primacy of "printing on demand," which will supplant the traditional pattern of commissioning authors, designers, and photographers; editing; hiring printers; storing; marketing; and distribution. In theory, and surely in reality before long, authors will be able to act as their own publishers, since the hitherto indispensable skill of balancing unit production costs against estimated sales will no longer be crucial.

What all this comes down to is that many of the "mysteries" of printing, publishing, and—yes—the most recent "mystery" of graphic design are being made accessible to the reasonably well-informed nonprinter, nonpublisher, and nondesigner. Acceptable approximations of catalog, brochure, and periodical layout can be arrived at by suitable design templates and computer applications.

Paradoxically, at a time when graphic designers are being offered ever more enticing technological aids, these are also falling into the eager hands of nondesigners: Our hard-won skills are already being overtaken by do-it-yourself design packages.

So what are we to say to would-be recruits to our craft? Must we acknowledge, bluntly, that at present there are too many of them trying to get into the act? And should we, however reluctantly, agree to share our increasingly user-friendly facilities with nondesigners?

On both points the answer is yes. Distasteful as it may be, we can no longer pretend that the market for our skills will magically expand in proportion to the unplanned increase in students that we have graduated.

Equally, we cannot, even if we were empowered to, restrict the use of any new development in information technology to ourselves. If others want to handle the gear, however ineptly, who's to stop them?

You may, if you accept the above scenario, think that the future for graphic design is a gloomy one; that we are facing a period of retrenchment, even of total eclipse; that the bubble has burst, the great days are over, the race is run, and so on, and so on . . .

Not so, my friends, not so. We were never meant to be narrow specialists, nor slaves of machines, however user-friendly, nor the unthinking servants of powerful entrepreneurs. We are, most of us, alert, independently minded, inventive, and inclined to be anarchic (in the nicest possible way, of course). We resist labeling, compartmentalizing, and confining. Here is what a perceptive design teacher had to say about what we should be. I ask you not to look at the next page to see who he was and when he wrote this until you have first read what he had to say:

A human being is developed by the crystallization of the whole of his experience. Our present system of education contradicts this axiom by emphasizing single fields of activity. Instead of extending our realm of action, as primitive man was forced to do, we concern ourselves with a single, specific vocation, leaving other capacities unused. . . .

Here our system of education has been found wanting, despite vocational guidance, psychological testing, and IQs. A calling today means something quite different from solidarity with the aims and needs of a community....

The future needs the whole man. . . . A specialized education becomes meaningful only if an integrated man is developed in terms of his biological functions so that he will achieve a natural balance of intellectual and emotional power. Without such an aim the richest differentiations of specialized study . . . are mere quantitative acquisitions, bringing no intensifications of life, no widening of its breadth.

Only when men and women are equipped with clarity of feeling and sobriety of knowledge will they be able to adjust to complex requirements, and to master the whole of living. It was the old Bauhaus master himself, Lázló Moholy-Nagy, and he was writing in 1928, nearly eighty years ago; but apart from the anachronistic gender bias, he could have been writing today. If you, as students, teachers, and practitioners, accept his thesis—and I hope you do—you will see that, by character, by inclination, and with the right kind of education, you need not feel anxious about the future. They need you out there. They really do.



That Was Then: Corrections & Amplifications

Lorraine Wild

Two hundred years ago, a woman had to be able to start with grain to make bread, and a man making a wagon had to start with a tree . . . too much of that has been lost. . . . Density and complexity of a vision come from a single person making a single thing. . . . In our time, people are infatuated with thinking . . . but this notion that the idea is adequate all by itself is just absolutely wrong . . . an idea has no meaning until it finds physical form. . . .

-Calvin Tomkins, "A Single Person Making a Single Thing"

About eighteen months ago, I gave a talk in Holland that was turned into an essay published last summer by *Emigre*. The essay is titled "That Was Then, and This Is Now: But What Is Next?" That essay really attempted to do two things: first, to describe the conditions that we all face in the post-Macintosh, Macromind Director environment of graphic design today; second, to map the trajectory of design pedagogy and show that much of it is actually at odds with the massive shifts in design practice wrought by new technology.

THE STATE OF THE PROFESSION

A few months before I wrote "That Was Then," I attended the 1995 American Institute of Graphic Arts National Conference in Seattle, and many presentations that I saw there influenced my observations on the state of the design profession. The theme of the conference was "change," which was generally translated to be about the shifts in design practice brought on by digital technology. I summarized the main issues that many speakers in Seattle described as follows:

- The increase in media "options" beyond print makes all communication problems more complex
- Given the media options, each designer has less command of all of them, and knows less about the medium and the audience
- Those increased options for receiving information have splintered audiences into many, many more "micromarkets"

- This results in "micromarketing," yet, ironically, no one is quite sure who the audience is, especially on the Net
- At the same time, everyone is supposed to be thinking and acting globally

What results from this tension between micro- and macro-audiences and multiplying media formats is that the demand for more conceptual, research-driven solutions increases with the shift away from print; but, simultaneously, design practices are now saddled with print production duties, which, while billable, can become threatening if they aren't managed with great efficiency through constant technological investment in upgrades and retraining.

Not that this mess has necessarily been bad for graphic design business or education. In the past few years, we have seen a mushroomlike growth of firms servicing new media and new academic programs dedicated to graphic design and new media. Still, the climate we practice in is different. Unless you are a graphic designer, it is not at all clear that anything resembling the traditional role of the graphic designer is really necessary and/or needed in the new media. Lots of new, interesting, visual things created in new media turn out to have been produced without the participation of someone the profession itself would even call a graphic designer. This raises the question of how the visual side of new media is produced and what, if any, role the graphic designer plays in its production.

Authors versus Teams

Successful design consultancies have had to develop "divisions" within their own offices to handle the very different types of time and effort required by these more complicated scenarios. Large-scale design projects often require multidisciplinary teams because they span the broad range of media options just described. In either situation, it is much, much harder for designers to retain control over the projects and their clients the way they used to. And while graphic design education has sporadically paid attention to the need to train designers to work collaboratively, their training is typically based on designers maintaining their specific identity as the originators, "authors," or controllers of visual ideas. (Graphic designers have often looked toward architecture as a model, where authorial control is maintained by the architect even in the largest of collaborative projects. For a good example of this desire to emulate architects, see Massimo Vignelli's recent declaration that he no longer refers to himself as a graphic designer—because they are only concerned with the superficialities of style—but instead as an "information architect." 2

But what is often experienced by designers who get new media commissions—for instance, Web site design—is in many cases a team-production model based less on maintaining the integrity of the "author" and more on the entertainment industry paradigm where authorship is granted to the director, the producers, maybe the screenwriters, but typically not the people who create the visual nature of the product. In the movies and TV, a final project is only as good as the director or producers will allow it to be. They, not the artisans, have the

power to "green light" ideas. They are the "authors." Those who want to operate outside of these conventions ("independents") generally do so at their own expense.

The structure of finance in complex, high-production-value multimedia projects may be similar to that of movie production (i.e., it takes a lot of money to pay for the time to do all that programming and production), and that has led to the assumption that the team model of the film industry, which differentiates authors from artisans, may be the appropriate process paradigm. But the logic of the new media does not necessarily support a hierarchical division of creative roles. What is demonstrated by software programs like Director is a new situation where the conceptual phase (or authorship) of design development in new media is hardly separated from final design or production. The line that divides design from both editorial development in print and directing or screenwriting in film, and the final production of either media, is blurred in multimedia and up for grabs.

There are a lot of graphic designers who will admit (after a few stiff drinks, maybe) that this blurring of the role of the designer comes with mixed blessings, and that the techno-optimism of outlets such as *Wired* masks a crisis of identity for design. No one wants to get caught saying "this will kill that," but there is a real sense that the game has changed. This is complicated by the irony that the practice of design was, until recently, supposed to be an invisible force. In the post–World War II optimism of the 1950s and 1960s, graphic designers championed a hidden process that was supposed to deliver a visually potent product—communication enhanced by visuality—orchestrated by the designer/author. While new media may demand an author or a team, it is not clear that it needs or desires an invisible (or omnipotent) design hand.

By its most mainstream definition, graphic design does not initiate its problems or projects: it is assignment based. It provides a service, and, ideally, it is supposed to mediate seamlessly between the sender (i.e., the client) and the receiver (i.e., the audience). Now, no one in academia has bought this line for a while. The collusion and culpability of the designer have been fodder for much discussion in design theory for many years now, but this theoretical challenge has never quite translated to the larger world. One could argue that our culture has gotten hooked on a high level of visuality without even knowing, more or less, where it comes from. Relatively high (but constantly pressured) fees have assuaged the bruised egos of the legions of creative people who have both benefited by, and been resentful of, the invisible role that they have played in this major realm of our larger culture.

Some of graphic design's elders spotted the tendency of technology to devalue the work of the graphic designer earlier than the younger generation did—mostly because the younger generation of designers were too busy trying to master the new technologies, and, perhaps, were so enthralled with the illusion of control that they did not see the subtle changes that were taking place in the issues of authorship and authority. In his essay "The War Is Over," Milton Glaser observed that business had proclaimed the value of design precisely because it had figured out how to exercise control more thoroughly than ever, and that this constituted a triumph of bad values over the humanistic intentions of designers. He maintained that graphic designers had lost ground on many different aspects of practice, and

that this could be blamed on digital technology: that it had actually made it easier to produce design and had therefore contributed to an overpopulation of designers (which put fees and value under pressure). He also noted that the computer had given clients greater control over designers' efforts: for instance, the client can possess and manipulate a digital document (which has eliminated the need for "the original") without consulting the "originator."

Glaser also cited what he referred to as the "punitive" tone of contracts that ask the designer to sell rights to their work for "all purposes throughout the universe, in perpetuity" (a clause that is, in part, a defensive reaction on the part of corporations to their own inability to predict media and formats), and the inequity of work-for-hire contracts that "presume that the client initiates and conceptualizes the work in question and that the designer merely acts as a supplier to execute it." Not surprisingly, he sees these statements and others like them as a sign that designers are losers. Of course, lots of younger designers have never known anything different, but he ends his powerful statement with the idea that designers literally have to start from scratch to create "a new narrative" for our work.³

Recommendations for the Future

Whether one agrees with Glaser's scenario or not, the new sociocultural environment of design challenges each person working within it. In this context, two very different responses to the challenge illuminate the state of graphic design discourse: the first demands that the designer become a marketer; the second, an anthropologist.

The first view says we should adjust all of our work to the demands of technology, business, and marketing. This view is expounded in some detail in the first three issues of *Critique*, a San Francisco–based graphic design magazine. *Critique* often champions the notion that designers are public communicators who should scrupulously avoid personal artistic expression. Its point of view accepts the inevitability of the leaner-and-meaner business arrangements described by Glaser and the old paradigm of the invisibility of the designer.

In a recent issue, editor Marty Neumeirer states:

Increasingly, the haves and the have-nots of graphic design are separating along conceptual lines. The designer who demonstrates an ability to think independently and strategically will attract the patronage of serious clients. The designer who follows the line of least resistance, or who indulges in purely artistic pursuits, will find that . . . wealth and power are elusive indeed. . . . [quoting another designer] "Sometimes we . . . Quark and Quark and Quark . . . this all takes time, and there's a limit to what clients will pay for these production-oriented tasks. With conceptual work, you can get your idea in two minutes and charge for two days. And it will be worth every penny, because it will be stronger than a design based only on looks."⁴

In contrast to the literal marketplace of design concepts expounded by Neumeirer, the second "anthropological" viewpoint challenges the designer to be an interpreter rather than conceptualizer of context. At a more sophisticated level aimed primarily at design educators, Michael and Katherine McCoy, in "Design: Interpreter of the Millennium," maintain that an important job for designers of the near future is the interpretation of technology for the audience, and they advocate that education should prepare students for that specific role.

The McCoys do not choose to focus on the aesthetic and syntactic static created in the act of interpretation; rather, they emphasize a "cleaned-up" version of a reception theory-based model to describe communication transactions, particularly for multimedia. They state:

Design for interpretation involves the audience in the creative process . . . graphic communication does not truly exist until each receiver decodes or interprets the message. Interpretive design challenges the viewer to participate and affect the outcome. . . . Designers will be . . . more involved in the design of experience . . . creating potential and open-ended situations for users to explore. Audiences will "finish" designs as they negotiate nonlinear and malleable situations. . . .

They go on to recommend the addition of research techniques that straddle the fields of anthropology and marketing—such as "video-ethnography"—to give the young designer insights into patterns of use.

The McCoys quite rightly note that the end of broadcasting as a modernist paradigm creates opportunities for more focused graphic communication dedicated to narrow audience groups. As I noted at the beginning of this piece, this is no small shift and must be seen as a new condition of culture that demands a response on the part of design. The McCoys address this condition by asserting that "when the designer does not have to speak to the broadest common denominator of a mass audience, a richer conversation among peers emerges." Yet, since the invention of form is never mentioned in their description of design at the end of the millennium, it seems as if communication will be more about strategy and less about the visual.

Like Milton Glaser, the McCoys also refer to the Darwinian economics of digital technology:

Sophisticated desktop publishing and multimedia software allow virtually anyone to do everyday design work; designers can no longer rely on their traditional skills alone. Designers must deliver conceptual innovations and new insights, the things that computers cannot do. This challenge will lift design beyond a service trade into the role of interpreter for culture.⁵

Will designers "from subcultures" design for their own subcultures, or is there something almost too prescriptive or paternalistic in that equation? Isn't what unites the designer with his or her audience something more subtle: the fact that the designers are users as well? As individuals, designers are related to the larger social context more intimately than the typical interpreter/interpreted relationship implies.

TEACHING DESIGN

The Conceptual Curricula

At CalArts, my colleagues and I, during recent years, have watched increasing numbers of our graduates get snapped up by multimedia firms. Given the context just described, this has made us increasingly nervous that the curriculum we've provided somehow hasn't prepared the students for the conditions they would find upon graduation. For the second part of the *Emigre* essay, I tried to describe how to make graphic design studies a more viable training for future designers. At that time, I wrote that design would have to be redefined as a conceptual practice, while graphic design would have to be more clearly identified as a specialty within it.

I suggested that in addition to teaching basic visual syntax, composition, typography, and the other skills usually associated with graphic design education, the following issues had to be added to the education of young designers to strengthen their conceptual skills:

- More attention on "learning how to learn"
- Attention to writing to facilitate conceptual and expressive communication
- Study of the operations of verbal expression, rhetoric, semantics, and narrative and storytelling as part of the basic structure of communication
- The grammar of film and film editing as part of the basic communication structure
- The structures and narratives in games
- Critiques of communicative systems as artificial constructs
- An understanding of the social, cultural, and functional possibilities of real and simulated public and private spaces
- Techniques of collaboration, teams, negotiation, and consensus building
- The history of design expanded to include the social and cultural development of media
- A study of fantasy, surrealism, pranks, simulation, bricolage, and other forms
 of subversion as a stimulant to the possibility of a more entrepreneurial
 approach to design

I presented this laundry list as the framework of a new and idealized design curriculum. Life is not ideal, and curriculum plans are just starting places, but it seemed important at that time to articulate the missing elements of design education, especially since what seemed to be lacking was related to the uses and theories of language. This bias against language in graphic design teaching is part of our DNA that we still carry from the invention of basic design courses at the Bauhaus. Teaching based on modernism looked for universal images to substitute or supersede verbal communication. In arguing for these new design "basics" in the

Emigre article, I claimed that educators should acknowledge the weakness in graphic design's tendency to focus on the visual translation of a concept, in isolation, as a framework for understanding the potential communicative powers of new media. In "That Was Then," I did qualify that my assault on the visual did not deny the critical presence of the visual, but I then went on to say that the concentration on craft attached to visuality was, perhaps, what needed to be altered. Both as a designer and an educator, this conclusion—the basis of my article—is what I now think needs challenging itself.

Searching for Paradigms?

The current prescriptions for what education needs to cope with the new technologies (mine included) define the conceptual work of graphic design as being largely verbal—which falls in line with most of the language-based, rationalist, linear, scientific biases of the rest of both academic and business culture. The visual, to many design educators, is a remnant of the "old" graphic design—before we got postmodernism, structuralism, poststructuralism, and politics, and became seemingly sophisticated about theory and criticism.

Disdain for the visual also falls in line with what has to now be seen as a persistent thread in modernist art education, post-Duchamp and post-Moholy-Nagy (who, of course, said that any designer's idea that could not be described over the telephone was not an idea at all). This thread denies the power of visual craft. It diminishes what happens in the process of subjecting oneself to the rigors of learning a tradition, or working a medium over and over until one can invent with it, in favor of the freedom of operating in a purely conceptual mode without the alleged restrictions of tradition, which is seen to hinder the creativity of the artist/designer. It is a common attitude in contemporary art education that meaning is privileged over the technique used to convey meaning; or as they used to say at CalArts, "No technique before need."

But another phenomenon of recent years, despite the academies' seeming disdain for pure form, has been a huge interest in form-making that reflects the expanded capabilities of the digital technology. The renaissance in typography and typeface design of the last few years is the strongest example of this.⁸

The attention paid through award shows, annuals, and endless compilations of "cutting-edge" design on the surface appears to be an old, familiar celebration of novelty that mirrors the way the profession has always explained itself, even in the days when it was just plain old commercial art. But is it not ironic that all this is going on while so many designers are expressing their doubts that visual talent is even needed when it comes to new media (again, because of the question about authorship and who will really get to drive projects)?

But the questions are, what constitutes graphic design craft, and why should we care about this? Can graphic design now be defined only as a conceptual process? Can we ignore the form-making aspect of it, which is, in fact, the only way it is ever seen? And where are all these conceptualists of the future going to find the "commercial artists" of the future to translate their big ideas into beautiful or seductive or remotely interesting forms that anyone else will want to look at?

If you only judge design by its conceptual content, there is a tremendous amount of strong work from the history of design that is quite meaningless in terms of subject matter: posters by A. M. Cassandre for liquor and cosmetics, posters by one constructivist or another extolling the Bolsheviks' next five-year plan, etc., etc. Years ago, during what might be called the "heroic" phase of graphic design history, it was assumed by many writers that all the great artifacts of graphic design had actually been effective. As design writing, theory, and criticism have become more sophisticated, much more complex narratives have been attached to these objects, and not every story ends in success. Still, we look at these things because their forms have made a contribution to our culture, and we wish to understand what that means and how that works. We are compelled by the look of these things.

What is obvious is that, whether looking at design or the contemporary design scene, the work that affects the community of design, and the public perception of it, is visual. It does not matter if you are looking at the high or the low, professional or vernacular: if you are looking at all, it is because of the way it looks.

I know that it is somewhat politically incorrect to say what I just said, but I am beginning to think that the only way to salvage graphic design, and enable it to grow in the face of both of the juggernaut of technology and the demands of the market, is to allow for the real development of the individual voice in graphic design and to recognize that the individual voice manifests itself in the forms that it makes—independent of the needs of the project or the marketing analyses.

Of course, the phrase the "designer's voice" is not foreign to designers' and design educators' ears. It has been used to signal a variety of things. It could mean the simple acknowledgment of the role of the designer in communication, or it could mean the designer taking a more active role in generating content. It is probably true that the design community (or the design education community) had to go through the issue of the designer's voice first as a philosophy, because it was so at odds with the definition "design = problem solving" derived from modernism. But now, as they say, the rubber hits the road: philosophy must be put into practice.

Back to the Visual

If, in old or new media, design is still, in the end, a visual practice, then the quality of this visuality must be nurtured. And that is problematic given the simultaneous challenge to design from both the producers of the medium who demand that we be specialists and the software interface that insists we be generalists. Any look at the magazines or the annuals will show that we are going through a period of visual disunity. It has been awhile since there was a dominant idea about correct process or form; if anything, the correct notion, in academia as elsewhere, is that form should be reflective of its context and time. So, without repeating history, given how different times and problems are, how do we nurture form in a way that doesn't close off the future for the young designer?

In many ways, the answer seems to be in a revitalized discussion of technique, but in this there are at least two cautions. The last time technique was stressed really strongly was in the context of Swiss-influenced processes and projects, which invariably ended up leading students to essentialistic stylistic conclusions frequently based upon abstraction. The resulting style was so co-opted over time that it eventually lost its communicative power. This raises the second caution regarding technique: that it is hard to conceive of it not resulting in style, and style has a life cycle that makes designers uncomfortable. It starts out as originality; it's adapted widely; it becomes a cliché; it slips down-market; it becomes an embarrassment; it becomes a fetish; and then it's ready for revival (or so we are led to believe).

CRAFT

Rather than talk about technique, perhaps it is useful to talk about craft. A contemporary mistake (one that I am guilty of myself) is to define craft in terms of digital technology. It is true that the more deft one is with understanding and using the hardware and software, the more flexible one can be in devising solutions to problems and getting them to the production phase. Nevertheless, to define craft only in terms of the use of a given technological skill does not adequately address the way that knowledge is developed through the skill as opposed to just being overlaid as a concept over technique.

Another common mistake is to define graphic design craft as that which only has to do with the materials and processes of printing. For instance, in another essay in *Critique*, "The Genius Matrix," craft is defined as the choices a designer makes using paper and color and dimensions, which might be part of what we would call craft, but doesn't begin to include everything that constitutes craft.⁹

My personal interest in the idea of craft stems partially from my own experience as a student at the Cranbrook Academy of Art, where "the crafts," such as weaving, ceramics, and metalsmithing, were taught with great vigor. As a young designer, I was always slightly confused and more than intrigued by the apartheid that had set in between what was understood as design and what was understood as craft: we all made things for use, but an unarticulated real split somehow reflected the idea that some things were being "designed" for mass production and other objects were "crafted," or one of a kind.

In my ongoing research to try to understand the whole issue of craft, I encountered *The Art of the Maker*, a book by British design theorist Peter Dormer. He discusses craft in the context of two different types of knowledge (which I will try my best to paraphrase). The first is theoretical knowledge: the concepts behind things and the language we use to describe and understand those concepts. The second is tacit knowledge: knowledge gained through experience, or know-how.

The tacit knowledge required to make something work is not the same as a theoretical understanding of the principles behind it. Theory might help you understand how to make something better, but craft knowledge (sometimes also referred to as "local" knowledge) is necessary to know how to begin in the first

place. For Dormer, these two types of knowledge are completely intertwined, because if we rely only on theory, we never get things made (as any graduate studio faculty can attest), but if we only rely on experience, it takes too long.¹⁰

Tacit or craft knowledge is hard to teach because a lot of it cannot even be described, but has to be experienced. Some of it can be described in a sort of step-by-step way, but teaching this way leads to ossification when the same steps are assumed to be adequate in any situation (as the example of the Swiss school of graphic design recalls). To continue to paraphrase Dormer, the more sophisticated a craft becomes, the less you can explain its actual process. Craft knowledge is acquired through doing or making, and as you master a craft, you think less about the conceptual basis of process, even as you address more complicated conceptual issues. Craft knowledge, though hard to get, achieves the status of a skill once it is taken for granted and not considered every time it has to be put into use. It is a knowledge of familiarity, and breeds confidence.¹¹

Knowledge gained through familiarity also includes what we know through the senses, connoisseurship: recognition based not only on attribution or classification, but also on just knowing what is good (having an eye) based on experience. This allows problems to be recognized almost instinctually. If you've ever listened to *Car Talk* on NPR, you hear those two mechanics solve car problems over the phone, not based on overall ideologies of automotive function, but years of tinkering—taking things apart and putting them back together.

Craft knowledge stands up to scrutiny (measured by the question, Does it work?), but on the flip side, craft knowledge is very personal because it has been gained through intimate experience.

A critical part of the private aspect of craft knowledge is the dialogue that goes on between the practitioner, his or her expertise, and the goal that the practitioner is trying to make or find. This, again, may constitute what is meant in graphic design when we speak of the "designer's voice" as that part of a design which is not industriously addressing the ulterior motives of a project, but instead follows the inner agenda of the designer's style. This would be what guides the "body of work" of a designer over and beyond the particular goal of each project. In this way, craft is tactical rather than conceptual, seeking opportunities in the gaps of what is known, rather than trying to organize everything in the matrix of a universal framework.

Dormer expands his idea of craft knowledge beyond the fields that we conventionally call the crafts. In *The Art of the Maker*, he states, "in a general sense, tacit knowledge is an aspect of all thinking, including conceptual thinking in such disciplines as mathematics, theoretical physics, or philosophy. There is a craft to such thinking and one learns it, becomes expert and applies it to solve problems. . . . But I want to claim for practical work a special sense of tacit knowledge, which is that the core . . . is unrecoverable by words. The thinking in the crafts of (the visual arts and crafts) resides not in language, but in the physical processes involving the physical handling of the medium." ¹²

Dormer goes on to describe how the craft process creates knowledge. The activity of craft is seen, in great detail, to be essential to human activity and transcends the narrow confines of functionality that is often attributed to what might be described demeaningly as vocational skill. An active world of making and creativity opens up for the practitioner who defines craft in this manner. Again, from Dormer:

The purpose of skills is to put them to use; unless one's aim is limited to repeating the designs of other people, then one of the skills one needs is the ability to experiment. Experimenting, which is often described as playing around, itself demands judgment—it involves improving one's sense of discrimination. It may well be that one produces designs that are only "good for me" (and no one else) but it still matters that one has an understanding of why it is good. ¹³

Interestingly, in utilizing this richer definition of craft, which equates making with meaning, it becomes possible to better account for the individual visions of many figures of graphic design history who are "marginal," i.e., not producers of huge bodies of client-based work and for that reason not necessarily well compensated or, in some cases, not even well recognized because the work is seen as too personal or eccentric. But they created bodies of work that resonate, look better and better over time, and, at the least, make more sense. A consideration of craft allows understanding of the development and value of the individual designer's voice within the well-worn and too facilely understood construct of visual communication, both high and low. Rather than applying a universal standard for material production to become the measure of quality or importance in graphic design, we can begin to see a wider range of possibilities for cultural production. All the elements of the design process—the client, the problem, the context—are in constant flux, but the designer's voice remains constant, a signature, an ethos built out of conceptual, personal, and practical accretion of experience.

I look at my own list of guilty pleasures, designers whose work I love above all else because of its integrity to itself:

W. A. Dwiggins, who, working out of his garage in Boston during the Depression, reinvented American typography by bringing arts and crafts values to design for machine production, all while running his completely handcrafted puppet theater.

Alvin Lustig, who trained as an architect, worked as a printer and then a designer, and insisted on the personal mark as the talisman of modernism, refusing to specialize by designing interiors, signage, and the first cheap paperback publications of high-modernist literature. (He is the author of one of my favorite definitions of design: "I propose solutions that nobody wants, to problems that don't exist." ¹⁴)

Imre Reiner, an eccentric antimodernist typographer in Switzerland who, after World War II, when "objectivity" was the goal of graphic design, rebelled by promoting an even more subtle subjectivity, lending the inflection of the scrawl and the hand to the public language of classical typography.

Sister Corita Kent, southern California nun and printmaker who, in the 1960s, seized upon the idea of using the language of pop culture to speak to her local audience about spirituality, which she did by cutting and mixing historic and contemporary advertising headlines, copy, and logos, and writing poetry (her own and others) over and under them. She subverted and appropriated the public discourse before those words were even in our critical vocabularies.

Big Daddy Roth. Why? I really can't explain, except that I think it has something to do with consistency of vision inventing a new language.

And finally, that other big daddy, Edward Fella, artist of design in Los Angeles who mutated himself from a "commercial artist" to a designer of the highest caliber by working on problems only as he defines them and sets them up. His explorations of antimastery (exemplified by his dictum, "Keep the irregularities inconsistent"¹⁵) liberate design from the surface of perfection associated with digital competence, simultaneously getting down and dirty with the vernacular while attaching it to the free play of language and form associated with art and poetry of the highest order.

Each of these designers invents (or invented) in ways that transcend the frameworks of conceptualization and theory that mark present design discourse, particularly in academic design. Their work suggests an alternate path of craft and making as knowledge production, which I feel now needs to assume a critical place in design education and design production. With regard to my essay of eighteen months ago, while I would not back away from the prescriptions that embrace the rigors of conceptualism, general and specialized, I would now add to it the central role of craft knowledge and the use of the tacit and tactical in everyday design processes.

I am highly self-conscious of the weirdness, in 1997, of arguing for a reenergized and reinvented teaching of basic color theory or basic typography—including scribes, classicists, modernists, and on to the digital—as well as drawing and composition. But as Edward Fella has said, "Rules are meant to be broken, only exceptionally," 16 and the wonderful ambiguity of that sentence points to the ultimate goal of craft: not to produce uniformity, but to produce the exceptions.

The discussion of graphic designers working in an open way through their craft, from the edge toward the center, tacitly, parallels the interest in some architecture circles with the "everyday." These architects reject strategic overviews in favor of more localized tactics that grow out of an appreciation and immersion in the forms, forces, and functions of the street and the city. In their readings of critics such as Michel de Certeau, understanding how mundane and ordinary tasks of everyday life are practiced leads to ways of observation and working that connect architects', designers', or artists' experimentation and expression with daily reality. This daily reality is seen to be below and beyond the market, tied but resistant to the technological format within which we exist. De Certeau describes this condition as follows:

Beneath the fabricating and universal writing of technology, opaque and stubborn places remain. The revolutions . . . lie in layers within it, and remain

there hidden in customs . . . and spatial practices . . . the place on its surface seems to be a collage . . . in reality, it is ubiquitous. A piling up of heterogeneous places. 17

In *The Practice of Everyday Life* (note: not the "Theory" of everyday life), de Certeau also describes the idea of "casual time" as the gap where creativity occurs in contrast to "the empire of the . . . functionalist technocracy." This gap in time suggests a space where individuals improvise and make do with what exists and create their own reality. Like craft, this creation is tactical and not strategic. Like design practice, casual time works with what is at hand and makes do within the constraints of the moment.

Contrasting the theory of language with the practice of speaking, de Certeau describes "everyday creativity" as the difference between knowing a language ("competence") and being able to use it expressively ("performance"). Echoing this definition, Fella, Lustig, Sister Corita, and even Big Daddy Roth perform within the constraints of their craft to create public communication with an intensely personal voice.

Combining these brief notes from de Certeau and Dormer allows one to develop a simplified series of complements that describe the basis for a pedagogy based on craft knowledge and conceptualism. The dualities are as follows:

tacit and tactical and the strategic craft process and formalism doing and making and theory and interpretation

In essence, I am advocating that a practice of craft can supplement design theory and reposition the activity of design as central to knowledge produced by design. For me, this is what is missing from all the descriptions of the future of design as a purely conceptual activity.

For the past five years, I have found myself increasingly frustrated with the conceptualization of design into a theoretical and interpretive knowledge system, which has relativized and devalued the types of knowledge and pleasure gained by engaging with passion in the craft itself. I have come to realize that the knowledge gained through activities, that can be described as tacit, tactical, everyday, or, simply, craft, are equally powerful and important. I believe that these activities must form the foundation of a designer's education and work. Without this second type of knowledge and commitment to work within the framework of craft activity as knowledge, design withers. Craft is a window into what designers do and a difference that marks our activity as valuable both in the making and production of ideas. By emphasizing and strengthening the understanding of how the difference of craft contributes to the message of the medium—of new media or any other media, past or present—the contribution of craft knowledge as design knowledge will define a more complex and interesting path for graphic design.

NOTES

- 1. "Graphic Design and the Next Big Thing," in Emigre 39: 18–33.
- 2. Andrew Blauvelt, "The Info Perplex," Emigre, 40: 6.
- 3. Milton Glaser, "The War Is Over," AIGA Journal of Graphic Design 13, no. 2 (1995): 48–50.
- 4. Marty Neumeirer, "Secrets of Rebellion," Critique (Autumn 1996), 36.
- 5. Katherine McCoy and Michael McCoy, "Design: Interpreter of the Millennium," *U&lc* 22, no. 4 (Spring 1996): 4–5.
- Sibyl Moholy-Nagy, Experiment in Totality (Cambridge: MIT Press, 1969), 92. Taken from "Pens and Needles: Robert Brownjohn, Conceptual Design" by Katy Homans (thesis, Yale University, 1982).
- "No technique before need" is an abstraction of an explanation of conceptually based art education. For a program description that reflects this idea, see Catherine Lord, "School of Art—Dean's Statement," *California Institute of the Arts Bulletin* (1989–90/ 1990–91): 15–16.
- 8. For examples, see Rick Poynor, *Typography Now: The Next Wave* (London: Booth-Clibborn Editions, 1991) or Rick Poynor, *The Graphic Edge* (London: Booth-Clibborn Editions, 1993) or any number of AIGA or ACD 100 annuals since 1990.
- 9. Nancy Bernard, "The Genius Matrix," Critique (Winter 1997): 39-48.
- Peter Dormer, The Art of the Maker: Skill and Its Meaning in Art, Craft and Design (London: Thames & Hudson, 1994), 11–13.
- 11. Dormer, 21.
- 12. Dormer, 23-24.
- 13. Dormer, 50.
- R. Roger Reminton and Barbara J. Hodik, "Alvin Lustig Remembered," Communication Arts (May/June 1983): 94.
- 15. Edward Fella, unpublished comment, 1997.
- 16. Edward Fella, unpublished comment, 1997.
- 17. Michel de Certeau, The Practice of Everyday Life.
- 18. de Certeau.
- 19. de Certeau.



Catching Up with the Past: Shifting the Pedagogical Paradigm

Leslie Becker

think we may have finally learned how we learn. Almost twenty years ago we had to confront revolutionary ways to work in our offices because new technologies required that we conflate the production of design with designing. Pedagogical opportunities have been missed because design education (supposedly not constrained by the real world) has not adjusted its teaching and learning methodology to the technologies embraced years ago in practice. This has led to a noticeable disconnect between designing in school and designing in the workplace. Following are the components of a functional pedagogical model:

- 1. Computers need to be in the classroom.
- 2. Students need to bring the latest iteration of their work to class, viewable on the screen and as printouts.
- 3. Design faculty need to sit beside students and suggest, direct, and help them metamorphose projects right on the screen. They need to think out loud so the students benefit from reasoning and thinking in action, making more explicit the processes that designers use in order to achieve a particular result. "Try making that smaller and redder. . . . Well that didn't work. . . . Your metaphor escapes me because . . . That fights too much with . . ." By listening to the verbalization of thought, the internal arguments and experience gained from years of practice are made audible, and the student can access both the tacit and explicit knowledge invoked in varying combinations during the course of any project.

Additionally, there is a greater likelihood that students will push a project to a higher level of refinement, because the showing of *X* one week and then returning to class next week with *X* bigger and greener, but not *Y*-er, simply eats up valuable learning time. Often, students are aware of design mastery and refinement *out there in the ether* but haven't yet developed a high level of control over details in their own work. Thinking out loud alongside a student brings forth a "eureka" moment much sooner.

4. Eliminate thrash-around-and-print designing by teaching on the screen and in the moment—a technique that is intended to slow down the design process as it is happening. Otherwise, students tend to go through rapid successions of ill-considered choices because what they are designing does not exist yet in their heads, making the process more reactive than creative. Design becomes like twenty questions. The student prints some things (or more likely ten things) and brings them to class for review. "That's not it, not quite right yet . . . " And then we do a little drawing and say, "Why don't you try this?" Making rapid, ill-considered decisions is (technologically) so damned easy. Perhaps the Ctrl+P command should result in a message on the screen that says "Ponder" rather than "Print."

The problem with the way most of us have been teaching is that design reasoning, thinking, and decision making are not revealed to the student as these processes are happening. "I would try this because . . . (that's a better face to use in this situation. It references . . . that color is a bit harsh; it doesn't speak to the audience you are trying to address. . . .)" This running commentary is a missed, but essential, part of design pedagogy. Thinking out loud represents a moment that brings experience to the forefront. It slows down the reflective process, which, due to technology, has sped up as it collided with and was overtaken by the production process. The comments are heard only after something is printed and shown. Students have already gone away, made questionable design decisions, and committed them to paper. The instructor then offers a critique that they may or may not hear because by now, their guard is up. Isn't a critique actually just telling someone that something that has sprung from his head is not yet quite right? And we expect students to welcome a critique of their personal expression (which is distinctly unlike arriving at the wrong answer in an algebraic equation)! The problem with the critique is that it requires a suspension of the self. On the other hand, if the faculty member makes sure that students have been brought along inside the process, they tacitly absorb the thinking, reasoning, and intuiting that result in smart design decisions. They are not defending a poor fait accompli.

Eliminating the time-wasting, paper-wasting, back-and-forth shuttling between printing and showing allows students to develop their work, refine it, and embrace the craft of design in a shorter amount of time and with fewer iterations. Many of the complaints among educators about lack of craft would disappear. We have failed to be smart about the barrier-breaking potential of these machines because the paradigm for these technologies that we embraced years ago in our offices has not been applied to our pedagogy. It's time that we, as educators, caught up with our own past as practitioners.



Legacy of a 1960s Credo

Kenneth Hiebert

It doesn't matter as much what's behind us or what's ahead of us but what's inside us.

-Ralph Waldo Emerson (paraphrase)

CREDO

In 1966 I was asked to develop a new graphic design program for the Philadelphia College of Art to replace an advertising program. Outsiders had referred to PCA as a rendering school of design. *Rendering* in this sense is to make something showworthy, and, in fact, projects need to be rendered in order to be presented to others. But used the way it was, it was a pejorative. It suggested that the emphasis on show preempted the rigor of process, that simulation and decoration took precedence over structure and depth, that persuasion preceded information.

The following is the credo on which my colleagues and I based the program back then, and, by comparison, the ideas and ideals I would apply to education today.

Credo is a loaded word.

I don't mean dogma; I do mean belief.

I don't mean doctrine; I do mean principles.

I don't mean gospel; I do mean philosophy.

At one extreme I mean a word that sounds similar: cradle. A cradle is a womblike, nurturing surrounding for growth, as in the "cradle of civilization."

At the other extreme I mean a manifesto that defines change. For example: Before the programmatic change, students at the Philadelphia College of Art had been instructed in letterforms by rendering a plethora (thirty or more) of faces while they were projected for fixed amounts of time. Our revolutionary change was to make letter design a truly perceptual drawing process, accounting for all aspects of form in an original design based on structural fundamentals that had general applicability in design. This meant intensive, generative experience with letters replaced rendering the surface beauty of letters.

The credo was thus a set of guidelines, a statement of purpose. It had a base in my own experience in a studio school—the School of Design in Basel—augmented by my previous experience teaching at what was then called the Carnegie Institute of Technology. And it was formulated to morally confront society, in particular the world of visual communication.

LEGACY

Legacy could mean an obsolete throwback or a vital, ongoing tradition, a ground-work of durable value. Since it could be either, it is honest to look at it from both sides.

THE 1960S

I wanted to know if what we set out to do in the late 1960s had relevance today and how today's situation challenges those earlier precepts. Or, to ask it another way, if I were to design a program from scratch today, what would be its basis?

Since the 1960s we've experienced radical change:

- The vernacular revolution
- The computer revolution
- The feminist and sexual revolutions
- Alternative medicine
- New wave and all the small isms
- The information explosion and infotainment
- The Internet and burgeoning subcultures
- Globalization and xenophobia
- Mixed media
- Project complexity
- Design of loose parts
- Postmodernism and deconstruction
- Commercial penetration into noncommercial content
- Speed of change
- Death of heroes

What I observe is that programs in design today tend again to be rendering schools, seeking effects that entice the viewer without the thought and work that go into original design. "Now that form is easy . . ." was the way one design teacher prefaced her remarks. This is, in a way, a natural, expected outcome of demands on education that are beyond the time resources we have.

But form is only easy, I find, if you abdicate your process to software and appropriation—if you look for ways to give someone a free ticket to material success without the underpinnings for success in a larger sense.

In 2001 I had another look at educational purpose and wrote a set of

discernment skills that I posited against the generally negative real-world pressures we face. They've been updated somewhat in 2005.

Discernment skills are what I call basic skills: separating the valuable, relevant, fresh, and true from the worthless, trivial, stale, and false. (Any skill requires guidance and practice. It is not a matter of lip service or perfunctory action.)

I place them in five categories:

- Veracity
- Clarity
- Vital Form
- Self
- Service

Each category consists of foundational attitudinal and work skills that transcend stylistic and technological shifts. Below, I'm showing them in confrontation with common real-world pressures. Then I will compare these discernment skills with the way we stated similar concerns in our late 1960s credo. You can judge if what I'm describing as a key skill set and the antecedent in the credo have validity for our current situation.

VERACITY

- Illumination *versus* Deception
- Substance *versus* Posturing (Expression *versus* Dazzling Effects)
- Allowing Reflection versus Evasive Speed

1966-68

- Recognition of situational exigencies today: thought and attitudes, issues, materials, functions, change
- Study of historical forms in terms of their material-spiritual necessities (non-imitative)
- Relating to historical matter in an essential way, finding the common and universal threads
- Developing a method of problem solving independent of preconceived notions
- Providing a sequence of projects, gauged in such a way that the knowledge gained in previous problems can be directly utilized

CLARITY

- Semiotic Precision versus Mixed Signals
- Coherent Simultaneity versus Raging Illiteracy
- Breathing Room versus Congestion (Transparency versus Murkiness)

1966-68

- Preparing a student to recognize and work within valid limitations; at the same time to see through arbitrary or purely conventional ones
- Cultivation of the objectification of feeling: common perception, relevant gestalt, consensus gestalt

VITAL FORM

- Generative Process *versus* Stealing (or Appropriation)
- Invention *versus* Stylistic Overlay
- Craft Authority *versus* Craft Dependence (Perceptual Proof *versus* Stylistic Dependence)
- Paradox *versus* Banality (Poetry *versus* superfluity; Positive-Negative Dynamic *versus* Simplistic Form)
- Abstraction *versus* Literalism (Structural Narrative Integration *versus* Narrative Safety)

1966-68

- Knowledge-by-experience of the language of form, color, and relationships; a command of the generic design means that we define as: point, line and plane, module, proportion, sets, rhythm, scale and dimensionality, texture, color, series, direction, motion, confrontation, symbol, metaphor, thought processes, reproduction processes
- Avoidance of premature style, effects, mannerisms, prejudices, fads, clichés.
- Generative, noneclectic formation of visual vocabulary
- Development of superior manual and technical skills as an integral part of the conceptual process
- Organic growth of a result
- Preservation of the reality of the material means
- Development of a student's awareness and aesthetic sensitivity and appreciation

SELF

- Connection to the Inner Self *versus* Outer Slickness (Passion and Ecstasy *versus* Cynicism and Jadedness; Overcoming Resistance *versus* Seeking Ease; Essentials Are Key *versus* Wants Dominate)
- Relatedness *versus* Alienation (Wholeness *versus* Fragmentation)
- Fairness toward Others versus Status Seeking

1966-68

- Encouraging self-confrontation: developing an individual point of view and independent judgment
- Tireless questioning, evaluating, revising, testing of alternatives
- Internalizing the design process through extensive experimentation that allows for failure (process above result)
- Developing a capability in the student to isolate and define a problem for oneself and a personal commitment to and philosophy about one's problemsolving activity
- Providing an educational environment, which will induce students to work on the highest possible level qualitatively and allow all to progress according to their own capacities

SERVICE

- Accountability versus Exploitation (User Advocacy versus Cavalier Superiority)
- Long-term Benefit versus Opportunism
- Ecology and Resourcefulness versus Excess

1966-68

- Cultivating discernment concerning moral-ethical implications of design (social responsibility)
- Preparing a student to face creatively the technological and use shifts throughout a lifetime and conversely, to avoid indulgence of momentary and exploitative fads and fashions
- Professional competence instead of professionalism

SUMMARY

1966-68

To provide a climate and a controlled series of experience possibilities that will prepare the student to deal intelligently, sensitively, and inventively with the whole range of problems in visual communications through fidelity to intrinsic properties of forms and ideas and to self; to enable the student to interrelate with the serious worker in allied professions and the positive strivings of humans generally.

2005

A prime purpose of education in design is to cultivate the generative, creative spirit. The essential benefit to society is that it frees the student from the bonds of purely commercial interests, from the mass culture of the empty self, and from moribund

tradition. The creative spirit both defines society and gives it direction. It neither condescends to insulting levels nor joins in empty hubris.

For the designer dedicated to the common good, the creative spirit yields results resting on qualities of accessibility in material and perception rather than the superficial slickness of style.

The genius of creativity is to begin with a very limited, modest circumstance and find in it an expression of surprising breadth and wider significance. Addressing the local and immediate in ways that are not prescriptive, dogmatic, or formalistic places the onus for success on learning—learning of long-term value—and thus on the quality of the teaching.

Education must be seen as a real world in which deeply nurtured discipline and sense of self are cultivated, a place to build essential honesty, authenticity, and concern for the human condition, where the skills to develop communications appropriate to content are fostered. This nurturing requires time and reflection, accorded now to lesser and lesser degrees because of a nervous desire to match external "real-world" demands.

In teaching the rhythmic interplay of experiences of the radically simple and the typically complex, both experiences must be kept vital and generative. While building blocks in design education might look outwardly similar, the learning processes and effective outcomes may be completely opposite, depending on the quality of the teaching.

Form construction might be seen as a "technicality" but it is so only if it is sought as an end in itself, rather than linked to meaning. Form-making is, finally, still the outcome and form quality is at issue. Distinctions have to be made between valid aspects of visual language universals and stylistic entropy ensuing from blind repetition of basics.



Graphic Design Family Values

Paul J. Nini

Graphic design education programs are like families—and as with families, values are passed on, even if they aren't stated explicitly. It is often easy to identify alumni from certain schools by the values evident in their work. How else can one explain projects by students that are very experimental and expressive at one end of the spectrum and others that are more analytical and user-centered at the other? Values are embedded in our students' work and reflect what we as educators have determined to be important.

Yet I highly doubt that many high school students actually choose undergraduate graphic design programs based on such issues. My experience as an educator dealing with prospective design students is that they select a program based on more pragmatic concerns, such as cost and geographic location, for example. Interested students often have very little idea of the values inherent in a chosen program, which may not be made clear until they're well into a particular course of study. It's also unrealistic to expect potential students to ask questions about a program's basic philosophy, since it's not likely to be one of the major concerns factoring in their decision.

Therefore, this situation requires design educators to do two very simple things. First, we must examine our own convictions, and determine which of those we wish to stress through our courses and the experiences we provide to our students. Second, we must take every opportunity to make our values clear to potential students, so that those values can actually play a part in a student's decision to enroll in a particular design program.

So, what are your core beliefs?

The answer to this question will, of course, differ for each of us. But there are some basic issues that we would all do well to consider in the contexts of our courses and programs. In a talk titled "Legacy of a 1960s Credo" (presented at the 2004 AIGA FutureHistory design education conference; see page 57), Ken Hiebert, a professor and author, suggests the following issues for our consideration: (1) deception versus veracity; (2) posturing versus substance; (3) congestion versus clarity; (4) literalism versus abstraction; and (5) exploitation versus accountability (among others). He also urges us to allow our students to

put their work to use for more noble purposes, such as enhancing the public's understanding of and participation in our democratic society through the presentation of well-structured information. Likewise, Ken Garland's well-known "First Things First" manifesto (originally published in the UK in 1964 and revised in 2000) expresses similar sentiments.

The undergraduate program in which I teach emphasizes audience- and user-centered design, as we feel it's important to create communications that meet the expectations of those who ultimately experience them. We also deal almost exclusively with informative (as opposed to persuasive) communications, since we have little desire to convince viewers. We simply wish to present the necessary information for decisions to be easily made. Other programs are more oriented toward advertising, where persuasive communication approaches are employed toward various ends. Still others follow a more fine art–based approach, where developing the designer as "author" (that is, someone with a strong, individual voice) is the ultimate goal. Obviously, there are varying beliefs at work in each of these types of programs—but are potential students aware of the differences, and are we doing enough to articulate them in how we describe our efforts?

TELL IT LIKE IT IS

Our students find out about us through a variety of media, such as Web sites, printed literature, posters, and the like—but how many of these items actually go beyond the expected program information and provide statements concerning the values an educational experience will be based on? Such information ought to be front and center, and it should be a proud declaration of what we as design faculty believe. We not only owe it to our potential students, but also to ourselves to make our ideals known. What we stand for as design faculty ought to be plain for everyone to see.

It's confusing enough for the graphic design student to determine which kind of program to choose. Would a BFA be better than a BS in design, or a BA? Is the program a comprehensive major, an emphasis, or just a certain number of design courses? How many reviews will students go through before they're sure they can actually get through a program? Are there internship or foreign study opportunities? Do the graduates of a program find good jobs? These are the kinds of questions that are typically asked, and on which students base decisions that will affect their professional lives.

Students shouldn't have to think much about the faculty's convictions and how those are reflected through a program's educational approach, as such things should be clearly and simply stated in the information that we provide. I urge all graphic design educators to carefully consider these issues, to discuss them with their colleagues, and to determine how to incorporate such content in the descriptions of their programs. If a program has no clear beliefs on which all faculty members agree, then it's time to start talking and coming to some conclusions.

Being a professional designer means, in part, that we adopt values that are at the core of how we practice. Our profession is diverse, and there are varying beliefs that are reflected in our education programs. It's time for us as design educators to make the values of our programs obvious. Our students deserve to know a bit more about the kind of family they're joining when they embark on their design careers.



What Is "Professional" about Professional Education?

Meredith Davis

In the 1970s, during the tail end of modernism's reign in graphic design, most of us believed ourselves well prepared for long careers in professional practice. Our later moves toward a form not bound by rules in the early 1980s seemed enormous in their implications, but also entirely within our domain of expertise and the traditional knowledge base of graphic design. Since that time, however, the earth has shifted on its axis several times, with the source of each change for design residing largely outside the field. The introduction of the Macintosh computer and the rapid growth of technology, extreme highs and lows in the economy, consumer activism, increased public access to the means of production and dissemination, and concern for the environment have rewritten the value system of design and how it is perceived by others. The lessons in these shifts have less to do with what we deem to be our traditional "professional expertise" and more with the general notions that context is everything, that very little professional knowledge truly meets the threshold of "enduring understanding," and that knowledge is relational and dynamic.

Graphic design educators have also adjusted to these changes. But because the adoption of curricula in academic institutions is both a democratic and bureaucratic process, our responses often come well after the need for them is apparent in practice. At the same time, we are in the "future" business; we make informed assumptions that our curriculum and instruction today will serve our students and their constituents well for the next fifty years and that, in doing so, we play some role in defining the future of our field. I believe that if we think of our responsibility as some positive, future consequence, made possible through both our teaching and our faculty research, we make different decisions about how we conduct the business of learning than if we see ourselves only as serving the current definition of professional practice.

I'm not talking about some highly general, warm-and-fuzzy ambition to make a better world (although that would be nice, too), but about consciously anticipating change in the profession of design and taking responsibility for the content and methods of that transformation. To gain some control over a future agenda, we must reconsider what it means to be a "professional" and what we define as "professional education."

A DISCIPLINE VERSUS A PROFESSION

In addressing this issue, I'd like first to draw a distinction between a "discipline" and a "profession." A discipline is a branch of learning; it represents a body of knowledge and accepted modes of inquiry, as well as historical and critical perspectives on that particular subject. For example, chemistry and anthropology are disciplines.

A profession, on the other hand, is an occupation that involves the application of knowledge and training in a discipline. Being a chemist or an anthropologist is a profession. There is a discrete body of knowledge utilized, but we can distinguish such knowledge from that of the discipline itself. For example, the chemist knows how to structure an experiment and control some things while others are variable. An anthropologist knows that certain practices of researchers' immersion in a culture can influence how the people being studied behave. These concepts are not knowledge about chemical elements and their behavior or about humans and their social interactions; instead, they are about the practices through which scientific and anthropological understanding are applied in the work of the profession.

Professions share some things in common: a documented history; a concern for the development of methods; a code of ethics and standards of fair practice; publication of substantive literature on the body of knowledge in the discipline, including theoretical and critical discourse; and components of practice devoted exclusively to research and the development of new knowledge. Graphic design arose from the "trades" of printing and typesetting, and, until recently, its practitioners were educated in working apprenticeships or vocational programs focused almost entirely on the technical and formal issues necessary to bringing image and text to print. Encouraged by the information age and the growth of the knowledge economy, however, the field has developed new aspects and behaviors that more fully express its more recent status as a profession.

The role of colleges and universities now engaged in professional education is to instruct students in both the discipline and the profession of graphic design. The underlying premise of professional programs is that a deep understanding of the discipline is an essential prerequisite to its application in a professional context. The contract between the institution and the undergraduate student is that the disciplinary knowledge imparted will be relevant in some respect, not only immediately upon graduation, but for the career lifetime of the individual. The contract between the institution and the profession is that this knowledge base results from an informed guess about what will serve the profession well into the future. This is not to say that the discipline or profession won't change in unpredictable ways, or that some theories or concepts won't lose their status in relation to others over time, but that the requisite knowledge and skill set will allow the individual to evolve with the field and its place in society. For this reason, a curriculum is not a job description.

Healthy professions transform themselves over time; they respond to changes in the social, technological, and economic context as well as to the infusion of new knowledge, modes of inquiry, and critical perspectives. History also shows that new disciplines and professions emerge to meet new conditions, often exhibiting simultaneously the demand for interdisciplinary degrees and specialization. In the evolution of a traditional field, we often see new practices arise. Initially, there are no titles for or consensus about the scope of work. But, it is clear that they deploy distinctly different knowledge and professional behaviors than the parent field. In graphic design, for example, the emergence of strategic design and interaction design demanded different skills and knowledge than the print-based, form-making activity of the past. For this reason, all professions benefit from their members being well educated in areas not currently defined as exclusive to the profession. Study in college subjects that are more frequently defined as part of a "general education" are not merely in support of the well-rounded individual, therefore, but essential to the future evolution of the individual's chosen field.

DEFINING THE "FIRST PROFESSIONAL DEGREE"

Several years ago, the American Institute of Graphic Arts (AIGA) and the National Association of Schools of Art and Design (NASAD, the accrediting body for college programs in art and design) agreed that the bachelor of fine arts with a fully articulated major in graphic design was the "first professional degree." As part of that agreement, the organizations defined "essential competencies" as learning outcomes that should result from study in these programs and have published briefing papers that expand discussion of conditions surrounding professional programs (on faculty qualifications, technology thresholds, degree programs, and the role of general education—all available on the organizational Web sites).

Since that time there has been considerable debate as to the status of preprofessional degrees (the terminology referring to associate's degrees and bachelors of arts, science, and fine arts with concentrations of less than 25 percent of the total coursework in graphic design). The position of AIGA and NASAD is that graduates of preprofessional programs generally require additional study to qualify for significant professional careers in design. The frequent arguments from faculty teaching in preprofessional degree programs, however, is that graduates of their programs gain employment in the field (this is usually followed by an anecdote about a recent graduate who has attained high-profile employment) and that the graduates have addressed the professional competencies and are simply lacking the unrelated general education coursework surrounding studio instruction in graphic design.

I would argue that what distinguishes a professional graphic design education from a preprofessional experience is not the one-to-one match between curriculum and the current skill set necessary for entry-level practice, but the essential competencies that enable design practitioners to be predictive and responsible for transforming the field across their professional careers. It is possible, for example, to meet most day-to-day demands of a professional office without deep knowledge of design history or how new technologies destabilize traditional theories of mass communication. But without such disciplinary knowledge, it is far less likely that the

young designer will anticipate and respond appropriately to the rapidly shifting context for design. If the changing task of the designer is viewed simply as transferring traditional skills to new problems—a recycling of form and technique—the relevance of the field in the future is in question.

To describe the dimensions of the contemporary design task, I refer to the message cycle diagram below.



In this model, visual communication is described as consisting of message creation, reproduction, circulation, reception by individuals, and assimilation of message content by culture (which, in turn, defines the context for the creation and interpretation of future messages). Preprofessional degree programs focus design coursework almost entirely on the first two steps of this cycle: message creation and reproduction. The limited number of credits devoted to design study makes it less likely that issues of message circulation (what meaning messages gain or lose through their distribution), reception (how the individual perceives and processes information), and assimilation (the future meanings that result from message ideas being adopted by the culture) will be addressed in any way other than through the most general faculty description of assignments. It is with respect to these later stages of the message cycle that issues such as design history, communication theory, understanding of systems, and the explicit connections made between design and general education coursework become distinguishing aspects of the professional curriculum. The assumption is that designers with this disciplinary knowledge will create messages differently than those without it.

MAKING PROFESSIONAL USE OF GENERAL EDUCATION

AIGA and NASAD discuss the relationship between general and professional education in their briefing paper, "General Education and Professional Programs in Graphic Design." The paper encourages integrated relationships between the professional and general education components of curriculum, in contrast to

relationships of proximity in which the nondesign coursework is seen as ancillary to design study.

Under proximity relationships, nondesign content may enter the design curriculum as the subject matter of project texts or images. For example, an assignment to design posters on scientific phenomena may require students to research theories of evolution or what makes a firefly glow. In authoring the text for the poster, students also exercise writing skills. In such projects, however, the information on evolution or fireflies is not integral to the students' mastery of a design principle, nor is it fundamental to the development of a problem-solving strategy that is applicable to other contexts. Such content is rarely discussed as representative of a class of concepts that places particular cognitive demands on audiences or changes perceptions of the surrounding information context. Design faculty rarely checks content accuracy or debates the students' selection of concepts from a larger body of information about the subject. The appropriateness of content has more to do with how well it allows us to design particular types of communicative forms (i.e., diagrams, explanations of invisible processes, relationships of descriptive text to image, etc.) rather than with general applicability to design theory or communication strategy focused on audiences and contexts. Alternative content—a battle from the Civil War, for example—could be equally effective in achieving the outcomes of the assignment.

In relationships of integration, however, design faculty refer to general education content specifically for its relevance to the outcomes of design and issues that transcend individual projects or formats. The role of design faculty is to make explicit how such information from other disciplines informs design strategy and decision-making. In these classrooms, form is frequently evaluated in terms of its responsiveness and consequences in larger systems that are not visual or spatial. For example, an assignment to design a Web site for an online bookstore requires students to think of the site as one part of the user's much larger experiences with reading and buying books, as well as a component of more complex cultural and economic systems and the associated attitudes and behaviors. Under integrated relationships, content from outside the discipline of design informs students' understanding of the nature of inquiry, audience or users, and contexts in which design solutions must perform.

ACCOMPLISHING THE OUTCOMES OF PROFESSIONAL EDUCATION

Therefore, among the defining characteristics of professional curricula, as opposed to preprofessional curricula, are the depth and scope of design content in both the discipline and the practice of graphic design; the relationship of such study to the broader academic context; and the deliberate intention to create individuals who can manage complexity and change at the highest levels of practice.

There is enormous variety in the professional curricula that achieve these outcomes, and I have long been reluctant to publish model curricula or even exemplar projects that depend almost entirely on particular faculty expertise,

student qualifications, course position in a scaffolded curriculum, and institutional context. But excellent professional programs in design demonstrate that, regardless of their structure and the particular skills of faculty, it takes time to produce a professional and even longer to produce a leader in the field. I'm not talking about specific amounts of "seat time" in classrooms, numbers of credits assigned to particular areas of study, or even the age of the student, although these factors play some role in the development of essential competencies. There are reasonable limits to how quickly results can be achieved.

By time I mean the progressive and integrated experiences in design education that build insight; the maturation of thinking skills and elaboration of concepts that can only happen through significant, ongoing immersion in the work of a discipline. This is a scholarship of design that continues as designers progress from school through their practice career. The goal for design faculty in professional programs, therefore, should not be simply to monitor student completion of a menu of required professional courses or to verify inclusion of each professional project type in the student's portfolio (annual report, poster, Web site, etc.). Instead, the mission of professional curricula should be to instill in students a disposition for scholarship in both the academic and professional settings; to use Carnegie Foundation President Ernest Boyer's terms, the scholarship of discovery (mastery of new knowledge), the scholarship of integration (making connections), and the scholarship of application (service).

THE PREPROFESSIONAL MISSION

If integral to the notion of being professionally educated are deep and enduring knowledge of the discipline, design understanding in relation to the work of other disciplines, and appropriate application of skills and knowledge in ever-shifting contexts of practice, what meaningfully different missions can preprofessional programs serve? Articulating these alternate missions is the challenge for design education and a necessary step in full disclosure to prospective students who must choose among a myriad of program types.

Liberal arts degrees involve, by definition, broad exposure to the sciences, social sciences, and humanities, with somewhat deeper experiences in a focused area of study. Many college art and design programs offer concurrently the bachelor of arts and bachelor of fine arts, often under the same disciplinary titles. The presence of the BA encourages students to transfer from nondesign majors without losing credits toward graduation and to experiment with an array of interests without committing wholly to a focused career path. A recurring pattern in institutions with both the preprofessional BA and professional BFA, however, is a "professional lite" approach to the BA curriculum; students enroll in the same beginning studio classes as their professionally focused BFA counterparts, but stop short of completing the fully scaffolded sequences of coursework.

The underlying assumption of this approach is that capping the preprofessional student's design experience after completion of beginning level

coursework provides a general understanding of design issues. This might be the case if the typical course sequence moved through content from general overarching concepts to specific applications. However, this is rarely the way in which studio-based coursework is designed. For example, the organizing principle of most sequences of typography courses places study of the letterform and word in early classes and defers the design of typographic systems for later, upper-level courses. As a result, students who take only one typography course miss even the most cursory exposure to entire dimensions of typographic design. The same is true for sequenced graphic design studios; beginning courses usually focus on organizing visual form and ignore the full range of issues implicit in design problems. In freestanding BA programs, curricula frequently integrate typographic issues into general graphic design offerings; students never engage in discussions or assignments that illustrate, for example, the explicit ways in which written language and typographic form structure the interpretive task.

What is needed is the development of liberal arts curricula that distill the overarching concepts of the discipline and provide instruction that asks students to reflect on these concepts in deeper ways, recognizing that the opportunity to understand them through professional studio practice will be limited. This calls for a different course structure and pedagogy than we find in the typical professional program. Faculty must ask what truly constitutes a liberal education in design and invent challenging but realistic missions for preprofessional curricula. Further, curriculum and advising can direct students to combinations of design and general education coursework that address emerging and less traditional needs in design practice. For example, students with strong backgrounds in the social sciences and design offer interesting skill sets for the emerging research practices in the field; anthropology, psychology, and cultural studies provide much-needed perspectives on audiences and contexts for design.

Other equally viable missions could serve the profession well. The preprofessional design education in two-year programs represents an even more challenging landscape. Once the center of technical education, two-year programs now serve the dual purpose of educating students who will only spend two years in college and those who expect to transfer to a four-year professional program for their last two years of undergraduate study. The latter population usually finds that few design-based credits will transfer to meet the requirements of four-year curricula because course content has been compressed or abbreviated for vocational students who will not continue their studies beyond two years. For example, a typography class designed to be a two-year student's only typographic experience is unlikely to mesh with the first class of a four-course professional sequence in typography. And because students' first design experiences are formative in their development of a perspective toward the discipline, the technical and often software-driven orientation of many two-year programs leaves some transfer students behind their four-year peers in grasping the larger disciplinary concerns of design. As the economics of higher education encourage expanding populations of students to

begin their baccalaureate studies in two-year institutions, the need is greater for four-year programs and community colleges to coordinate curriculum planning.

Unfortunately, the ongoing debate over what constitutes a professional education has been polarizing among graphic design faculty in institutions that represent different degree programs and curricular models. Motivated by misperceptions of curricular status and competitive program viability, such arguments confuse students, employers, and the clients for design, as well as other educators who sit in judgment of graphic design faculty performance and curriculum effectiveness within institutions. Few other professions demonstrate this level of equivocation over their essential natures; various schools offer different "flavors" of professional preparation in response to a variety of value systems and segments of practice, but rarely express their disagreements about minimum qualifications through radically different degrees and durations of academic study in the discipline. The time has come for the graphic design education community to refocus its attention on the challenges represented by a maturing and diversified profession and on the roles design can play in educating broadly an informed citizenry; to be accurate and responsible in describing what various curricular options can and do deliver. We need to design solutions for an evolving practice.



Emptying the Spoon, Enlarging the Plate: Some Thoughts on Graphic Design Education

Warren Lehrer

In this information age of ours, we have twice the information, half the knowledge, quarter the wisdom.

-Robert Theobald, Futurist/Economic Humanist

WHAT MAKES A GREAT TEACHER?

The best teacher I ever had never really taught me very much. He was curious about me. He challenged me. He believed in me.

SOME FALSE DICHOTOMIES BETWEEN TEACHING DESIGN AND TEACHING FINE ARTS

The standard "fine art" educational model evolves from the Renaissance notion of the individual genius artist, who, having learned the fundamentals through an apprenticeship with a master, works alone in his studio communing with his muse making works of genius for the aristocracy.

Contemporary "fine art" programs teach students tools, techniques, and methodologies. By the junior year, they give each student a studio/cubicle from which to make work and commune with his or her muse. While "fine art" programs do a decent job nurturing aesthetic self-expression and making work for the gallery and the museum, they often do a poor job teaching students how to define and solve problems critically, how to collaborate, and how to question the role of art in everyday life.

The standard contemporary model for teaching "design" evolves from the notion of the artisan/craftsperson who serves the needs of the client (that is, the state or the corporation).

In most design programs, the teacher is a stand-in for the client, supplying the project/problem to the students throughout their entire undergraduate and graduate careers. Credits and grades ultimately are replaced by salaries and awards. Often, when it comes to senior or graduate thesis projects, design educators find themselves frustrated by the design students' inability to define their own projects. It's no wonder! Design students have, in the main, not been encouraged to think for themselves or develop their own ideas or vision.

Both fine art and design teaching models are too limited. Many of the *best* practitioners of art and design today defy these *art*ificial barriers, erected by art and design academies. It's understandable that a formerly adolescent design profession was in need of establishing its own, completely separate identity. Perhaps it's time for a supervised reunion.

Graphic design was forged in the early twentieth century out of revolutionary art, literary, cultural, scientific, and political movements. It developed as a professional art practice imbued with the ideals of making a better world. While proudly teaching the heady "pioneer" days of graphic design—as practiced by poets, painters, language artists, utopians, and revolutionaries—many design programs go on to base their training on a relatively narrow slice of contemporary design practice, that of the corporate service model.

EXISTENTIAL QUESTION #1

Do I teach design? Or do I teach human beings?

EXISTENTIAL QUESTION #2

Am I a teacher of individuals aspiring to excel in design, make beautiful, hip work, and live a nice comfortable life? Am I a teacher who should help students discover a path to a life's work filled with meaning, exploration, and purpose? Am I a teacher in the service of training designers to create a better world? Or am I a teacher in the service of training a highly competent and employable workforce?

Before teaching graphic design, it's helpful, every decade or so, to question the parameters of the field. It's generally understood by now that graphic design has expanded beyond 2D and 3D design to include 4D (motion and interactive) design, that the modernist/Swiss palette is too limited, that a decent design education needs to include the study of theory, and that design history has a cultural, technological, and political context. But the parameters that define graphic design activity are still constrained by an (arbitrary) economic premise that presumes graphic designers to be skilled hired hands.

EXPANDING THE PARAMETERS OF GRAPHIC DESIGN PRACTICE

Consider equivalent professional art practices, such as filmmaking or music composition. Like graphic design, these fields encompass a wide range of activities, sometimes within the lifetime of one practitioner. A filmmaker can make commercials, political ads, public service spots, Hollywood blockbusters, documentaries, independent, experimental, narrative, and nonnarrative films. Sometimes a producer or an organization hires the filmmaker. Sometimes filmmakers come up with an idea for a film or screenplay themselves. Sometimes they work with a screenwriter. The process is always collaborative.

Music composers are commissioned to compose corporate jingles, scores for

commercials, TV shows, movies, and Broadway musicals, as well as the indie and nonprofit versions of the same kind of work. Then there's a wide range of composer-initiated work, including most pop music. Often lyrics are written by the composer/songwriter. Sometimes the composer/songwriter collaborates with a lyricist. Composers of opera sometimes write their own librettos; sometimes they collaborate with librettists. A lot of music is composed from within specific traditions—classical, jazz, folk, religious, etc. Experimental and avant-garde composers are not only originators of content and form, they often invent their own instruments/technologies, systems of notation, and means of presentation. The work of these experimentalist composers, while generally not lucrative (to put it mildly), often expands the music vocabulary and processes of pop and commercial genres.

A wider view of the graphic design field (harkening back to its origins), could be expanded beyond client-generated work, to include many entrepreneurial, self-initiated, and collaborative endeavors, such as political/activist graphics; the writing and design of manifestos, theory, and visual literature (poetry, fiction, and nonfiction); artists' books; experimental writing/typography/type design; public art projects; and independent publishing, broadcasting, new media, and new product ventures. Collaborations between graphic designers working *with* (not necessarily *for*) architects, writers, scientists, historians, philosophers, linguists, theater artists, urban planners, computer programmers, engineers, and other cultural workers contribute to local, national, and global culture through original projects and research.

At a time when the interplay of visual signs, icons, words, and images— DESIGN—is playing a vitally important role in shaping culture and affecting the future of the planet, who should be entrusted with the tools, responsibility, power, VOICE that design now enjoys? Stylists? Functionaries? Technicians? Truth-tellers? Poets? Activists? Inventors? Visionaries? Change agents? Renaissance persons? Informed citizens?

GRAPHIC DESIGN-AN OPEN FRAME

graphic design is an art
graphic design is a business
graphic design is a profession
graphic design is next week's garbage
graphic design gives shape to culture
graphic design gives shape to ideas
graphic design gives shape to information
graphic design gives shape to misinformation
graphic design gives shape to feelings
graphic design gives shape to stories
graphic design gives shape to dreams and experiments
graphic design gives shape to experience
graphic design creates experience
graphic design is the visualization of language

graphic design facilitates dialogue graphic design boils things down like poetry graphic design diagrams teeming complexities graphic design grows out of local traditions graphic design drains local traditions graphic design is manifest through invention graphic design can help save lives graphic design can help destroy lives graphic design can pose questions and illuminate ambiguities graphic design can help transform consciousness graphic design can make the ordinary sacred graphic design can be used as a weapon graphic design can be cool, slick, objective graphic design can be personal, idiosyncratic, hot, deep, strange, lovely graphic design can be playful, funny, ironic, or biting graphic design can make the useless mandatory graphic design can make the unseen visible graphic design can make the incomprehensible clear graphic design can be condescending, misinformed, and insulting graphic design can be a flower blooming on a rainy day graphic design can help perpetuate stereotypes or dispel them graphic design can help facilitate democracy graphic design can help fake democracy and enable fascism graphic design is a powerful gift/responsibility graphic design can be a one- or a two-trick pony graphic design reveals the society that produces it graphic design can be the life you make it

ENCOURAGING STUDENTS TO FIND THEIR OWN WAY WITHIN AN EXPANDED FRAMEWORK

- Provide opportunities for students, at almost all levels, to develop their own voice. Beyond the most rudimentary exercises, try to avoid spoon-feeding students with prepackaged visual elements. Even undergraduate freshman and sophomore projects can go beyond exercising the student's ability to rearrange the teacher's preselected images, icons, and letterforms.
- Whenever possible, allow each student to select his own subject matter. Twenty students working on the same material breeds sameness. In an identity design class or project, each student can be asked to come up with his or her own organization or company—something that he or she thinks is missing from the world. Forced to think for themselves, students seek out what interests them and imagine/invent an organization of their dreams (other than their own graphic design company). Some gravitate toward corporations that make and sell things; some come up with alternative media

- or publishing entities; others dream up arts or health organizations or social justice/activist groups. Students do the research needed to validate the uniqueness of their organization, and through writing and mind mapping, they carve out a name and a program for it. Each student designs and fleshes out identities in media appropriate to his or her organization.
- In an advanced typography class focusing on text typography, require each student to write and design his or her own textbook, instead of requiring a single textbook. By doing this, each student studies and researches numerous sources and has a chance to develop his or her own sensibilities and perspectives while learning many of the variables of text typography, book design, working with a typographic grid, and the like. Dimension and format are open-ended as well.
- In a motion graphics or animated type class, each student can design a film title sequence for a preexisting film, or a nonexistent film based on an existing book, or a film that he or she might one day want to make. In this case, students not only choose their own subject matter, they also get to choose between working on a reinterpretation, an adaptation, or something completely original.
- In an introductory Web design class, students are asked to design a site based on a collection. As they learn the rudiments of designing for the Web, students grapple with set theory, issues of organization, creating an archive, curating, and providing context. Students also decide whether their collection is a closed set, or open to further contributions or input from visitors to the site.
- In courses that require more than one big project, try to include a final independent project whenever possible. In consultation with the teacher, students learn to come up with projects that are doable within time and budgetary limits—essential entrepreneurial skills.
- Giving students more room to rely on themselves does not merely foster self-expression. Research and writing are integral and mandatory parts of the process. But don't underestimate the importance of having students draw from their own experiences, their families, as well as their cultural, ethnic, racial, economic, and geographic backgrounds, and where they live now.
- Emphasize the importance of image making as much as typography. Introduce students early on to a wide range of drawing techniques (beyond "graphic translations" and Department of Transportation icons) in order for them to discover their own way of mark making. Encourage or require at least one course in photography and one in video. Stress the importance of seeing from a specific point of view and doing whatever it takes to get there—climbing up on a roof or down under the floorboards. While picture research is important, discourage swiping images from the Web. The computer is an amazing tool, but it is also an addictive, quick-fix narcotic, especially for design students.
- Whenever possible, I begin classes by wiping the slate clean of preestablished rules. Instead of teaching the dos and don'ts, I try to blow things open. In a

writing class, students turn newspaper articles into dada poems. In a type class, selected letterforms are sliced, diced, folded, torn, remade into new compositions. In a book class, students transform a preexisting book. Then, starting from a blank slate, the students begin to confront the need for structure, conventions, ways of doing things—as discovering their own ways of working, one variable at a time. (For inspiration on starting classes *from zero*, read Arnold Greenberg's¹ *Adventures on Arnold's Island*, a collection of essays on education. In it, Greenberg describes beginning a grade-school class with no tables and chairs. Quickly, students establish ways of acquiring and arranging tables and chairs. By the end of the semester, students develop their own system of governance, rules of operation, reward system, currency, priority over subjects in need of study, etc.)

- Expose students to a wide variety of quality work in studio classes as well as design history classes. Avoid showing a lot of your own work and a lot of work that is of the same or similar school of design—this inevitably breeds emulation and sucking up. A more eclectic set of influences can inspire students and make them aware of what's already been done, while providing no single stylistic path, causing students to rely more on themselves. Always provide context, analysis, and discussion when showing work.
- And what about in graphic design history, contemporary practices, and studio classes? Go beyond showing the usual collection of design icons and movements by giving a serious look at the history of visual poetry/literature from ancient pattern poetry to William Blake, Mallarmé, and Appolinaire to modern poets and writers like e.e. cummings, Gertrude Stein, and Kenneth Patchen; the concrete poets, Situationist, Letterist, Samizdat, and Fluxus movements; word/image artists like Ed Ruscha, Alison Knowles, Arakawa, Jean-Michel Basquiat, Tom Phillips, and John Baldassari; contemporary visual literature practiced by writer/artists like Mark Danielewski, Johanna Drucker, Paul Zelevansky, Janet Zweig, Joe Sacco, Charles Bernstein, Keith Smith, Takayuki Nakano, Ruth Laxson, Tomato, Ian Hamilton Finlay, Richard Kostelanetz, Clifton Meador, Graham Rawle, and myself; graphic satirists and provocateurs like Shawn Wolfe, Ilona Granet, and Richard Tipping; text-based installation and public artists like Jenny Holtzer, Barbara Kruger, and Mark Mandel; activist graphics by dissident artist/designers like Gran Fury, the Guerilla Girls, and WAC; design interventionist groups like Designers Without Borders and WD+RU; interactive media designers like David Small, Deena Larson, Chemi Rosado Seijo, Mark Napier, Anne-Marie Schleiner, Margot Lovejoy, and Jim Petrillo; and performance-based designers like Laurie Anderson, John Cage, Robert Wilson, and Elliott Earls.
- Expose students to a diverse range of texts: theories, perspectives, and arguments that can inform their design process. Each week in my design issues class, students read multiple, often contradictory texts related to a particular design-related issue. The texts form the basis for debates and discussions in class. Students write and design weekly responses to one or

- more of the week's texts. Students also write, design, and present a final research project on a design-related issue of their choosing.
- Encourage and facilitate collaboration. In a senior-level community design class, students work in teams, doing designs for on-campus, off-campus, and nonprofit clients. While solo efforts are still part of the process, more complex projects require true collaboration. Students learn to draw on each other's strengths, learn to listen and brainstorm within a team. As a teacher, it's necessary to keep an eye out for conflicts between students and with clients. Discuss the problems. Help students develop ways of working through conflicts and dealing with disappointments, while raising the bar of what is possible.
- Community-based projects get students out of the classroom, and allow them to be engaged with real people and organizations facing issues like domestic violence, immigrant rights, AIDS, and recycling. In a new, collaborative, Internet-based project, design and new media students at the State University of New York (SUNY)—Purchase are collaborating with other design programs in Mexico, Poland, and Germany. A project like this literally expands the parameters of the classroom and facilitates cross-cultural, cross-continental dialogue.
- If possible, offer interdisciplinary classes with a mix of design and fine arts students, as well as classes that get design students working together with students from other areas of study outside the visual arts. I've taught several classes where students in graphic design, music, dance, computer science, drama studies, political science, and literature collaborate in teams. These can be the most rewarding and surprising—and most disastrous—kinds of classes. As the media options that designers work in continue to expand, design programs and design educators need to get better at stepping outside their own circle and consider mapping out overlapping curricula tracks. As this happens, students interested in a wider range of activities, from writing and journalism to engineering and cultural criticism, may choose graphic design as their primary area of study and vehicle of expression.

In the wrong hands, a more expansive approach to anything can foster dilettantism. In the hands of faculty that take a broad view of graphic design activity, have high standards, are well informed, and are actively practicing their own work—the field can only deepen. Even if many or most design students never actually become authors or producers or active citizen-designers—preparing them to generate, research, edit, and collaborate on original projects will, no doubt, help them be better graphic designers.

NOTE

1. Arnold Greenberg is a poet, baker, tap dancer, and maverick educator. He founded three schools, including the Liberty School in Blue Hill, Maine.



Design Rockism

Nick Currie

An article appeared in the *New York Times* in 2004 on an issue I've long found fascinating: rockism. The word comes from the British music press in the early 1980s. It demonizes a conservative and romantic ideology of authenticity often encountered in rock and pop music. Here are some of the core tenets of the "rockist":

- Rock music should be bass, drums, guitars.
- It's about artists and songs, not about production.
- A good artist "keeps it real."
- Some artists are more "real" than others.
- Good songs are timeless.
- At some point in the past, they "got music right."
- Music has value to the extent that it's one person emoting sincerely.
- Although the real is very important, the real is today absent (metaphysics).

Now, other art forms have their own forms of rockism. In Britain, the Stuckists believe that painting is more "real" than video, for instance. Their manifesto begins, "Stuckism is the quest for authenticity," and continues through "artists who don't paint aren't artists" to "painting creates worlds within worlds, giving access to the unseen psychological realities that we inhabit" (that's the metaphysical bit).

So, is there a form of "rockism" in design? Is there an appeal to "authenticity"? I think there is. How many times have you heard designers say they design with pencil and paper rather than a computer? Isn't that just like those 1980s rock bands who wouldn't use synthesizers, or painters who think that video artists aren't "real" artists?

Rick Poynor recently described, at the Design Observer blog, a "difficult month" at London's Design Museum:

At the end of September, James Dyson, design entrepreneur and inventor of the bagless vacuum cleaner, accused the museum of "ruining its reputation" and

"neglecting its purpose" and resigned as chairman of the board of trustees. He claimed the place was "no longer true to its original vision" and lambasted it for becoming a "style showcase." His company Web site spells out his own engineering-led conception of the design process in no uncertain terms: "'Design' means how something works, not how it looks—the design should evolve from the function."

But the "form follows function" argument is a modernist one, not a post-modernist one. It fails to take account of the following:

- 1. We live in an increasingly postindustrial consumer society, a "society of spectacle." It's not enough for things just to be "functional," they have to be funky too. Sure, a vacuum cleaner must suck up dust efficiently—must "function"—but it must also look funky. Dyson's did, and that's a big part of why it became a consumer success story. In cultural terms, you could say that Dyson is listening enough to the Bauhaus, but not enough to the surrealists.
- 2. We are also a society whose religious and cultural outlook has been greatly shaped by its Protestant roots. Functionality is a moral value in itself in our "post-Protestant" culture and makes a covert appeal to authenticity. What's functional is good to the extent that we value the utilitarian, the empirical, the pragmatic. These are core *metaphysical* values in post-Protestant cultures. The value of things working is all tied up with the value of work, the "work ethic." Values like decoration and aestheticism are seen as Catholic: indulgent, feminine, subjective.

Post-Protestants "desire" functionality in ways that go beyond the merely pragmatic, and stray into the areas of the ethical, the cultural, the aesthetic, the psychological, the irrational. Jerry Seinfeld has a sketch about how men go and just watch other men when they're involved in do-it-yourself projects, because they have a magnetic attraction to the machismo of tools. Sure, it looks "functional," but it's also an aesthetic attraction, an irrational impulse deep within a certain kind of man.

The "rockists" in the Dyson affair are incensed that the Design Museum should stage a flower arrangement show, but they don't consider that their own attachment to functionality may be just as subjective, as aesthetic, and as irrational as any response to Constance Spry's flower arrangement show, which triggered Dyson's (highly emotional) resignation.

If the rockist designer believes that form should follow function rather than desire, it's easy to see him setting up a hierarchy in which graphic design is necessarily lower in the pecking order than industrial design because it's less "functional." All too often, graphic design fights back using the very functionalist language that puts it in second place, asserting functionalist qualities like legibility and internal systematic coherence. Amazon's editorial review of Josef Muller-Brockmann's "Grid Systems in Graphic Design," for instance, tells us firmly that "with examples on how to work correctly at a conceptual level and exact

instructions for using all of the systems (eight to thirty-two fields), this guidebook provides a crystal-clear framework for problem-solving." The Protestant severity is echoed in a reader review below:

Josef Muller-Brockmann has established an ironclad undergirding for graphic designers to base all of their layouts on. . . . In communications graphics it is essential that a design be based upon an objective process that centers on functionality and a logical progression of reasoning. Many designers embark on a project with no rational justification for what they are doing, only that what they are doing looks good to them. Such uninformed progress often leads to a composition that is incongruent and cannot provide the visual stability and functionality that must be the foundation of any graphical piece whether it is in print or web.

The same reader adds, incongruously but tellingly, "I was jumping around like a kid at Christmas when it arrived."

Brockmann would no doubt be spinning in his gridded grave if he knew that his name was now being used by Japanese design collective, Groovisions, for a range of dolls inspired by the look of his cutely stern Swiss system. But Groovisions' Brockmann dolls remind us that, whether it proves really to be more "efficient," more legible, than other layouts or not, Swiss graphics is finally a "look." Functionality is also an aesthetic value.

When people say design is about "what works," we should ask, "What works *where*?" and remind them that one of the locations where design has to do its work is the human soul, a place we need Blake, Freud, and Dalí—not Newton, Brunel, and Brockmann—to explain. And if that's a somewhat "rockist" argument for expanding the definition of functionality into nonrockist areas, well, shoot me. Preferably with a nonfunctionalist gun.

URL REFERENCES

Kelefa Sanneh, "The Rap Against Rockism," New York Times (October 31, 2004), www .nytimes.com/2004/10/31/arts/music/31sann.html

The Stuckist Manifesto, www.stuckism.com/stuckistmanifesto.html#manifest

Rick Poynor, "Fear and Loathing at the Design Museum," *Design Observer* (October 29, 2004), www.designobserver.com/archives/000219.html#more

On post-Protestantism: See Geert Hofstede's work on "cultural dimensions" at www .geert-hofstede.com

Amazon review of Josef Muller-Brockmann's "Grid Systems," www.amazon.com/exec/obidos/tg/detail/-/3721201450/002-3711850-4694438?v=glance

Groovisions Brockmann figures, www.sweatyfrog.com/brockmann1a.html



From Form to Context: Teaching a Different Type of Design History

Prasad Boradkar

A good history of design isn't a history of design at all. It's a history of ideas and therefore of culture.

—Tibor Kalman

The writing of design history is gradually evolving from a chronologically framed documentation of styles and their creators to an account that more frequently situates artifacts (objects, images, and spaces) within broader social contexts. It would be optimistic to say that we have traveled some distance in terms of placing design history within a more socially defined discourse—but more realistic, perhaps, to say that we still have further to go. This evolution in the writing of a culturally oriented design history is based primarily on these notions:

- 1. Formal analysis is incomplete knowledge
- 2. Objects and images are under-theorized in design research
- 3. We tend to neglect cultural meanings generated in practice by audiences

This essay does not attempt to outline design history's object of study, but it strives to emphasize that an inquiry into the social significance of artifacts should be included as one of its pivotal concerns, and it further offers possible models for so doing.

One of the first steps in contextualizing the history of graphic design can be treated as part of a continuum of design evolution, undetached from the histories of other design disciplines such as architecture, interior design, or industrial design. Though the task of teaching such a history is difficult to accomplish in the one or two semesters typically available, such an approach can set the stage for a more holistic understanding of designed artifacts. Although several graphic and industrial design educators, theorists, historians, and writers have begun to expand the premise of design history, three distinct areas additionally need to be tackled in further detail—context(s), critical perspectives, and cultural models. Together, these

three form the key components of a structure that can be used in teaching a more socially informed history of design.

CONTEXT(S)

The history of graphic design cannot be learned by studying merely the history of graphic design. It is critical that graphic communications be situated within a variety of venues, including *cultural*, *social*, *political*, *environmental*, and *economic* contexts. And, in accomplishing this, disciplines and areas of study such as visual culture, media and cultural studies, anthropology, political economy, sustainability studies, as well as material culture, can function as valuable resources. An engagement with discourses derived from such diverse sources will lead to a higher awareness of the role of images as signifiers of culture, human relations, and society, and thus will provide a notably more well-informed understanding of the larger significance of graphic design activity.

For example, Peter Jones demonstrates how situating the analysis of postage stamps within a historical/cultural context can reveal appreciably more than the expression of graphic creativity—that, in fact, these stamps serve as signifiers of national identity, fetishizing of technology, modernization, and the like. In Malek Alloula's postcolonial critique, postcards featuring photographs of veiled Algerian women sent by French colonizers back home between 1900 and 1930 unmasks new meanings. In his analysis, Alloula shows that these postcards reveal the colonial gaze of the oppressor, the stereotyped French perception of the native, and the Oriental eroticizing of the Algerian woman.

CRITICAL PERSPECTIVES

Complex analytical frameworks based on specific theoretical positions can help uncover particular meanings of artifacts. British author and literary critic David Lodge lists the following as some of the types of perspectives that are regularly used in the analysis of literature: "historical, biographical, rhetorical, mythical, structural, Freudian, Jungian, Marxist, existentialist, Christian, allegorical, ethical, phenomenological, [and] archetypal." Such approaches may be similarly employed in critiquing visual messages. When situated within a feminist perspective, the analysis of an advertisement can reveal the unique conditions and meanings generated by the politics of gender, and, if situated within a Marxist perspective, it can highlight issues of class and labor. Similarly, an allegorical perspective will emphasize stories behind the message, just as a Freudian analysis can underscore issues relating to subconscious desires. Each critical perspective is fundamental to creating the condition for a specific interpretation. In a Marxist analysis of packaging design, Wolfgang Haug delivers a scathing critique of Andy Warhol's record sleeve concept for the Rolling Stones' Sticky Fingers, released in 1971. The cover art features an image of the male body in tight jeans photographed from waist

to mid-thigh, clearly showing the outline of the penis. A fully functional metal zipper is attached to the cover, and, according to Haug, "the buyer acquires the possibility of opening the package, and the zip and finds . . . nothing." It is his contention that commodity aesthetics (the form of a product and its packaging) promises much more than it can deliver, leaving the unsatisfied audience with a desire for more. This critique implicates the form-giving aspect of design as an activity that prevalently provides value to the capitalist system at the expense and disappointment of the user.

CULTURAL MODELS

Having asserted that "culture is one of the two or three most complicated words in the English language," British cultural theorist Raymond Williams further defines it in three parts as:

(i) the independent noun which describes a general process of intellectual, spiritual, and aesthetic development; (ii) the independent noun, whether used generally or specifically, which indicates a particular way of life, whether of a people, a period or a group . . . [and] (iii) an independent and abstract noun which describes the works and practices of intellectual and especially artistic activity.

Cultural models may be described as mechanisms devised with the explicit purpose of gaining a clear understanding of specific occurrences in the world. In order to ground the contextual meanings of visual messages, cultural models that highlight any of the elements from Williams's definition of culture above can be highly effective.

Paul Willis' concept of homology may be considered as one such model. "Essentially, [homology] is concerned with how far, in their structure and content, particular items parallel and reflect the structure, style, typical concerns, attitudes, and feelings of the social group." For example, fashion, music, art, graphics, and products may be interpreted as exhibiting stylistic similarities as well as the zeitgeist of the 1960s. The dreamy ethereal music, drug-inspired lyrics, and strange rhythms of some of the songs of bands such as Cream, the Beatles, and Jefferson Airplane led to the design of posters and album covers that exploded with psychedelic colors and free-flowing forms. Dylan's poster by Milton Glaser, with swirls of bright colors described as "a symbolic crystallization of its time," and the lava lamp, with lazily floating globs of oily light, expressed similar aesthetic and cultural ideologies. Research assignments constructed around homological analysis of specific time periods that help students connect graphics to objects to sound to motion become excellent pedagogical tools, which may be used to explore an expanded history of design.

Paul du Gay's circuit of culture, with some alteration, can serve as a basis for the contextual study of artifacts. In order to gain a better historical perspective, the model, originally composed of five segments (production, representation, consumption, identity, and regulation) can now be expanded to include evolution. Production of objects, images, and spaces refers not only to processes of design and technological manufacture but also to practices of cultural production that often layer meanings into these artifacts. Of particular significance to graphic design is representation, which in part refers to how artifacts are portrayed in popular media. Consumption involves the active production of meaning by audiences, a practice that also leads to the generation of specific identities. Finally, regulation deals with the effects that artifacts have on individuals and institutions, often engendering responses such as control and adaptation. The addition of evolution to du Gay's circuit makes a provision for the study of changes in form and meaning that artifacts manifest in time as well as during their life cycles. For example, the UPS logo, from Paul Rand's 1961 design to Futurebrand's 2003 version, can be critically analyzed from six different approaches using the expanded version of du Gay's circuit of culture.

CONCLUSION

Context(s), critical perspectives, and cultural models (used individually or in conjunction with each other) can become guidelines for projects and research papers in history courses. In an Arizona State University industrial design course, Twentieth-Century Design (typically taken by sophomores), I have experimented with creating a research assignment titled "ImageMusicObject." Students are asked to select five objects (products, buildings, etc.); five images (posters, photographs, CD covers, etc.); and five examples of music (songs, albums, etc.) from an assigned decade for analysis. The crux of the student project is not simply to identify and critique these fifteen items individually, but to find patterns of homology among them in terms of style, attitudes, and the spirit of the age. By employing one of the critical perspectives mentioned above (such as feminist or Marxist), students contextualize these artifacts in terms of the politics of power of class, race, and gender—all issues germane to cultural studies discourse. Informed by Dick Hebdige's work on subcultural style, some students analyzed grunge graphics, fashion, and the associated music in light of emotions such as apathy and dissatisfaction felt by youth in the early 1990s. Others studied the hip-hop aesthetic as well as expressions of masculinity and race through designs of music videos, CD covers, logos, tattoos, cars, and jewelry.

Situating objects, images, and spaces within contexts, critical perspectives, and models can reveal meanings that, in traditional pedagogical environments, have been invisible to design students. Such an expanded basis for the history of design will not diminish the typical design concerns of aesthetics and style, but it will contextualize them with an awareness of the social and cultural landscape. These methods of teaching history possess the capability to awaken a consciousness that purely chronological and/or formal accounts often put to sleep. Such methods can enliven the debate in the classroom significantly and engage students more deeply in the subject. Furthermore, design history courses employing these ideas and

techniques have the added value of imparting contextual and critical-thinking skills to complement the creative-thinking skills typically emphasized in studio courses. The education of a graphic designer is only partially complete without a history course structured around the concerns of everyday life.

NOTES

- Tibor Kalman, "Good History/Bad History," in Tibor Kalman: Perverse Optimist, eds. Peter Hall and Michael Beirut (New York: Princeton Architectural Press, 1998), 80.
- 2. For lack of a better descriptor, the term *artifact* is employed in this chapter to encompass physical objects and visual messages as well as interior and exterior spaces.
- 3. Peter Jones, "Posting the Future: British Stamp Design and the 'White Heat' of a Technological Revolution," *Journal of Design History* 17, no. 2 (2004): 163–176.
- Malek Alloula, "From the Colonial Harem," in *The Visual Culture Reader*, ed. N. Mirzoeff (London: Routledge, 1998), 317–322.
- 5. David Lodge, Small World (New York: Penguin Books, 1995), 24.
- 6. Wolfgang Haug, Critique of Commodity Aesthetics: Appearance, Sexuality and Advertising in Capitalist Society (Cambridge, UK: Polity Press, 1986), 86.
- 7. Raymond Williams, *Keywords: A Vocabulary of Culture and Society* (New York: Oxford University Press, 1976), 76–80.
- 8. Paul Willis, Profane Culture (Boston: Routledge, 1978), 191.
- 9. Philip Meggs, A History of Graphic Design, 3rd ed. (New York: John Wiley & Sons, 1998), 394.
- 10. Paul du Gay, Stuart Hall, Linda Janes, Hugh Mackay, and Keith Negus, *Doing Cultural Studies: The Story of the Sony Walkman* (London: Sage, 1997).
- 11. Dick Hebdige, Subculture: The Meaning of Style (London: Methuen, 1979).



Principles Before Style: Questions in Design History

Richard Hollis

Why do we teach design history? One important reason is that designers have to spend time not only thinking about their work, but also explaining their reasoning. And design history gives students the confidence to think and talk about graphic work without just saying, "I like it" or "It works." Studying design history helps students find a language to talk about their work. If they have looked at a lot of other designs and asked the question, "What was the person who made it trying to do?" it may help them to answer the question, "What am I trying to do?"

In studying an individual piece of graphic art we can learn a lot by asking questions. The questions can be about three basic aspects of visual communication:

- 1. Social questions: Who made it? Who was it made for? Why? Where? When?
- 2. Technical questions: How was it made? What tools and materials were used? If printed, what were the processes, the mechanics, or the chemistry?
- 3. Aesthetic questions: What was the cultural environment? The current fashion or influence on style?

Then we can ask, "What functional category of graphics does this piece of work belong to?" What is it meant to do? What is it designed to do?

- 1. To identify? To say who or what something is, whom it belongs to or where it comes from? Is it a kind of label?
- 2. To inform or instruct? To say where one thing is in relation to another, to show position, scale and sequence?
- 3. To present and promote? To draw attention to something?
- 4. To direct? To say where something is—over here, over there, here!?
- 5. To demand a response or action? This may be added to the other questions.

And the piece under scrutiny may have more than one function, and may suggest other questions.

The next question is, if the task of graphic design is to communicate, how

does this piece of work communicate? What form does its message take? How is it encoded?

There are two obvious problems in finding answers. First, there is usually only the evidence in front of our eyes, and this is likely to be some form of reproduction rather than the original. Second, we usually can't talk to the people who made it or used it. So this demands some intelligent guesswork and imagination.

In addition to developing a vocabulary with which to talk about the meaning, context, and impact of a graphic design, another reason for learning something about graphic design history is to establish values. If we are looking at and talking about a particular piece of work, we should be able to answer the question, "Why it is worth looking at?" Any discussion will entail finding a vocabulary and language that everyone understands. (This will vary according to who is looking at and talking about the work. It doesn't matter if the language is straightforward and

Next, history helps deal with questions of style. Such questions solve themselves in actual design practice, but not so easily in the design school studio.

based on the traditional language of the studio, or if it is technical—say, from

semiotics—as long as everyone understands the terms being used.

This brings us to the question of sequence in learning about history. Should it be chronological? The difficulty, if you begin with early cultures, is that you need, ideally, to understand that culture. But design history is not anthropology. If students look at how certain ideas have been conveyed, at different times and different places, it can be easier to grasp some of the principles of visual communication.

Some of the useful aspects that can be examined in the past and the present are:

- The use of the human figure—the head, facial expression, gesture
- The use of signs—nonalphabetic signs, sign systems, alphabets—discussing the differences and similarities among pictograms, symbols, emblems, and logos
- The use of graphic surprise, scale, or unexpected metaphor to grab attention and make items memorable
- The use of text and image together—how they make and change meaning
- The use of illustration and photography to extend the meaning of the text, to substitute for it, or to record an appearance or an event
- The use of maps, charts, and diagrams
- The effect of changes in technology

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There is always a contemporary equivalent to a historical example.

There is no doubting the value of history. Eyes and brains have worked the same way over generations. The environment changes but the principles of visual communication survive. History helps us understand these principles. Principles come before style.



The Case for Critical History

Steven Heller

Most students and many practitioners cannot even list or describe the field's respective milestones or form-givers. I refuse to believe that this is true in other creative fields—painting, film, architecture, or literature—but arguably the biggest void in graphic design education is a critical awareness (or literacy) of design history. During the three to four years spent in undergrad art and design school, students are offered many studio courses devoted to technology, technique, form, and even style—they are taught to solve problems in various media and to produce professional work for numerous genres. But ultimately a portfolio is the coveted end product, which is even more important than the old sheepskin.

As co-chair of the School of Visual Arts' MFA/design program, I've found that some—not all, mind you—grad school applicants whom I interview, discounting those coming from nongraphic design backgrounds, have no sense of design's cultural significance. They don't have the rear vision that enhances forward thinking and view graphic design simply as a means to an end—a professional activity that leads to professional employment. True enough, but it limits the richness of the educational experience.

I often urge these "cultural illiterates" to either return to undergrad school or take continuing education classes that might bolster their understanding of design as a cultural manifestation. But, frankly, depending on the quality of the school and its programs, there are significant pedagogical cavities that even the best-intentioned teachers have trouble filling.

So at the risk of sounding like a lockjawed proponent of the educational standards movement that seeks to hold students accountable to standardized levels of competence in reading, math, science, and history, which I am really not, I believe that understanding our past through the discipline of critical history will enable us to learn how to learn about our present.

It is *critical* for design students to be fluent in the language (and idioms) of design beyond the programs and styles du jour. Just as important, students must be aware that graphic design history intersects with other cultural, artistic, and

political histories. Although our history has its own integrity, design is not produced in a vacuum, and design history must be taught from numerous social perspectives. For even when stripped down to the bare essentials, design history intersects (indeed is influenced by) outside events, discoveries, and policies. Design history is world history.

Today's designers are sometimes blamed or feel guilty for contributing to the wasteful excesses of our globalized capitalist consumer society. Branding has become the recent bête noir and marketing is suspect. This hot-button issue was rekindled a couple of years ago with the publication of the First Things First 2000 manifesto, and the ensuing controversy is bound to arise repeatedly in classes everywhere. While the debate over design's social role and designers' social responsibility is useful for self and professional awareness, seeing this topic through a historical lens would add dimension and weight to a highly emotional theme.

For example, branding methodologies are not new to the twenty-first century but began over seventy-five years ago when Earnest Elmo Calkins, a Midwest-born advertising executive founded an ad firm in New York and presumably invented what in the 1920s was called "styling the goods." Calkins proffered a strategy that involved regularly altering graphic styles for advertisements and packages. The idea was to push consumers to change their buying habits and thus goose the economy. This intersection of advertising, product design, industrial design, and public relations was key to what eventually became the paradigm of American consumer culture. In those days waste was not an issue and America had seemingly endless resources.

Tracing how Calkins's ideas developed into the practice of forced obsolescence and the role of design in this process is more than simply fascinating, it is necessary to understand in order to place today's issues in context. Branding strategies did not emerge overnight. In any case, the above example is just one opportunity to marry history, analysis, and criticism.

Knowing history might not change the attitudes of No Logo advocates, but for teachers and students it provides necessary grounding as they try to form intelligent critical perspectives. While it is not the primary job of design educators to develop the next generation of social critics, why shouldn't designers be fluent in a critical language? For that matter, why shouldn't we encourage designers to become critical historians? Even if scholarship is not part of their ultimate career goal, this knowledge (indeed all knowledge) will doubtless enhance relations with clients.

History is also vital in addressing many of the concerns that arise regarding the role of design in the social contract. Yet another critical topic for teachers and students is the war in Iraq. How (or when) designers contribute to pro-war or antiwar efforts is an individual decision and while I am not advocating that teachers express overt partisanship, historically designers have contributed good and bad propaganda to the world's conflagrations, and this war is no exception. Understanding the history of both oppositional and official propaganda by

analyzing it from the vantage of politics and aesthetics is an invaluable introduction to this practice. Through grounding in the history of propaganda, students can critically perceive how their own work functions to aid, abet, or critique public policy.

In my own truncated critical history lecture series for MFA students at SVA, I give one class that focuses on how racial and ethnic stereotypes have been perpetuated in popular arts and mass media since the mid-nineteenth century. The rationale is to expose students to a slice of American and European history that is unfamiliar—to discuss the origin of stereotypes and to explore what remains today of this sinister historical legacy. Regrettably, I cannot carve out enough time to also address some of the side issues; for instance, caricature and cartoon as a means of creating and deflating public myths. While this is not related to graphic design in the parochial sense, it is nonetheless an important sidebar to design history. There are dozens of historical sidebars that allow for similar critical analysis about graphic design practice. Sadly, most schools barely touch on these tangents at all, and what about design history in general? The fact is:

- Most design schools and colleges do not offer history survey courses that tackle more than a superficial canonical timeline
- Most design schools and colleges do not employ dedicated teachers of history and criticism
- Most graduate schools do not train educators to assume this role or take critical history into advanced realms of study—most design history teachers are practitioners who have entered the field through the back door
- And even if there were more trained educators, most schools claim they do not have the finances or underwriting to maintain a dedicated critical history program

Of course, history is low on the priority list compared to spending for up-to-date technology or studio courses that have immediate professional applications. There are only so many credits available in any given year, and a strict laundry list of graduation requirements prevails. So what currently takes the place of required history classes? There are various ad hoc nods toward history. Hank Richardson at the Portfolio Center, for one, routinely assigns students in his classes a project that involves researching a historical twentieth-century style and then producing design work in or influenced by that style. The research is meant to go beyond the superficial into a deeper analysis of the time and place in which said style was produced. During the course of this research, students immerse themselves in the particular methodology and mannerisms that may truly lead to further curiosity and investigation. And this is a good thing.

But, it is not my idea of a devoted critical history program. Sure, the student may learn about form by researching and copying important canonical works, but the big picture—design's influence throughout society and culture—remains fuzzy.

Some schools do have survey courses that use Phil Meggs's pioneering

History of Graphic Design as means of injecting a dose of history for a semester or two, and even a cursory sampling is better than none at all. However, using the short form method usually results in dry history—names, dates, and places do not an exciting or inspiring historical narrative make. The best way to use this book is as an outline upon which to build other more engaging activities. But the killer constraint is time.

The time allocated for even required design history courses is routinely limited—one or two semesters are the maximum—barely enough time to get a firm grounding in the European modern movement, no less the richness of postwar design, and forget about a viable historical survey of type. So when rushed to squeeze so much material into already chaotic brains, the best that can be hoped for is cursory knowledge with a paucity of insight. To have a truly engaging course, history must be critically presented and analyzed in such a way that it is a spring-board for understanding theory and practice, not filler.

So here's a radical idea that opens a huge can of worms given the political and jurisdictional concerns of most colleges and universities. I propose adding a required critical history course that is not squirreled away as a footnote under the art history department but instead must run for no less than three years within an undergrad design program. Make it an academic or studio requirement—whatever the rubric the subject demands this attention. Arguably, a graphic design curriculum cannot be considered completely effective if it does not teach the following ten points:

- T. The historical timeline
- 2. How to research and analyze historical data
- 3. How to discuss and critique this historical data
- 4. How to integrate historical precedents into contemporary practice
- 5. How to *apply* historical knowledge in critical analysis about contemporary design
- 6. How graphic design historically intersects with other design and mass media
- 7. How design and art historically influence one another
- 8. How design was influenced by social, cultural, and political, not to mention technological, events of the past.
- 9. How history is collected and written
- 10. The language of criticism

Given these ten points, I envision a program that does the following:

- 1. Introduces students to the milestones and form-givers of graphic design through readings, lectures, exhibits, and anecdotal or oral histories
- 2. Surveys the continuum of all design from the mid-nineteenth century to the present
- 3. Integrates popular culture throughout design history by focusing on specific events, objects, and individuals who have influenced this culture

- 4. Finds means of exhibiting in various media these historical and contemporary intersections
- 5. Promotes original research as a means to uncover and thus continue to critically pursue new historical avenues
- 6. Focuses on the historical derivations of type and why typefaces were created at particular time
- 7. Discovers the origins of graphic design in relation to advertising and printing
- 8. Introduces the critical voice that enables students to discuss the past and present in formal and practical terms
- 9. Encourages research and writing through papers and journals that critically analyze new data
- 10. Builds an environment in which history is an integral part of all design teaching

And allowing for these prerequisites, here is a sketch of how I would organize the three-year program.

YEAR ONE: IMMERSION

Most incoming students have no knowledge of design history whatsoever and little grasp of art history. The first segment of this year is immersion in art and design history. Milton Glaser proposes that at the outset, students simply be exposed to 1,000 images carefully arranged in a chronological line of arts, crafts, and designs. Like a movie teaser, this rapid snapshot of major and minor objects serves as an introduction to a more detailed survey and accounting. Key individuals will be covered as well as movements and schools. Type history will be covered along with a history of style. The immersion phase is easily standardized, allowing enough discretionary room for individual teachers to inject idiosyncratic preferences. Projects throughout the year could include multiple-choice and essay tests to measure knowledge and retention of facts, design problems (like creating magazine layouts and book jackets or using historical methods, manners, and styles), and research projects that demand more than superficial scholarship into known and unknown facets of these historical artifacts and events. This might culminate in an end-of-year thesis that involves producing a real or virtual exhibition.

YEAR TWO: ANALYSIS

With this scholarly grounding, the second year stresses secondary and original research and analysis that brings the sidebars of history to the fore. This year would focus on themes, context, and cause and effect. What caused the movements, schools, and philosophies of design to come into being? What theories were developed by which designers and thinkers? This year would force the student to think about what was learned in the previous year and to make connections to contemporary practice. It would include a unit on plagiarism versus influence. It will

involve developing books and catalogs that showcase individual and group projects. Narratives should be stressed and storytelling is key to relating history. Students will be encouraged to make visual presentations—anything from lectures to performance. As a final project, students could produce a magazine, Web site, or journal that collects the year's findings. AIGA might be a resource for these documents, and some could indeed push the historical scholarship further.

YEAR THREE: CRITIQUE

By the third year, students should be well versed not only in historical fact but also in the application of historical forms to present practice. This third year should now instill a critical vocabulary. Various media will be employed in order to integrate the knowledge of the past two years with a critical discourse of design today. The student is encouraged to marry theory and practice. The culmination would be a final thesis wherein a historical phenomenon is analyzed and critiqued in a contemporary context. Rather than develop a joint project, current practice for the third year emphasis would be on individual scholarship that can be made available through the Web.

While most educators respect history, graphic design education pays mere lip service to the integrated scholarship that I propose. We teach people to experiment, we teach people to produce, we teach people methods to get good jobs. But graphic design education requires even greater intellectual rigor. Granted, many students are good designers and some are great, but they must be equally good or great thinkers. They must be able to research, analyze, critique, and write. Therefore we need a critical history program that makes this the norm for design students, not the exception.



Putting Criticism into Critique

Nancy Mayer

oday's design students face a disturbing disconnect between the design criticism they study, and the design criticism they receive at their critiques. In most design programs, the overlap between criticism and critique is no more than five shared letters. In programs where both terms are used, design criticism is an area of inquiry where we study how we think about design. In design criticism we address what we consider to be "big issues," such as design theories, the social and cultural contexts for design, or the application of other disciplines such as anthropology or Marxism to the study of design. Design critiques, on the other hand, are where a group of people look at a student's work and proclaim his typography to be over-scaled. Criticism relates to inquiry, critique to judgment. I believe they should become more closely aligned. The disparity between these two arenas of discussion has become increasingly pronounced as many design programs have shifted focus over the last twenty years.

CRITICAL BACKGROUND

Graphic design education has changed dramatically since the introduction of digital technology. The curriculum has become more specifically technical and, at the same time, paradoxically, more theoretical. Before computers, when text was the realm of trained professional typesetters, "publication design" was full of gray boxes of Latin text and "communication" assignments were usually image-based posters. Posters required little text and communication effectiveness was relatively easy to ascertain.

Then the world got more complicated.

Suddenly, the student (and the professional as well) was responsible for learning myriad software intricacies, and became simultaneously responsible for all the details of typesetting, editing, and typographic refinement. But hand in hand with the new technical responsibilities came typographic freedoms never before imagined. I don't wish to imply that there had been no expressive typography before desktop computers—only that the ease with which a student could now affect the reading of a text through typographic means was unprecedented. Design assignments often changed to reflect these new possibilities.

Expressive typography, once mainly the province of headlines, was now brought to text. At many schools students began writing, rather than appropriating existing texts, designing what are awkwardly referred to as "self-authored" texts. Because of the ease of manufacturing typography, new kinds of student projects developed: more complex publications, interpreting a wide range of texts both informationally and editorially.

Concurrently, some design departments began adding design history, theory, and criticism classes to their curricula. The National Association of Schools of Art and Design's recent program guidelines help explain the design history classes, but do not explain the increase in design theory and design criticism classes now being offered to undergraduates. It would appear that schools are trying to produce designers who see a bigger picture, who are concerned with more than purely formal issues, understand issues of interpretation, weigh the implication of design decisions, and understand the social context of a design solution.

In offering these classes to undergraduates, there is an underlying assumption that the study of theory and of criticism should inform the process of creating graphic design—that this study should affect the quality and content of the student's work.

Admirable intentions all around.

The only problem is that most of the undergraduate departments still treat the critique process as if we were looking at posters. At the end of the semester, across the country, hot-shot designers are wheeled into final crits where they view assignments for the first time. They respond the only way they possibly can—viscerally and visually. When the project critiqued was a poster or a magazine cover, this structure seemed completely serviceable. Today, with projects of increased complexity, sometimes with intricate, layered content, this structure seems inappropriate and inadequate.

A CRITIQUE OF "CRITIQUE"

The purely "visual" critique tends to undermine the lessons taught in critical theory classes. The lesson put forth in a traditional, final critique is that meaning and context may apply to other designers (famous or dead designers discussed in history or theory class), but not to the student's studio work. The effective transference of theory hinges on the ability and desire of studio faculty to insist that these lessons be applied. If these lessons are not applied, the lessons are lost.

A student's hard work and attempts at dealing with content, interpretation, information, and context are not rewarded. The studio teacher may understand the project's developmental process, but the additional critics are only prepared to comment on how an assignment looks. The critic, due to limited time and preparation, can only discuss superficial aspects of a design, which exist out of context. Unfortunately, the visiting critic is given an overly important status by students. The critic inherently symbolizes the outside world. So the unspoken message of the critique is that while one's own teacher might be interested in meaning, the rest of the world (the real world that counts) clearly is not.

While there can be no visual communication without form, we are asking students to see the practice of design as more than just form. We are asking them to enlarge the profession and see new possibilities. Yet, when we talk about what they make, form is often the primary arena for discussion. Design theory and design criticism become abstract. The readings and all the discussions in the theory class appear to apply only to other people, often dead or French. "Experimental" work created for theory teachers is seen as different from "professional work." We want students to believe that design theory and design criticism apply to all design, even theirs, or, perhaps, especially theirs.

A SUBSTANTIVE CRITIQUE

I have been a guest critic in the graphic design department at the University of the Arts (UArts) since 1994. The degree projects there have developed an unusual format for critique that I believe could be a useful prototype for other institutions.

These capstone projects at UArts are interpretations of student-chosen texts, sometimes strongly edited or authored by the student. The final format may be a book, a digital experience, an installation—whatever is appropriate to the specific material. Beginning in the fall of the senior year, a capstone studio class is co-taught by liberal arts faculty members and resident design faculty. The students begin the year by writing and designing personal, autobiographical stories. The students work hand in hand with a design teacher and a writing instructor. It is believed that, because designers have so much influence over the reading of text and information today, it is necessary for any educated designer to understand and respect the written word. By undergoing the editing process themselves, and feeling personally invested in the interpretation of a text, they might become aware of how their formal decisions affect the meaning of the story. The liberal arts faculty continues their collaboration with the students into their degree projects, where they are joined by an outside critic who is a practicing designer. The students have three meetings throughout the senior year with this critic: at the initial proposal stage, at an intermediate progress stage, and at the conclusion of the project. The liberal arts faculty consults throughout the entire two-semester course.

I think what happens here is profound. There is constant reinforcement that content matters. Three different people have actually read a student's text, and all can respond to design decisions as these decisions affect the reading and interpretation of the text. Formal decisions are discussed in terms of their intention and their impact on meaning. These critics can judge the implications of a design decision by its effect on the text—how it reinforces, subverts, or misdirects the meaning. The only sacred cows, not open to negotiation, are the legibility and continuity of the text.

The effect of this structure on the final critiques is also profound. The final crits are open to a wider crowd. There are certainly a number of people looking at senior degree projects and praising the formal aesthetics, which are a UArts legacy. But into this melee are injected a group of people who have read the texts, who

know whether a diagram is informationally sound, and who might question the implications of a format choice, or the appropriateness of a stylistic move. And these people are treated like VIPs at the critique. The visiting critic in this model reinforces the idea that design choices have implications and that the outside world actually has a stake in the quality of those choices.

A PRACTICAL SOLUTION

In a world full of hand-wringing over unsolvable problems, this one is relatively simple. I would recommend that those invited as visiting critics request additional information before accepting the call. If an assignment is simple, such as poster designs, full-page advertisements, or magazine covers, a critic can responsibly show up and respond. However, if the projects are more complex, a potential critic should ask for the information necessary to provide the foundation for a valuable and insightful critique. A critic might request texts, sketches of charts and diagrams, and project proposals. Some homework will be necessary. The payback, however, can be enormous. If we put meaningful criticism back into critique, we tell our students that strategic thinking and conceptual analysis are essential parts of the design process. We tell them that we value their struggle with content and their attempts to broaden the profession. We tell them that we value intelligence and insight brought to bear on form.

And as educators, we also value our own efforts to introduce undergraduates to concepts of design criticism and design theory—to, hopefully, establish a bridge from theory to practice.



Remaking Theory, Rethinking Practice

Andrew Blauvelt

Unlike the recent skirmishes around issues of aesthetics and legibility in contemporary graphic design practice, the adverse reaction to theory crosses the generational divide, drawing dismissal and condemnation from likely and not-so-likely suspects. This condition is not surprising. First and foremost, graphic design is a practice, and as such, it seems destined to oppose theory. This schism is rooted in the division of human labor that separates thinking from doing, head from hand, the means of reflection from the means of production. Second, in the prevailing anti-intellectual social climate affecting all claims to knowledge these days, we should not be surprised at the level of skepticism directed toward anyone proclaiming a theory of anything.

BEYOND THE GREAT DIVIDE: PRACTICE VERSUS THEORY

The arguments made against theory in graphic design can be sorted out in two basic reactions. On the one hand, there is a fear of overintellectualizing the practice of a profession whose relative "simplicity" is often expressed with disclaimers such as, "Well, it's not brain surgery." Perhaps graphic design isn't a physically invasive procedure, but certainly there's the same potential danger of mind-numbing results. Even J. Abbott Miller, a designer who writes about the history and theory of graphic design, recently asked, "One always hears complaints about the 'dumbing-down' of design in journalism, but shouldn't we be equally critical of the 'smarting-up' of design for academic audiences?" This comment represents something of a milestone insofar as it even acknowledges that theory is being used, if only to claim its use has gone too far. Another variant of the anti-intellectual reaction to theory is harbored in the deepest depths of design mythology. Theory, precisely because it is characterized as external to the design process, is seen as disruptive to a designer's "intuition," dousing the flames of the designer's proverbial creative imagination.

On the other hand, there is a concern that theory is simply too vague and abstract to be useful for graphic designers. In this line of reasoning, theory (always described monolithically and without specificity or definition) does not and cannot respond to the particularities of graphic design practice, rooted as it is in the

materiality of the so-called real world. Apparently, theory is ever only about abstractions on the ephemeral and immaterial. Conversely, graphic design is seen as irreducibly complex, grounded in the messy realities of ink and paper, too constrained by industrialization and capitalism to ever rise to the lofty heights of theory.

TOWARD A THEORY OF PRACTICE

This impasse between theory and practice in graphic design must be bridged, not for the sake of theory, but for the sake of practice. However, the challenge is to both theory and practice. For theory, it means engaging in the making of graphic design, not simply as a means for critical reflection about work, but a critical intervention in work. For practice, it means rethinking the very definitions and limitations of graphic design, not simply to add a little intellectual glamour to an everyday practice nor as a rallying cry to colonize other areas of creative endeavor, but to finally understand graphic design as a form of social practice.

Thus, the title of this essay is "Remaking Theory, Rethinking Practice," not "Rethinking Theory, Remaking Practice." As such, it is my attempt to question why "thinking" automatically aligns itself with theory and how "making" positions itself almost exclusively in terms of practice. Rarely do we consider that theory is something that is made—let alone something that is creatively fashioned. Theory is seen as something "out there," like storm clouds on the horizon or, perhaps more fittingly, a fog bank, slowly and completely enveloping our minds. In this scenario, theory is preexistent, waiting to be discovered, waiting to happen. By understanding that theory is fashioned, refashioned, and self-fashioned—not merely fashionable, preordained, or predestined—we can begin the process of putting theory to work.

It is also important to recognize that graphic design, no matter how it is practiced, fashions its own theories about making that help give it meaning, significance, and legitimacy. Just as it is impossible to honestly entertain the notion of being outside of politics, it is equally impossible to imagine any practice of design that is somehow independent of, or beyond, a theory of practice. Just as sociologists are able to formulate theories about social practices, it is possible to construct a theory—or theories—about the practice of graphic design. However, unlike social scientists who are often left on the sidelines to describe, graphic designers can actively redefine their practice from within.

THE TURN TOWARD THEORY

The very fact that we can have a design conference in 1997 with the word "theory" in the title—well, the subtitle at least—demonstrates that something is afoot. As the literary critic Terry Eagleton relates:

Theory on a dramatic scale happens when it is both possible and necessary for it to do so—when the traditional rationales which have silently underpinned our daily practices stand in danger of being discredited, and need either to be

revised or discarded. This may come about for reasons internal to those practices, or because of certain external pressures, or more typically because of a combination of both. Theory is just a practice forced into a new form of self-reflectiveness on account of certain grievous problems it has encountered. Like small lumps on the neck, it is a symptom that all is not well.²

Indeed, all has not been well for graphic design recently. And both internal and external forces have acted in concert to disrupt the practice of graphic design, forcing it to a new level of self-consciousness and self-reflexivity. The most obvious factors have been the technological challenges and opportunities imposed by the introduction of the personal computer, which transformed the way graphic design is produced and distributed. With the threat of every personal computer owner becoming a desktop publisher, graphic design was in danger of demystifying its professional practice and abdicating its perceived role as a "gatekeeper" to mass communications. Simultaneously, the personal computer expanded the range of media and skills needed by graphic designers in the areas of motion, sound, and interactivity, for example, which threatened the very definition of graphic design rooted in the world of print. Unfortunately, both conditions only serve to emphasize the dependency of a definition of graphic design predicated on a set of (everexpanding) technical skills. Faced with the prospect of massive mechanical deskilling and pervasive digital re-skilling, it is no wonder that graphic designers seek their social legitimacy less in terms of what skills separate "amateurs" from "professionals," but in the "value-added" notion of design as a potent social and cultural force.

Coinciding with these technological challenges is a more widespread public consciousness of design itself. If the 1980s initiated the age of designer "things" (e.g., jeans, water, and furniture), those discrete objects coalesced in the 1990s around a constellation of various marketable lifestyles. The advent of niche marketing effectively disrupted the notion of mass markets and, with it, the idea of mass communication. The idea of "audience" itself has changed as the cultural geography of society has changed, altering the demographic composition of not only potential audiences, but also graphic design students and practitioners.

The introduction of theory into the design curriculum is the logical consequence of such challenges, as teachers, students, and practitioners attempt to come to terms with these internal and external changes. Rarely does one encounter any course called "design theory." Rather, the introduction of theory into the curriculum has been through the back door—so to speak—of history classes, seminars on design issues, and, occasionally, in studio-based projects and assignments. If the 1980s saw the drive toward design history, then the 1990s witnessed the move toward theory. Of course, the introduction of history into design curricula elicited less negative reaction than the move toward theory, in part, I think, because history was seen as a confirmation of the logical evolution of a craft into a profession. Plus, it certainly didn't hurt to have wonderful images of old, but recognizable, things: after all, a poster is a poster. History gave life to

graphic design by giving it a past and, by implication, a future. Theory, like history, serves to contextualize the practice of design in any number of ways, not the least of which is to position it in relationship to other areas of intellectual inquiry. While a history of a discipline by its very nature defines limits and thereby creates autonomy, any multidisciplinary theory of graphic design by its nature robs the discipline of some of its autonomy by questioning its limits.

In a recently published interview with Ellen Lupton, Lorraine Wild—one of those pioneering souls in the American design history movement in the 1980s—comments on the role of theory in relationship to practice:

Theory has opened up a multitude of ways that we can understand our work, but it will not tell anyone how to produce a better or more interesting design. Graphic design will continue to be measured—or seen—through its visual manifestations, in all their variety.³

While this comment may be somewhat surprising, coming as it does from someone closely identified with contributions to graphic design history, theory, and criticism, Wild's comments express a more widespread ambivalence about how theory might be useful to designers. While theory is given the possibility of informing our understanding of work, it is denied any possibility of contributing to the making of such work. This tidy division of labor, splitting the theoretical from the practical, only serves to reinforce the very difference—indeed, the very distance—between theory and practice, which is at the heart of the problem.

RETHINKING PRACTICE

Theory provides the basis with which to ask questions not only about work, but also through work. And if nothing else, what design lacks in terms of interesting work these days is not necessarily more visual variety, but rather more provocative questions and polemical answers.

But it would be misleading to suggest that theory is something that is only added to the design process or curriculum when, in actuality, it is something that is already there and is made visible, and once discovered, makes visible certain assumptions and problems. We can and do import theories and ideas from other disciplines in order to understand our work, but it is only through the integration and synthesis of these ideas into the very materiality and particularity of graphic design that we can begin to determine the relevance of such an operation.

Not surprisingly, I see the role of theory in design not as a set of outside influences, assorted bibliographies, academic electives, or ex post facto critiques, but rather as integral to the process of making graphic design. In this way, I concur with Jan van Toorn when he describes the role of the contemporary graphic designer as a "practical intellectual," someone who is actively engaged in critical reflection about the designer's process of making.⁴ By recognizing that the theoretical is not simply something that is done either before or after work has been made, but rather

is crucial to the very process of making, graphic designers can actively contribute to the (re)definition of their roles in the communicative process.

It has become a cliché to say that the role of the graphic designer is undergoing significant change. The danger of repeating this truism too many times is that it will be considered inevitable. An expanded role for the designer in the communicative process is by no means guaranteed. Rather than submitting passively to the vicissitudes of change, graphic designers must actively reconstruct their roles. This is, of course, happening on a small scale, as designers entertain broader notions of graphic design, engage in entrepreneurial actions that challenge the ideology of the marketplace, or broaden their own creative roles in the formulation of projects and problems.

That is why I believe the role of graduate education today must be research oriented if any constructive redefinition of design practice is to be entertained. While professional practice increasingly accommodates the kind of "visual variety" Lorraine Wild referred to previously, it has not had to confront, in any large, systematic way, the challenge of not simply having to solve communication problems, but to pose them. A truly radical design practice, in my book, will be one that actively disrupts the conventions of the design process and transgresses the professional boundaries and limitations of graphic design, and not one that merely bears the visual signs of radicalism as a kind of calling card.

But what is research in the context of graphic design? Typically, research is understood as "getting to know your problem or subject." While this is not necessarily problematic—in fact, we might say that it is essential—we should not let this be the only function of research. Research in graphic design, much like theory and criticism, asks some much larger questions than can be asked by any one design problem or solution. These questions, while specific, are also open-ended in the sense that they can be made manifest in any number of ways. So, while there is a tendency in both research and theory toward the abstract and general, there is also the necessity of grounding any answers or solutions in a particular context, in a specific material reality, and a concrete historical moment. And it is this balance of the general and the specific, the abstract and the particular, which will help keep the answers asked by research and theory from becoming universal claims to Truth. Modernist design theory and research tended to ask questions removed from any particular cultural context and any specific historical moment. By doing so, their answers were often presented as universal and ahistorical—placeless and timeless. A critical, theoretical disposition helps frame and limit the answers found in research by making them contingent—specific to the historical moment and the particular context from which they emerge; in effect, situated knowledge and timeliness replace objectivity and timelessness.

TEACHING THEORY IN GRAPHIC DESIGN PRACTICE

The central questions remain: What is the role of theory in the design curriculum? And what do we mean by "theory"? I can only answer these questions, which have

been central to my own concerns, by relating specific examples in the formulation of a new graduate program at North Carolina State University.

We began by acknowledging that the graphic design faculty shared at least one common view: graphic design does not begin nor end in the objects it makes. While hardly an epiphany, it is a sentiment that is broadly acknowledged yet undertheorized. In order to more fully contextualize the practice of graphic design, it was necessary to adopt and adapt a model of cultural production and consumption from research done in cultural studies. This model recognizes that there are important stages or moments in the life of designed artifacts, from their production through their distribution and eventual consumption. It is important to note that this model is dynamic and cyclical, meaning that any stage can and does influence other stages.

We began by moving outward from the designed product, looking at the cognitive interaction between designed artifacts and those who use them—as viewers, readers, audiences, receivers, browsers, or consumers. It was also necessary to place the entire realm of design—designers, design artifacts, institutions, and audiences—within a larger framework of society and culture, which ultimately "authorizes" its making. Influence is reciprocal, so we examine how society and culture shape graphic design as well as how graphic design shapes society and culture. We also felt obliged to consider the impact of digital media on both graphic design practice and society from a position that is critical of the kind of technological determinism so rampant in the society and profession today. These three areas of cognitive interaction, cultural reflexivity, and technological innovation form a set of interrelated discourses about graphic design practice.

Various theories are introduced in topical seminars that cover these frameworks or topics. For example, in addressing problems of cognitive interaction, students are introduced to material from cognitive psychology, perceptual studies, and learning theory; or when confronting the social and cultural implications of graphic design, students are introduced to theories of representation drawn from anthropology, ethnography, and sociology; or when assessing the influence of digital technologies on practice and society, students study theories of other media forms such as television, film, video, and literature in order to grapple with a convergence of media in electronic environments.

Importantly, these seminars are connected to studio courses, which require the synthesis of ideas in the form of design projects that address, confirm, or challenge the ideas presented. The focus of such studios is the creative application of theoretical ideas in design projects, which are constructed by the students in such a way as to ask pertinent questions. Unlike the objectives of undergraduate education, students are not asked to solve problems, but are encouraged to pose questions. This represents a fundamental challenge to traditional forms of design education, which exist to replicate the status quo through problem-solving projects that confirm what we, the profession, already know. By contrast, problem-posing education centralizes the student as an active agent in the formulation of projects that question what we, as a profession, already know as well as things that we might never had considered.

In a problem-posing education, students must be able to critically examine their world and their role within it. This means that a critical disposition on the part of the student and teacher is necessary to fully capture the radicalism of the proposition. Critical thinking and making skills are crucial for success. Students must be able to formulate questions that are not simply reducible to yes or no answers, because this is the prevailing logic that must be overcome. Questions that cannot be answered with a simple yes or no are, in fact, research questions. And if the practice of graphic design is more than an unending series of solutions to never-ending problems, then we might begin to understand graphic design as a researchable activity, subject to both the limits of theory and the limitations of practice.

NOTES

- 1. J. Abbott Miller, "What Did You Do in the Design Studio, Daddy?" Eye 6, no. 22 (autumn 1996), 6.
- 2. Terry Eagleton, *The Significance of Theory* (Oxford, England, and Cambridge, Mass.: Blackwell, 1990), 26.
- 3. Ellen Lupton, Mixing Messages: Graphic Design and Contemporary Culture (New York: Princeton Architectural Press, 1996), 173.
- 4. For a more complete explanation of van Toorn's position, see his essay, "Thinking the Visual: Essayistic Fragments on Communicative Action," in *And Justice For All...*, ed. Ole Bouman (Maastricht, the Netherlands: Jan van Eyck Akademie Editions, 1994), 141–152.
- For an account of problem-posing strategies in educational theory, see especially chapter 2 of Paulo Freire, *Pedagogy of the Oppressed*, rev. ed. (New York: Continuum, 1993).



Talking Theory / Teaching Practice

Johanna Drucker

Fourteen years ago, when I was a graduate student at U.C. Berkeley in the visual studies program in the College of Environmental Design, I had the rare opportunity (rare for a grad student) of designing my own course. It was titled Image/Structure/Culture—and was meant to introduce students in the college—future architects, environmental designers, and city planners as well as a handful of graphic designers—to the fundamentals of critical theory applied to visual images.

Now, of course, that's back when dinosaurs roamed the landscape and the ancient seas still covered much of North America; primordial chaos had not yet divided the heavens and the earth.

At that time, *The History of Graphic Design* was just a sparkle in Philip Meggs's eye, and the beacons we held aloft to light the way were works like Estelle Jussim's pioneering books on technology and graphic art, which felt dramatically modern by contrast to the classics—Daniel Updike's *History of Typography* or William Ivins's *Prints and Visual Communication*. But I was consuming a diet heavy in French theory from structuralism to deconstruction in all their "post" and "neo" forms.

Zuzanna Licko, my classmate, was sneaking me contraband copies of industry reports on ductal (stroke based), pixel, and bit-mapped concepts applied to type design—as she was on the verge of buying one of the first of the first generation of Mac personal computers.

Rudy VanderLans, our other classmate, still freshly arrived from Holland, was thinking of starting a magazine, *Emigre* (in which he reproduced a page of one of my letterpress books), and I tried to discourage him from doing a journal since I thought it was so impractical. (I'd been around a lot of small-press publishing and didn't want to see him lose all his money.)

At that point in time, I had the enthusiasm of a convert for the subtle complexities of theory. I had the semiotic disease—breaking out in signs the way practitioners of formalism had broken out in spots and dots a few decades earlier—was steeped in the mysteries of psychoanalysis, discovering the fundamental

mechanisms of "condensation" and "displacement" with the excitement of a young physicist introduced to Newton's laws.

My poster advertising the class proclaimed that it would examine materials from "Pogo to Plato's Cave," according to some perverse reverse logic of chronology. I had set out to maximize the ten-week course (Berkeley was still on the quarter system) by including in the syllabus everything I had read, learned, or could imagine could be brought to bear from "theory" upon the visual image in all its infinite variety. My topics ranged eclectically from the esoteric to the banal and topics as diverse as camouflage in the natural environment (or, how a fish can aspire to be a tablecloth) to camouflage in the built environment (how the military makes a building look less like a building). I had no hesitation about linking the most improbable images—suggesting that a posed publicity photo of Marlon Brando as Marc Antony had a precedent in the gesture of an elegant skeleton from Vesalius.

I will probably never again approach a class with quite the same enthusiasm or sense of vertigo—relying as I did on pure adrenaline to motormouth my way through sessions in which I projected Rorschach inkblots or eighteenth-century silhouettes on the screen and babbled in free association in a verbal leapfrog from Jean Piaget to Roman Jakobson touching down briefly on Hubert Damisch-while I tried to formulate concepts such as "the process of closure, toward a theory of the picture" on the fly. It was fun to teach the writings of the strange, self-promoting, and dubiously gifted Italian connoisseur Morelli right alongside the work of Andy Warhol and the big-eyed children of Walter Keane while asking questions about the nature of authenticity, forgery, and fakes. But there was a fundamental dehistoricization in all of this. As if the principles of analysis could be lifted, like a perfect skeleton of ideal thought, out of the tissue and fabric of their own historical moment in order to function like a clean, ideal armature for understanding any image at any time. What are the visual features that make an image kitsch? I would ask. Or what characterizes a dramatic moment in a still image? Or how do we read complex narratives that interconnect a series of images as a "pictorial text"?

If I go back through the list of topics in that syllabus and, one after another, read down the list of references, I'm not so much shocked by its ambitious naïveté with regard to scope—"The Structure of Static Images," starring Charles Peirce, Ferdinand de Saussure, John Locke, Charles Morris, and a few Prague school semioticians thrown in for good measure, or "Representation and Illusion," according to the texts of Alfred Bazin, William Ivins, Madeleine Bunim, John White, Erwin Panofsky, and René Descartes, and so forth. I'm not, as I said, so shocked by its ambitions as by its major blind spot in ignoring historicity in all its many ramifications.

That blind spot is the blind spot of one's own historicity. As an artist friend has said to me, "We all enter theory at a particular historical moment." That moment, so naturalized, so familiar, blinds us to its specificity: That this was the early 1980s in American academia; that I had a French professor for whom this theoretical material defined his role within an embattled department; that the first-world, white academic culture in which I was operating held out to me, as a young woman scholar, a belief

that conquering "theoretical" concepts, acquiring theoryspeak, would let me "play with the boys" or, at least, play like them. All that was invisible to me at that moment. Divorced from any self-consciousness about my own history, it's not surprising that the one thing so conspicuously missing from my course was any sense of the way historical and cultural specificity informs every human expression.

My sense of representation, at that point, was roughly contained within this structural formation: an individual subjectivity intersecting with ideological codes and conventions of production, or the artist in front of the easel on which a painted landscape figures the image of the supposedly real world beyond its frame.

In representation now, the ante has been upped on attention to the technological aspects of mediation, but the essential structure is still the same. A recent liquor ad features an artist/designer (a man, since all real artists are still male, remember) transforming the "raw materials of nature" (here in the dashing human analogue of the supposedly sentient dolphin diving into a Johnny Walker Red sea) into the refined product of culture while the caption reads: "Imagination cannot be confined." Switching into a techno-key gives the motif new style, but the structure of "real" to "represented" remains the same.

So, jokes and flippancy and self-congratulatory remarks aside, here I am creating yet another syllabus through which to attempt this task again. And what is that task?

Well, on the one hand, it's somewhat the same: to provide critical skills for the understanding of the daily encounter with visual, verbal, and graphic images across a wide spectrum, from the most familiar to the most arcane, esoteric, refined, and banal. But now the task is reframed. It is not that all the theory talk or concepts are gone, but that they have to reflect the distance we have come since that time, the more synthetic digestion of theoretical texts and ideas. And, above all, from my point of view, it's a matter of reorienting priorities.

Within the title of that first syllabus lurked the term "culture," a concept that got seriously short-shrifted in the actual material covered by the course. But, like all truly Freudian slips of the typewriter, it was potently waiting to become the major term. Now, it's that term that interests me most, seems most significant, most compelling as an essential point of departure. I haven't given up on some of the old questions or answers. How is it that these two images—one a painting, one a photograph staged to look exactly like it—are so fundamentally *not* the same image? How would a concept like "distinguishing the plane of discourse from the plane of reference" help us distinguish between the ways in which a viewer produces meaning?

But I am keenly aware that what I most want to communicate at this point is not a set of abstractions or models for analysis of "representational strategies," but something at once more urgent and more elusive. In constructing the new syllabus—which introduces critical concepts through a historical framework—my central concern is the communication of fundamental tools of analysis that can be applied to the ongoing lived condition of experience.

Why? On some level, I once believed, during those heady days of

my fresh indoctrination into the jargoned wonders of poststructuralist vocabulary, that those many texts were a source for unlocking the secrets of representational structures. But, just as we can't any longer expect art exhibitions to attract an audience with titles like *Deconstructing the Phallic Mastery of Representational Strategies: A Study in the Implications of Lacan's Lack for the (M)other,* so we can't, I think, expect that anyone will continue to be excited, or convinced, studying the lessons of Roland Barthes' in the analysis of "Italianicity." The learning of theory can be all too conspicuously akin to the activity observed by Le Petit Prince at the beginning of his story when a snake swallows an animal and is distorted to assume its contours. How many times have we watched someone swallowing Foucault or Freud or Kristeva and seen their sense of self and language distort into a frenzy of "discursive strategies," "drives and cathexes," or "abjection and desire"?

But now, as I consider the problem of framing this teaching task, asking how to formulate an intersection among the terms "teaching," "talking," "theory," and "practice" into a configuration that has some kind of effective meaning or real value, I find that I have to return the theoretical constructs to very specific relations with history and culture. It seems essential to lift the historical amnesia that theory can introduce (although it is no more inherent in theoretical texts to be ahistorical than it is in anything else) and to think about graphic form, cultural expression, designed objects, and even ideas in terms of the social institutions from which they emerge.

I've come to this conviction not only through my own work and projects, but, even more immediately, through the contact I've had with various students in the field of graphic design. I thought I would describe a few of these specific cases in terms of the generic issues they raise, and then finish with a quick description of the syllabus I have been working on for the following year.

It has been useful, and important, to me to consider the questions/concerns brought to my attention by the students.

One of the most striking moments in my recent teaching experience was when a graduating senior came to see me about her final project. She had been working on Komar and Melamid, was herself a Soviet émigré—a not insignificant point—and she had even invited the pair to campus to give a presentation. Afterward, she came to see me and we talked about how they had asserted that in the West, particularly America, there was "no ideology." It struck me that this assertion met with no resistance or surprise on her part. It was simply a fact. I was horrified. In part, the issue of cultural displacement has to be taken into account: that she had moved across the Iron Curtain late in the Cold War, and that Western-style consumerism made a stark, striking contrast to Soviet-style graphics, social agendas, and their communication in the public sphere. The ideology that structures and "naturalizes" every aspect of daily experience had rendered itself so successfully invisible to her that it disappeared. So, I showed her a couple of images, the cover of I.D. magazine, for instance. "Whose idea of identity is that?" I asked her. And then an ad. "Since when is it 'natural' for women to call attention to the virtues of office supplies by wearing a checklist of attributes on their chests?" I wondered.

But how does this happen? And how can it be undone? What is the basic

Ideology IOI reading list that can provide an unmasking, a defamiliarization, of the lived condition? And how to do this so that it's not showing simply that one image, one issue, or one idea is ideologically charged, but that the whole total daily experience of living is "naturalized" through its ideological condition. That this is ideology. There is a wonderful passage in some critical theory book I read once (which? where?) that takes the description of a sunset—glowing, beautiful, the quintessential "natural" event—and systematically demonstrates the way every aspect of that "event," and one's observation of it, are embedded in cultural conceptions.

Another student comes to me, this time a grad student in design working on a project about books and the future of the book. Everybody says the book is over, finished. She wants to do a project on its future. Having read a few hyper-extreme works, she now wants to make a project taking off from them. What does she know about the history of the book? Nothing. Its physical origin and development? Its cultural role and history? How do you deal with such students? What I want to do isn't just to give them a dose of "the cultural status of the book in historical perspective," but to get them to understand once and for all time for themselves that all objects/discourses/discussions have a history to them, that you can't just pick up on a few contemporary popular references and "get" the current condition of the book—or anything else.

A third student arrives, this one is working on a project that will be in a "public space"—bus stop, street corner, an urban environment. But what is the public space as she assumes it? What is the nature of that urban environment? How do I get her to go from Habermas's tracing of the historical conception of the public sphere within eighteenth-century notions of the social to the current disintegrated condition of urban New Haven? This is a persistent dilemma—this linkage between critical theory and any kind of practice—design practice, research, writing, or whatever.

Finally, another student is working on a typographic design project and is reading various philosophical texts. One of these is by Heidegger and puts forth a theory of culture that taps into the "roots" of authentic underpinnings. But Heidegger has been taken completely out of context. There is no way the student can recover from that single reading a sense of how that particular concept of "authenticity" carried a political value in its context of postwar Germany and was severely and pointedly critiqued by Theodor Adorno. Not, that is, unless I say something. Is it too much to ask of the student to consider this enthusiastic use of Heidegger's concept in relation to a critical discussion of its assumptions? To see the other side of its supposed humanism? Will it have any effect on the outcome of the typographic design?

The answer to the second question is easy: not likely. The answer to the first question, like that posed by the needs of the other students, is more complicated. The problem is not to show that one image/text/bit of writing or type is ideological, historical, and subject to investigation through critical tools, but to try to provide a framework of metacritical tools that becomes intuitive. Instinctive. To nurture responses that can reply to the hyped and seamless face of contemporary style and culture with critical distance.

This brings me back to the syllabus for the new course—not that it is a be-all-and-end-all solution. It isn't. It's one attempt to present fundamental concepts that will be useful for students of art, art history, and design. Titled "Critical Intersections: Modern Art and Design: History and Theory," the course examines some of the many moments in the history of modernity when fine art and design were in dialogue.

The course is focused around a series of issues and a series of historical moments. It begins with the concept of the public sphere and development of the autonomous art object as key aspects of the advent of modernity. What is modernity? How is it defined critically? What are the problems of demarcating periods of history, and how do questions of stylistic transformation relate to these larger questions? How do we read Baskerville's and other modern type designs in relation to these issues? Is there any connection?

The course keeps several themes alive throughout: technological changes, cultural changes in the institutions in which both fine art and graphic design function, stylistic innovations, and an examination of both visual and verbal forms of language. Historically, the course moves forward through the invention and proliferation of industrial and mass production, to the utopian arts and crafts movements with their retro/historical styles, to the advent of the avant-garde and the major changes brought about through electrification, to the change from the industrial capitalism of the nineteenth century to the consumer capitalism of the twentieth century, to the development of the concept of the "spectacle" and the "simulacrum," and ends with a discussion of the hype of cyberculture and the appropriation of old counterculture sensibilities as a style motif of new electronic media in the service of transnational capital.

The idea is to interweave the critical with the historical, to try to make clear that theory, like practice, is linked to specific individuals and moments in time. For instance, to get them to understand the lineage of formalist modernism in terms of the Soviet avant-garde and its links to a language of militantism—to understand that the rhetoric of the "Left Front of Culture" bore within it certain features of the same repressive dogmatism by which it was ultimately destroyed, on the one hand, while, on the other, its stylistic innovations, so dramatic in their original moment, were absorbed into—even served as the basis of—the language of an international "modern"—that is, corporate—design that would have been anathema to the original designers.

Is it necessary for designers to know this stuff? In "talking theory" within the context of "teaching practice," history and theory offer a base within which to locate cultural references, thus contributing to the knowledge and vocabulary from which we make choices about the forms used in design. Theoretical tools also contribute to an understanding of what the design is doing and how it is doing it—through an analytic frame for meaning and communication.

But there is a certain caveat emptor aspect to promoting critical theory within a design context. I find myself particularly wary these days of the ways in which the acquisition of the vocabulary of theory becomes a part of the designer's portfolio in response to a change in the academic life of design, or the life of design within academic departments, journals, and conferences. Beyond a certain cleverness, there is the insidious stratification that starts to occur. Theory = dense/difficult vocabulary = what distinguishes the "smarties" from the "dummies" and then the "tenurable" from the "discards"—and before you know it, this field will just repeat the same old transformations that accompany the colonization of academic domains by critical jargon into a false hierarchy of the critspeak aficionados bent on the careeristic self-promotion of a theory class within the discipline. This inevitably results in an ever greater distance between the real goals of theory—analysis of culture, power, and one's place within it—from the day-to-day activity of the practitioner; that is, dealing with clients in a highly capitalized and competitive field and producing graphic, visual forms.

So, what do designers need to know? What is the link between teaching theory and talking practice? Not old semiotics, but kind of living cultural criticism through which they/we can try and understand the fundamentals: the relations of money, power, and our own situation, particularly the position of the individual in terms of the nexus of corporate power and the implications of our complicity, dependence, and potential agency. What's at stake isn't so much the look or form of design practice, but the life and consciousness of the designer.

There is no mystery in unlocking the ideological bases of the cultural agenda. One has only to ask one simple question. Really, just one question unleashes the critical process: In whose interest? That's it. In whose interest and to what ends? Who gains by this construction of reality, by this representation of this condition as "natural"?

If there's any urgent, compelling mission in all of this, it isn't because thinking about communication and signs, "discursive strategies" and the "historical nature of design," and power and money will just get you more, it's because we have to face the very real challenges of helping give shape to a public imagination in which it will become possible, acceptable, and desirable to manage the diminishing resources of a small planet with diverse populations in a manner that is equitable and self-sustaining rather than to greedily participate in the Disney/Fox/Turner fast-food monoculturalization of the universe. Is that possible? That's not a question I can answer, but I think it is the question we have to keep asking.



Writing Now: Journalism, Criticism, Critical Journalism

Rick Poynor

This is the opening broadside from a review of the book *Barthes for Beginners*, published in Britain's weekly design magazine:

The last time I checked everybody I knew had studied Roland Barthes at art college. From media studies to graphic design courses, the theory lectures were full of words like "semiotics" and "structuralism," usually taught by someone in unmatching socks. If there was a single culprit for this drivel then his name was Roland Barthes.

Those of us who actually attended the lectures might remember that Barthes also has much to say on the nature of pleasure and sexual non-conformity, and applied his ideas on communication to every area of culture and life—from fashion and popular culture to classical French literature and homosexuality.... If all that sounds interesting but a bit too much like hard work, there's a new book . . . that should get you through the most demanding cross-examination on the man's life and works.¹

Note how the writer tries to have it both ways. She wants us to appreciate that she knows about Barthes and takes it for granted that her reader will know about him, too: Oh yes, we have all studied Roland, but only the kind of nerd who is so out to lunch he can't even match his socks would take the man and his confreres so seriously. Our reviewer affects an air of superiority to Barthes, putting him squarely in his place for his "drivel," yet she and her editor seem to feel the need to inform us about this book. Overall, despite the ambivalence of its opening paragraphs, the review is fairly positive.

The most interesting aspect of an extract that is in tone by no means untypical of Britain's design press is the would-be flattering but ultimately patronizing way in which it pictures the reader. It appears to offer insight, but declines to risk anything like a genuine discussion by someone with something worth saying about Barthes and design, preferring to play it for laughs. Who, one wonders, does this publication suppose are its readers, and what does it think they know already, or would like to learn? Slightly rephrased, these are two key

questions now facing graphic design criticism as it struggles to be born: Who is the emerging criticism for? And what is it for?

The answers used to be breathtakingly straightforward. Here is the British designer Ashley Havinden, addressing the question, "Does Today's Criticism Help Design?" in 1952:

The role of the serious critic is that of an educator. By searching out the many examples of good design and appraising them constructively, he may convince the manufacturer or the printer of the merits of good design associated with his product. In the same way he may succeed in inspiring the shopkeeper with the desire to offer good design to the public. Such constructive criticism in the press would teach the public, not only to appreciate, but to demand good design in the products they buy.²

At no point in this short article does the writer define his conception of "good design." There was no need to because he could take it for granted that his readers—fellow professionals—would know exactly what he meant. Havinden's concern was with the world beyond the profession—the realms of industry, retail, and the client. The task, as he and other design leaders saw it, was simply to get everyone else to fall into line with their manifestly correct views. To achieve this end, he advised, design would need to receive weekly, nonspecialist press coverage of the kind routinely given to art, music, literature, film, theater, and "ladies' fashions"—as Havinden so gallantly put it.

Forty-five years later, almost nothing has changed. Ladies' fashions are covered to excess in the generalist press, while poor old graphic design must make do with only the occasional review for a rare exhibition or an exceptionally noteworthy book. The primary limitation facing today's design criticism is that its placement in professional magazines—still the primary outlet—means that it consistently preaches to the converted.

This is not to deny that such writing, at its best, retains an educational purpose, though in a narrower, more professionally focused sense than Havinden intended when he described the critic as an "educator." The critical awareness advocated by a small minority of magazines encourages critical reflection in the designer's personal practice, while an acquaintance with design history develops an awareness of the profession's internal dialogues and broadens the designer's sense of the possible, or the no longer viable. Perhaps these are some of the pragmatic goals that Massimo Vignelli had in mind when he observed a few years ago that "criticism is the instrument that sharpens our tools." Andrew Blauvelt, writing in *Eye*, puts a 1990s spin on this way of thinking:

The notion of design as a field of study without practical application is unlikely and undesirable. After all, it is the practice of graphic design—no matter how wanting or limiting—that provides the basis for a theory of graphic design. This is not to say that the education of graphic designers needs to be tied so

intimately to professional practice that it cannot engage in activities which challenge design's social function, historical understanding, or professional legitimacy. The calls for graphic design to be a liberal art . . . need to be supplanted by strategies which foster "critical making," teaching when, how, and why to question things.⁴

At root, though, despite a much enlarged sense of what might be professionally possible, design commentary remains, even here, at the service of design. Its purpose is still, ultimately, to create "better" designers, even if the conception of "better" has changed.

There is another, more combative view of criticism, however, summarized in an essay by Anne Bush, writing in *Emigre* in 1995:

Criticism in its most rigorous form is analytic contestation. Its goal is not to reinforce, but to reveal. As an interaction between internal disciplinary conditions and outside influences, it must ultimately eschew consensus to maintain its critical eye. Thus to promote pragmatic criticism because it appeals to a professional body actually thwarts analytic introspection. . . .

By separating reflection and action, a singularly professional criticism depoliticizes graphic design. Preferring to focus on internal questions, it implies that design is only important to itself, privileged and immune, distanced from social and cultural conditions that it actually has a hand in constructing.⁵

Exactly how radical Bush envisages such a criticism to be remains unclear. One of her sources, literary critic Terry Eagleton's *The Function of Criticism*, ends with the proposition (not quoted by Bush) that "Modern criticism was born of a struggle against the absolutist state; unless its future is now defined as a struggle against the bourgeois state, it might have no future at all." In this view, criticism breaks free from narrow professional goals and becomes an instrument of radical social transformation. One could indeed imagine design criticism as part of a wider cultural criticism conducted along such lines, but given graphic design's intimate role, as usually taught, in serving the bourgeois state, one supposes such an approach would be highly critical of many of the institutions, practices, and beliefs that design holds dear. I don't intend to pursue this here, but I do want to suggest that there is a need for much greater clarity on the part of graphic design criticism's more radical exponents when it comes to design's sociopolitical dimension.

Anne Bush's analysis is valuable as one of the few recent attempts to explore issues surrounding the development of a graphic design criticism, but it stops at the point where it might more fruitfully have begun. Bush does not tell us which audience or audiences she envisions for her brand of "analytic contestation," what the vehicles—real or even hypothetical—would be for this kind of writing, who is going to write it, or how it would be funded. She offers only the vaguest sense of what such a graphic design criticism would be like to read and mentions no one who is actually

doing it. The lack of examples in her essay makes it almost impossible to test the cogency or viability of a position with which, in outline, I have a great deal of sympathy.

I will return to some of the practicalities that Bush overlooks because they offer the best guide we have to the state of graphic design criticism today. First, though, I want to look in broader terms at the relationship between academic writing and journalism on the subject. Here, there is a long-standing tension that can also be seen in many other subject areas, but this need not be a case of either/or. Both kinds of writing have their purpose and their place; both kinds of writing have their problems and their pitfalls. The inadequacies of much design journalism hardly need spelling out. The quotation with which I began exemplifies its anti-intellectualism and compromise, and the way it consistently underestimates its readers. But nor is academic publishing completely untouched by external factors. Academia has its politics, its personality clashes, its career paths, its tendency on occasions to encourage orthodoxy or to domesticate dissent, all of which exert a subtle influence on what gets written.

Neither of these positions, however, represent the ground we have attempted to occupy with *Eye*. As an editor, what I tried to encourage and develop is a "critical journalism" positioned somewhere between the two poles. The choice of term is deliberate because most journalism on the subject is not critical at all. But the concept is hardly new: broadsheet newspapers and magazines, such as *Harper's*, *New York Review of Books* (and its London counterpart *London Review of Books*), and the British film monthly *Sight and Sound*, all publish critical journalism.

Many of *Eye*'s writers are academics. The style and presentation of this writing is, however, journalistic—up to a point. If someone submits a piece titled "Figurative Boundaries: The Body in Early German Graphic Design," we will probably suggest something colon-free and snappier, such as "The Modernist Body." It looks better on the page and is a much stronger hook for the uncommitted reader. If writers are overfond of jargon or needlessly circuitous, we will encourage them to rephrase, or make some suggestions. Most professional magazines ban footnotes, which are seen as distracting to nonacademic readers. *Eye* is sparing in their use, but retains them where a piece would be compromised without, or where they will be helpful to readers with research interests. We have always published lists of suggested further reading if it seemed useful to do so. Aesthetically, *Eye* has elements of the bookishness and sobriety found in an academic journal, but combines this with the visual resources of a professional magazine. The politics of reproduction make an interesting subject in itself, but we can at least show the reader clearly what our writers are talking about.⁸

The point of these techniques is to attract readers and hold their attention. I have sometimes been challenged for the assumptions I make about what readers will or won't accept, but unless you are going to commission detailed market research, this is all you can do. Editors navigate by instinct, experience, and the feedback their magazines receive. An editor's guiding sense of the "ideal" reader—a composite

individual made up of many actual people—helps to give a magazine its coherence and shape. In *Eye*'s case, this notional reader was also, to a large extent, myself, and many an editor has admitted as much. We hoped to appeal to a mix of designers, educators, students, and anyone with a wide-ranging interest in contemporary visual culture, and as far as we can tell, this is *Eye*'s readership.

I would like now to change the angle of view and take a look at the individual on whom the development of design criticism must necessarily depend: the critic. Without people consumed by a regular urge to write, there can be no writing or criticism. The presence of committed critics in reasonable numbers, as well as their availability to do the job, is the real measure of graphic design criticism's state of health.

When we started Eye in 1990, I had a clear sense, from reading American publications, that the United States was ahead of Britain in developing an Englishlanguage criticism of graphic design. It would be satisfying to report, after seven years of concerted effort, that there had been real developments in this area. In the United States, there has undoubtedly been progress. Existing writers have grown stronger. Ambitious new writers, would-be critics, have arrived on the scene. Anthologies of critical writing are being published. Graphic design conferences include discussions of criticism. In Britain, however, despite the undeniable buoyancy of the graphic design scene, we still lag behind. More people are writing about graphic design, but, disappointingly, the standard of this writing has not, on the whole, improved. It lacks breadth and ambition and even the best of it is journalism, not criticism. I am not sure how to account for this. With Eye, we created a platform, issued frequent invitations, showed we were ambitious for the writing to develop and that we would give it the freedom and space to do so, but eager, would-be critics did not come flocking to join the cause. With a few exceptions, British academics teaching in humanities departments (as opposed to design schools) have not seen Eye as a place they want to publish; and not every academic writer is, in any case, a critic.

Perhaps I should define what I think it takes to be a critic and achieve a critical presence:

- 1. The critic needs to be identified with a strong personal point of view or position. This is one of the factors that sets the critic apart from the journalist. One of Britain's best-established graphic design journalists once told me that he liked to sit on the fence. So far as I know, he's still there.
- 2. The critic will probably be identified with a particular area or subject matter. This is the most obvious way of distinguishing yourself from other writers. It can only be achieved over time and it is harder than it sounds.
- 3. As a sign of seriousness, the critic will need to publish in the right places. This sounds horribly snooty, but it is a fact of life. Some publications have critical credibility and others don't.
- 4. In time, the critic will certainly publish books as well as articles.
- 5. The critic will almost certainly need to stick his or her neck out. Not everyone

- is going to like what critics have to say, but their willingness to do this and risk the possible consequences is another mark of their critical seriousness.
- 6. Last, but absolutely central to the enterprise, the critic will need to be an exceptionally good writer.

This is what a critic needs in outline, but there is more to be said about the last two points. First, sticking your neck out. My disappointment with some academic writing about graphic design is that, while it can be very outspoken when addressing general issues or abstract ideas, it is not nearly so brave when criticizing individuals or institutions—in other words, when it involves saying something that could entail some personal cost to the writer, if not now, then at some imagined future point. It is the difference between calling for "analytic contestation" as a desirable goal and actually practicing it by analytically contesting real design phenomena out there in the world. Academics writing for *Eye* could be surprisingly gentle even when, for instance, reviewing a book. Their real opinions, which sometimes emerged in conversation after the writing was done, were not vigorously reflected in the writing itself. But why not? This is why we went to them in the first place. If I single out academic writing, it is only because the ambition to develop a graphic design criticism is coming principally from that direction. If we are to have it, it will need to grow sharper teeth.

Second, the need for talent. As an editor, I was looking for opinionated writers who were not shy of telling us what they really thought, but I was also searching for a much harder-to-define quality that I will call a writer's sensibility. By this I am trying to suggest the manner of thinking, the areas of personal emphasis, the unique life experiences, the peculiarities of outlook, perhaps even the tics and quirks that inform a writer's writing and help to set it apart. The medium of an individual sensibility is, to a large degree, a writer's style and its resulting tone. This is one of the problems with jargon: it is the language of a certain kind of officialdom. By using it, you join the club and make yourself intelligible to other members, but you make it hard for nonmembers to enter and you also surrender something of yourself. It takes a fine writer to incorporate a professional jargon and transcend it. The British writer on popular culture, Dick Hebdige, dean of the School of Critical Studies at CalArts, has achieved this brilliantly. At a lower intellectual level, the same problem affects large tracts of graphic design journalism. Many journalists write with an interchangeable vocabulary and the same tone of voice. But journalism doesn't have to conform to a single style any more than academic writing does. Good writers can satisfy commercial and generic requirements while bringing something of their own to the writing. Mark Dery, for instance, an American writer on cyberculture, is a first-rate practitioner of an informed, incisive, always personal, critical journalism.

One of the ironies of recent design writing is that designer-writers who are sensitive to every tiny nuance of style in a piece of design sometimes forget (or perhaps never really understood) that writing is just as much a craft as design, and that style in writing is just as much a medium of meaning and a means by which you seduce and hold your reader as it is in design.

There has been a lot of straining after the grand effect in recent design writing—small or medium-sized ideas eked out to would-be definitive bulk until the whole construction, or perhaps the reader, collapses under a weight that simply cannot be supported by the material's level of intrinsic interest. But writing does not always have to be about the huge, world- or epoch-transforming idea. Most writing is far more quotidian. Whatever its field, it makes a modest contribution to a cultural dialogue in which we are all, as readers, already taking part. It deals with smaller but still significant things, new information, new angles and interpretations of familiar issues. The best writing pays careful attention, as it proceeds, to the little observations that lead to a sense, as they connect with each other, of how things are. An insight doesn't necessarily need a whole paragraph—it can be imparted in a sentence, a clause, a parenthesis. It is the accumulation of little insights that gives strong writing its density. As an editor, I was less interested in the ponderous application by a writer of someone else's theories than I was in the writer's original perceptions and freshness of insight. Until we produce such a writing, we will never appeal to the world of potential readers outside the profession.

The necessity for craft is equally true of another recent tendency, the "essay," which aims to readjust the conventional boundaries between writing and design and allow design to take a more active and discursive role in the articulation and framing of the content. As a genre, such experiments are intriguing, but that doesn't rule out critical appraisal of the results. A collaboration between a London-based design educator and John Warwicker of Tomato in *Emigre* (still the main outlet for such experiments) showed how the process can go awry. The piece's claim, made near the beginning, is that ordinary publishing formats and editorial frameworks would be inadequate for what it has to say. The writer explains:

I knew that it could not be constructed as a conventional interview. Tomato, and John himself, had been instrumental in building a reputation for developing a philosophy concerning new approaches to thinking about, design and communication. To settle for a simple question/answer would not do. . . . We agreed the piece should provide the "evidence" which mapped the developmental process of discussion, through our individual and collective journeys.⁹

In terms of its informational content, the fourteen-page piece, constructed as a patchwork of statements and quotations, contains little from Warwicker that is not available elsewhere. A "simple question/answer," skillfully conducted, might have elicited new insights into his background and motivation. (Anyone who imagines there is anything simple about seeing an interview through from the formulation of appropriate questions to its final appearance in print should try it.) But the main problem lies not so much in the conceptual framework, which might have been made to work, as in the unconvincing tone of the writing and the lack of critical distance the writer brings to an undeniably timely subject. The pair meet in the Rose Garden in London's Holland Park, where the "tranquillity is shattered," we are told, by the arrival of "London's infamous graphic design anarchist." John—it is first-name terms

throughout—is wearing a pair of "all-essential" Arnett sunglasses, and he is in an "upbeat and chatty mood indicating that things were going very well for him." It seems that for Tomato, the paragraph concludes, "everything is coming up roses." Even journalists who prefer to sit on the fence would have avoided a corny punch line like this.

It is unnecessary, perhaps, to go into further stylistic analysis of this piece. A much higher degree of writing competence is needed before such an exercise lives up to its claim of offering forms of insight that are inaccessible—in some way that is never properly explained by the author—to more conventional means. The brevity of the individual text components calls for, if anything, a particularly concentrated and specialized form of writing—almost a screenwriter's skill. The larger question that might be asked is whether real critical detachment is possible when a writer allows the critical framework to be determined at the outset by the personal preferences of the subject.

One of the factors shaping this piece, I suspect, is the writer's desire to become at least half of its subject. "I was of the opinion," the author says, "that the process of us working together on this piece in a collaboration would ultimately lead to a positive exploitation of each person's cognitive abilities and personal viewpoints." What we are increasingly seeing, as the new graphic design criticism unfolds, is writing by writers who wish they were the star of the show. Unless the author is a Garrison Keillor, whose life is his subject matter, readers aren't reading because they want to know about the writer, but because they want to know about the writer's subject. Naturally, readers do get to know some—though by no means all—writers over time by what they choose to write about, by their point of view, by their writing style, and by personal details they sometimes let slip where appropriate, but it can take years, and a lot of writing, to build up such a relationship with an audience. It is a big mistake to imagine that just because you suddenly find yourself in print, you are instantly fascinating to readers as a subject in your own right.

And yet, having sounded this cautionary note, in a much subtler and more positive sense, the most compelling critical writing is a journey of self-discovery in which the critic is at times quite nakedly exposed. Critics undertake a prolonged and sometimes profound dialogue with their own instincts, sensibility, understanding, and intellect in the hope of discovering what they think in the first place and why, precisely, they think it. They are learning in public. Readers come to criticism for very similar reasons, to take part in this dialogue using the writing as guide, touchstone, and punching bag. With so much at stake, critics need a nose to uncover the truth and a willingness to speak as they find—not truth in some absolute sense, but truth to their own experience and perceptions. The most valuable criticism does not simply sharpen our tools; it *is* a tool—a tool for revelation, analysis, and reflection. As such, it should occupy a place at the very heart of the educational process.

NOTES

- 1. Yolanda Zappaterra, "The Art of Barthes," Design Week (February 28, 1997): 32.
- Ashley Havinden, "Does Today's Criticism Help Design?" Printing Review 60 (Winter 1952–53): 36.
- 3. Massimo Vignelli, foreword to R. Roger Remington and Barbara J. Hodik, *Nine Pioneers in American Graphic Design* (Cambridge, Mass., and London: MIT Press, 1989), ix.
- 4. Andrew Blauvelt, "Dumb," Eye 6, no. 22 (Autumn 1996): 54-57.
- 5. Anne Bush, "Criticism and the Politics of Absence," Emigre 36 (Fall 1995).
- 6. Terry Eagleton, *The Function of Criticism: From* The Spectator *to Post-Structuralism* (1984; reprint, London and New York: Verso, 1996), 124.
- 7. See Eye 6, no. 24 (Spring 1997): 57.
- 8. For a brief discussion of the implications of high-quality reproduction in the context of *Eye*, see Robin Kinross, "In the Same Bed" (letter to the editor), *Eye* 3, no. 12 (1994): 3.
- 9. Teal Triggs and John Warwicker, "Inthisworldtogether," Emigre 40 (1996): 33-47.

Thanks to Eric Kindel



Circling the Desert: The Illusion of Progress

William Longhauser

If you are lost and decide to find your way out of the desert by walking in a straight line, eventually you will return to the place where you started. Because one leg is longer than the other, what you perceive as moving in a straight line is actually forming a large circle. This is essentially a problem of location. Unless we know where we are before we move forward, the perception of making progress can be an illusion.

Most graphic design departments review their programs on a regular basis, yet limited time and resources often make maintaining the status quo a priority over change. The pressure to prepare students for a seamless entry into the workplace makes it virtually impossible to invest time in experimental courses not directly geared to professional expectations. This problem is compounded by the time required to keep students and faculty fluent in current software. As boundaries defining the role of graphic design continue to expand and dissolve, it becomes increasingly difficult to identify a single point of departure. The only certainty is that current conditions will increase in complexity. It is the responsibility of design education to take a leadership role and develop a narrative that remains relevant regardless of evolving fashion and technological advances.

Schools have used the positive attributes of the latest technology, but more needs to be done to compensate for those aspects that do not facilitate students' creative development. One of the most dramatic changes is that the physical relationship between students and their work has been all but eliminated. This has less to do with the final result than the experience of designing. A healthy design process has a beginning, middle, and end. Most unique discoveries are made in the time between the first sketches of an idea and the final result. The computer has reduced this rich territory to a single point; the beginning and the end now occupy the same space. What were awkward and often provocative first sketches are now concealed beneath a surface perfection that continues to produce instant results with the click of a mouse or a keystroke. The wonder, discovery, invention, and struggle that come from the direct experience of physically working with tools and materials are being replaced by choosing from a preconceived list of default menu items

developed to mimic visual language formerly produced by hand. This turns the students into spectators in a game of multiple choice.

One of the many questions raised by this new way of working remains unanswered: In today's high-tech environment, what is a studio? Prospective students touring educational facilities today may find the graphic design studios little more than empty rooms with long flat tables; the students can be discovered in one of the many labs where computers are arranged in rows, like slot machines in a casino. Unlike studios in architecture or fashion departments, which are alive with materials and activity, these spaces feel anonymous and temporary. In such a passive environment, important design issues become encumbered with technical trivia: corrupt files, missing type fonts, laser printers lacking toner, and time-consuming searches for ineptly marked files that require tedious opening of each one simply to identify the content.

The urge to create is a powerful instinct that unites us as human beings. As educators, we need to establish fertile conditions and develop assignments that encourage students to fulfill their potential. Creativity, however, requires resistance and constraints—the antithesis of the mission of software engineers. Many students enter design programs today after spending a considerable amount of time using computers, but their experience has not made any contribution to their learning "how to see." They may easily produce words and images, but the results are undigested and often lack meaning. "Seeing," a discipline essential to the graphic designer, can be learned and enhanced in depth—and the best means for achieving visual literacy is through the direct experience of making. "See" has a second meaning that, although frequently used in conversation, is less familiar: to understand. In learning to see, one must transcend the passive role of recognition and engage in the active experience of perception.

Recognition is instantaneous; it stops, though, after labeling something familiar by name, like a sunset or a bird. Through conscious observation, perception extends this initial moment of acknowledgment to an experience that is translated into a visual language expressed with such words as light, color, texture, shape, line, and pattern. As awareness increases, more subtle similarities and differences become clearer, and previously unseen connections emerge. The relationship between seeing and understanding is essential to creating visual connections and finding new sources of reference. Design serves as a means to better understand the physical world and to better read the nature of the realities around us.

No single answer exists to the many complex questions confronting design education today, but we do need to explore new paradigms for restoring human creativity to the design process. School must function as a laboratory for experimentation, not mimic the existing, hackneyed solutions that abound in the practice of design. This experimentation is only possible when an environment stimulates students to explore without being afraid of producing results that have no immediate practical application in the "real world." Our students should be encouraged to expand their frames of reference and learn to identify where art, architecture, dance, science, biology, linguistics, and philosophy intersect.

In an age that thrives on complexity, it might be novel to celebrate simplicity. The core belief is that "not knowing" is a healthy prerequisite for discovery and that "making" is a physical process that involves thinking, drawing, and working directly with materials.



What This Country Needs Is a Good Five-Year Design Program

Steven Heller

What is the greatest problem facing graphic design education today? Not enough quality time. With the exception of occasional two-year programs, most undergraduate colleges and art schools offer four years—one of them being foundation, a questionable squandering of significant design teaching time. So the average education lasts three years, which is insufficient to cover everything today's well-rounded graphic designer should know. What might ease this "crisis in education"? Perhaps what this country needs is a five-year undergraduate school.

Of course, this assertion contradicts prevailing beliefs. But, arguably, the increasing number of applications (particularly from graduating seniors) to the growing number of American graduate design programs is evidence that today's BFA students are not entirely prepared (or confident) to function in a world of integrated practice and advanced technology. Let's face it, a three-year education is old school.

Proficiency in requisite technologies, not to mention a slew of optional techniques, easily takes a year or more to master in a rudimentary way. Acquiring fluency in the design language(s), most notably type, is an ongoing process. Then there is instruction and practice in a variety of old and new media—print and Web, editorial and advertising, static and motion, not to mention drawing and photography. These take time to learn, no less to master. And what about the liberal arts: writing, history, and criticism? Theory is also a useful foundation if taught correctly, but it is often perfunctorily shoehorned into studio classes. How can a design student function without verbal expertise, let alone the ability to read and research? This must also be taught in an efficient manner that takes time. And then there is basic business acumen; every designer must understand fundamental business procedures, which are virtually ignored in the ultimate pursuit of the marketable portfolio.

Whew! That's a lot to accomplish in just three years. But added to this are the necessary internships that also take chunks of time. Frankly, students should not be allowed to enter the field without a little real-world experience under their belts. So shouldn't there be time set aside for a few solid internships or work-abroad programs in addition to a strong course load?

The foundation year—traditionally an opportunity afforded to freshmen to sample a broad arts curriculum—would serve students better if devoted instead to teaching the technologies and introducing languages endemic to graphic design.

Art and design schools that ostensibly begin to teach design majors in the second year have barely prepared their sophomores for design literacy. Foundation classes may offer some credits toward graduation, but what good are these credits if the knowledge has little bearing on the major? It is hard enough being merely competent these days, but fluency in type and conceptual thinking is so essential that more, not less, time must be devoted to it. Most sophomores, even those who excel in Adobe Photoshop, Illustrator, or InDesign, are plunged into problem solving without the ability to parse the problems they are asked to solve. Sure, their instincts and skill sets evolve over time, but in the truncated three-year time frame there are greater chances that too many students will be left behind.

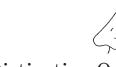
The greatest single area of ignorance among students (and some professionals) is type and typography. It takes sustained effort and practice to produce a type-literate student who knows how to compose type, what type is designed to express, and the history of letterforms as design components. By the senior year, too many students are still type novices, following superficial trends or rote traditions, and their portfolios prove that the standard for literacy is not as high as it might be. If nothing else, BFA graduates should flawlessly "speak" the language of type. Regrettably, claiming proficiency with computer programs seem to be more important.

Blame can sometimes be laid at the feet of instructors, but not always. How many times do good teachers lament the lack of time devoted to their specialty, or complain about the overall coursework packed into a short period that diverts student attention? In a three-year program, the number of required classes (and credits) often exceeds the ability of students to be well taught, or at least to retain what they've studied.

Given the programmatic and bureaucratic intricacies of higher education, a five-year program is probably unrealistic, but not altogether impossible. One solution is to eliminate foundation. But, more important, it is necessary for administrators to accept that twenty-first-century pedagogy is more complex than before. More, not less, schooling is demanded in many fields today, especially design. At the same time, design students must not be encouraged to view graduate school as merely a two-year supplemental extension of their undergraduate education. MFA faculties should not have to teach remedial type or computer programs—leave that for continuing education classes. Rather MFA programs should offer an additional two (or three) years to analyze and research bigger ideas for which there is no opportunity in the workaday world. MFAs should be advanced options after certain levels of experience are attained. Undergraduate education should be a full plate of pedagogical necessities that prepare students to enter the design field.

Admittedly, five years is not a lot of time either, but it will enable teaching of technology and encourage its immediate integration into the design process in the

freshman year. Furthermore, it will allow courses on history, criticism, and theory to be more than electives or add-ons (critical history should be a three-year parallel track intersecting with practical studio classes). The added year(s) should allow for more advanced minors in interrelated subject areas. More time could also allow for longer and more varied internships as requirements toward graduation. Five years of dedicated design pedagogy will better prepare students to enter the workforce, where doubtless they will learn even more. Undergraduate design education is not the last word in creating the good designer; work experience is essential. Yet more education accelerates professional growth. There are many terrific graduates emerging every year, but just think how many more there could be if graphic design education were not hampered by such a truncated production line. An extra year or two could make a big difference for everyone.



Distinctive Opportunities

Omar Vulpinari

Until a few years ago, master's and PhD studies were the domain of institutions with exclusively educational missions. Students and industry were respectful of their authority to certify the highest educational status and confer superior career potential. But the design profession and its educational needs have changed. Today's information society is dominated by speed and diversity. Production has moved from material to immaterial goods like ideas, images, services, experiences, and relationships. Ours is a society where globalized economy, information technology, and communication democracy have dramatically multiplied need and possibility. The current educational system cannot depend only on material production—age methods based on centralized military-style models still widely in use.

How is advanced education in communication and design evolving in this scenario? The buzzword may be "alternative opportunities."

Since 1998 I have headed the Visual Communication Department at Fabrica, the Benetton Research and Development Center for Communication in Treviso, Italy. Fabrica is a unique hybrid environment of learning, experimentation, and commercial practice sponsored by the Benetton Group. From its opening in 1994 by Luciano Benetton and Oliviero Toscani, hard-core networking has been one of its most successful philosophies, making the institution today the central node of an advanced international network of students, teachers, artists, 2D/3D and interactive designers, photographers, musicians, publishers, writers, filmmakers, and critics.

I guide a group of selected international student/experimenters who receive an all-expenses-paid, one-year grant. They benefit from learning by doing—working on world-class projects and attending world-class workshops, garnering extensive media exposure for their work, and drawing on numerous privileged connections. Benetton benefits from the public recognition, the extraordinary relationships generated from this unique global "think-net," and the innovative spirit that the center spreads out to the rest of the company.

And here is where the future is going: Like Fabrica, design education in the future will be seeded with more alternative education opportunities that will resemble corporate R&D departments focused on present and future socioeconomic

realities. Students will learn by doing. They will acquire knowledge from their successes and mistakes on real market assignments. The curricula will be based on finalized projects, short full-immersion workshops and lectures, and interdisciplinary speculation. Classes will become fast-paced, adaptable, small task forces. Projects and project leaders will bubble up spontaneously and prosper or fail, depending on team interest. Study platforms will be fluidly influenced by partnerships from corporate and governmental partners. The "open source" software development mode, based on idea democracy, peer-to-peer recognition, and horizontal hierarchy, will prevail. Attention will be given to ecology-oriented studies, where the efforts will address the social and environmental crises.

Bruce Sterling argues in his recent book *Tomorrow Now*: "Unfortunately, this speculative situation is not scholarship. Intellectually speaking, it means treading water. When you have no established canon of cultural classics, you have no place to take a permanent intellectual stand. You have no scholastic mastery; you merely have clever acts of opportunistic contingency. These losses are serious."

This is true when speaking about basic, undergraduate education. But at the postgraduate level these methods have already widely proved to be successful, especially when the objective remains preparing students for the speed- and change-driven world mentioned before. Learning to learn constantly and faster, along with broadening one's network of relations and resources, becomes fundamental.

These so-called school/shop models are also important "cushion" areas between the realms of study and practice, which are further apart than in the past. They allow young designers to express their most personal creativity and the potential of their still-uncontaminated instinct, while making important learning and discovery errors on real commissions. This can happen because the assignments come spontaneously from daring client/partners who need and expect unconditioned experimentation, innovating surprises, and constructive, not-asked-for solutions.

These new educational opportunities, like Fabrica, will not replace conventional studies, but will act as influential "boosters," offering a vital trickle-down effect of what good they have to offer. The private nature of their support will nurture risk-taking explorations that the academic world will also benefit from. And certainly they will offer distinctive learning experiences for a society where "new and different" are priority assets to all.

NOTE

1. Bruce Sterling, *Tomorrow Now: Envisioning the Next 50 Years* (New York: Random House, 2002).



What's Right with Design Education and Wrong with the "Real World"?

Susan Agre-Kippenhan and Mike Kippenhan

Admittedly, academia is disconnected from the "real world," and we think it is time to go on record saying that this disconnection is quite wonderful. We say this as graphic design faculty who are committed to preparing students to be smart, thoughtful, and productive participants in the community of designers.

The "real world" believes that a disconnect lies in the fact that throughout a student's education, academia provides him with a protective environment that doesn't actually offer him "real-world experience" prior to entering the job market. Our belief is that the disconnect lies in a different place. We believe that good design education is centered on some basic tenets that educators and professionals alike hold in high regard. These tenets form a backbone for education as the guiding principles that faculty and students use to ground their work. And we are confident that they translate as key theories for functioning in the "real world," forming basic building blocks that should be amplified and developed in the profession. But are they?

TENET ONE: SUPPORT, JUSTIFY, AND DEFEND YOUR DESIGN DECISIONS

Academia: In every class, every day, with every exchange, presentation, critique, and self-evaluation, students are required to be cognizant and articulate about every decision they make. Students must verbalize how their work addresses the creative brief, how it is connected with their concept, the defined audience, and the ultimate intent of the design.

Real World: Many clients and designers have no compelling reason for their judgments and decisions. Notions of creative briefs and problem statements that function above the most rudimentary marketing terms are irrelevant. How often does "real-world design" turn into a scary game of "Guess what I am thinking" and "I'll know it when I see it"?

TENET TWO: BE ACCOUNTABLE, POLITE, AND RESPECTFUL

Academia: There are basic rules of accountability in academia that include coming to class on time, prepared, and ready to participate. Learn to engage your instructor and classmates in a respectful and meaningful discourse. Give constructive criticism and behave civilly.

Real World: "Hurry up and wait" or work when your boss is ready. Try to make something of the vaguest of comments. Apply for jobs online, but don't expect as much as a thank-you-but-no-thank-you e-mail. It's all part of the game.

TENET THREE: MAKE GOOD DECISIONS

Academia: We teach students that it is unacceptable to produce crappy work. Students are expected to think critically, innovate, experiment, and create thoughtful design that illustrates a sincere desire to produce good work. If they can't do it, they are sent back to revise and revise again. If they still can't do it they are sent home.

Real World: Whether it is driven by market forces, low-budget excuses, or a lack of passion for the profession, there is a lot of really terrible design going on out there.

TENET FOUR: TAKE RESPONSIBILITY AND BE ETHICAL

Academia: There are direct consequences for failures: You miss a deadline or exam, your grade suffers; you plagiarize or cheat, you get kicked out of school. In the end, the scale of responsibility is personal.

Real World: Every design studio and business would agree with academic notions of responsibility. But in the "real world," shouldn't the stakes be higher? Decisions often affect the lives and welfare of people throughout the community, and standards of ethical business practices are often undermined by profit, greed, and ego.

SO WHAT DO THESE TENETS REALLY MEAN?

How often do we read or hear some "real world" lament regarding academia's failure to prepare students adequately? "If only students were better prepared. If only students . . . If only" It is as if the newly graduated designer were responsible for rectifying all the profession's ills. The truth is that academia is one of the last bastions of critical and ethical thought, and it is doing what it is supposed to do. Academia is holding up its end of the bargain with the "real world" by providing a protective environment where critical thought is expected and where ethical behavior is the standard. Unfortunately, we are growing increasingly less confident about the "real world's" ability to hold up its end of the bargain.

In the end, we are left with a few choices. Either we celebrate the real disconnect as being a very good thing for both students and the "real world" or, at

a minimum, the "real world" learns to place the blame for its problems elsewhere. Ultimately, we need to recognize that we are all in this profession together. But for the sake of this profession, let's hope that academia doesn't become more like the "real world."



Experience Versus Education

Jeffrey Keedy

So, you want to be a successful graphic designer with big clients and lots of design awards? Well, why waste time and money in design school when you can easily gain credibility within the field by networking at design functions and entering design shows? Use the money that you would have blown on tuition for something useful like office space, entry fees, and computers. Then, all you have to do is hire a few young people straight out of design school who—thanks to a good education—are proficient in the latest technologies and up on the latest styles. Young designers don't cost much because they are struggling to pay back student loans and buy new computers. And after they've been around long enough to qualify for a raise, you can get rid of them, because there are plenty more where they came from. After all, you are doing them a favor, you are giving them a "real" education.

Not long ago, all designers were self-taught or learned their craft as apprentices on the job. But today you would have to live under a rock to be unaware of contemporary design. Unlike designers of the past, today's self-taughts are functioning in a professionalized field that has established a loose framework of options for practice, as well as a plethora of information covering all aspects of design—the numerous books, trade magazines, organizations, and conferences. However, because self-taughts usually do not feel indebted to anyone, they think what they are doing is new and "original"—ignorance is bliss. As "outsiders," they feel no kinship or responsibility to other designers, leaving the rest of us with nothing but the privilege to admire their chutzpah.

Ironically, self-taught designers must establish themselves as "professional" to be competitive. This is accomplished by entering numerous design competitions and joining professional organizations—all the while reminding their peers in lectures and in magazines that they are, like commercial artists of the past, unencumbered by a formal education. But in our postmodern information age, what does it really mean to proclaim that one is self-taught? Should self-taught graphic designers be referred to as naïve or folk designers? For some, it is simply a means of removing themselves from a practice while simultaneously co-opting all of its

advantages. So why is the design community so complicit in celebrating the outsider's ability to exploit the rest of us?

Part of the answer may lie in the celebration of the self-taught as a particularly American phenomena. Although there are successful and celebrated self-taught designers around the world, only in America do they wear their lack of formal education like a badge of honor. There is nothing Americans like better than the self-made man—it speaks to our pioneer heritage, blazing a trail over the meek and inferior, and staking our claim to whatever we can take. Anyone familiar with our popular culture knows that Americans think there is something inherently honest in ignorance. We celebrate heroes that are kindhearted idiots (Forrest Gump), self-exploiting sluts (Madonna), tacky performers of bad sportsmanship (Dennis Rodman), and adolescent taste (Howard Stern). Conversely, there is something cold, calculating, and devious about the educated and intellectual. When was the last time you saw an American movie or TV show in which the bad guy wasn't characterized as "real smart"? And it was our news media that described the Unabomber as a highly educated "genius." How fortunate for Americans that naïveté is more socially acceptable than the corrupting influence of education.

Of course, it is impressive to see someone enjoying success in spite of his or her lack of a formal education. But in design practice, is it really that surprising? Given the largely service-oriented role that design plays, one could only expect that the closer you are to mainstream thinking, the more likely you are to enjoy popular acclaim. Conversely, the more specialized one's knowledge and skills, the more difficult it is to achieve mainstream success. Uncritically celebrating the success of the self-taught designer, without qualifying such success, only serves to undermine our own credibility and history.

It is not my intention to single out self-taughts as parasites on an accommodating host, as the majority of them are ethical and responsible people. But a few high-profile self-taught designers exemplify an anti-intellectual undercurrent that has been grumbling away in the design community for some time. The proliferation of design schools, particularly the ones with graduate programs, have engendered a reactionary backlash. When was the last time you heard a design star talk about the importance of design education to practice? In contrast to the precocious vocabulary-abusing graduate student, the plain-talking self-taught designer represents a reassuring alternative to constant change and increasing complexity. Perhaps this is why some of the harshest criticism in design today is no longer directed at the undereducated, but at the supposedly overeducated.

The self-taught designers are not a big problem because there are not many of them, and most self-taughts are quick to exploit relationships with well-educated partners or employees. Our more serious problem is the fact that there are so many educated designers who view design education as a necessary evil instead of a lifelong commitment. As the saying goes, "A little bit of knowledge is a dangerous thing." Unfortunately, too many designers are content to depend on just a little bit of knowledge. They are confident that they can learn most of what they need to know

on the job. They fail to understand that design education today is much more than vocational training—it is a process of discovery and renewal.

Anti-intellectual designers are critical of design education, even though they have absolutely no idea what goes on there, except in the design programs that have not changed in twenty years. Before new ideas and explorations are even developed and fully articulated within design education, they have often been dismissed as ill-conceived or just plain wrong by uninformed critics who are insufficiently prepared to understand what they are discounting. The true source of their anxiety is not the new ideas themselves (which they usually misunderstand), but the fact that they represent a change in design thinking.

Even though design education still has a long way to go in establishing parameters and standards, this certainly does not justify the lack of credibility it often seems to have. Designers who have been out of school for a while have no way of finding out what is going on in schools today unless they spend time in a classroom, attend an education conference, or read about it in design magazines. Unfortunately, most professional organizations dealing with education do so with segregated events that are primarily attended by educators and students. Or they hold a portfolio review in which practicing designers review student portfolios without the slightest idea of the students' curriculum, and then pronounce their approval or disapproval of the outcome. Design magazines are mostly uninterested in educational issues, except for reproducing snazzy-looking undergraduate work with little more than captions for explanation. They rarely publish graduate-level projects, fearing they are too complex or in-depth for their readership (*Emigre* magazine excepted).

The climate of anti-intellectualism in design is often bolstered by a false sense of professionalism based on real-world experience. Typically, this type of "professionalism" amounts to little more than platitudes and bromides—problem solving to get the ultimate correct solution, and the pursuit of timelessness that supposedly transcends its own era. These entrenched clichés are responsible for the banality of the cornball visual puns and pedestrian aesthetics that constitutes the majority of graphic design. As long as such simplistic thinking is tolerated in design, what little meaningful dialogue there is will be drowned in a morass of mediocrity. As you may have noticed, the harping and posturing by anti-intellectual professionals is not moving the discipline closer to becoming a real profession or increasing its recognition as being an important part of culture. Nor is it helping the next generation of designers to find their way.

To be professional is to be impartial and objective, guided by established precedence in your field. Although the word "professional" is used freely in design practice, graphic design is not a profession. Designers have no obligatory regulating body that oversees and safeguards standards of practice. Today, anyone can be a member in most graphic design professional organizations for the price of admission, and can print "graphic designer" on their business cards. The true professionals in graphic design are in design education. They are certified professionals whose credentials and practices are monitored by organizations like the National Association of Schools of Art and Design (NASAD) and the Western Association of

Schools and Colleges (WASC). However, design educators are only professionals as educators, not designers. It is one of the ironies of the pseudoprofession of graphic design that the only true professionals in the field are frequently criticized by design practitioners for not teaching students to be more professional.

Many graphic designers do not understand that academia is not just a hothouse of wanton self-expression, but is actually the bastion of tradition. Design practice relies on design education to train people in the latest technology and to develop basic skills and literacy. But what many designers fail to recognize is that academia's most important role is in establishing continuity from the past to the future. It is the place where the canon is constantly being elaborated and reformulated. If certain values are deemed important to design, such values will most likely be articulated and perpetuated through education, not practice.

Graphic design will not grow up into a profession or fine art until it can view itself in a larger historical and cultural paradigm. And this is where design education comes in. One of its most important functions is exploring and defining the context of design and establishing a shared core of ideas, issues, and values that define practice. Personal experience teaches how to repeat the successes and avoid the failures of the past. Education teaches the value of past successes and failures, but in an unbiased, professional fashion. A personal experience is only one person's experience and never exceeds his or her limitations and biases, but education is based on a shared cultural past that includes many viewpoints and possibilities.

Design education is not just for training designers how to use tools, it is a process for developing and refining our understanding of ourselves as designers. Regardless of whether you believe design is a problem-solving profession of information architects or a socially responsible art form, education will broaden your understanding and strengthen your convictions. The more articulate we are in describing the issues and ideas that concern us, the better we will understand each other and others will come to understand what we do. Education and experience are the foundation of our future. If they remain at odds with each other, we will be building on shaky ground, and whatever we make will not stand for long.

If this sounds like more "preaching to the choir," then you have missed my point. Although it is important for designers to reach out and educate the public about design, actually, the ones who need to be educated are the designers themselves. The majority of practicing graphic designers are ignorant about the history, theory, and ethics of their discipline. They know how to use the tools, make out invoices and entry forms for competitions, but are at a loss when it comes to placing their work in a critical, historical, or cultural context. Graphic designers have to get a lot smarter about who they are and what they are doing before they will be able to convince others what they do is important. You may admire the moxie and talent of a self-taught designer, but the fame of an individual is limited and fleeting in comparison to the respect accorded a profession or cultural institution.

Great strides have been made in the past decade in design education, even though it has been faced with its greatest challenges. It is important that we recognize the wealth of experience and knowledge that designers have acquired and build upon

it. Designers need empowerment, and knowledge is power. The design educator's job is to make graphic designers smarter. However, practicing "professionals" are not only needed to support design education, but to encourage it to go further. With the help of real-world practitioners, design educators must work toward establishing design as a vital part of cultural communication that is integral to, but not submerged by, the new global information environment. Graphic design is bigger than any one of us, so let's start acting like we believe it.



Traversing Edge and Center: A Spatial Approach to Design Research

Katie Salen

A story: I sit at my computer but compose first on paper with furtive scribbles, marking and re-marking words until they lav flat and still as if they were meant to be there—here—in this exact location. The page darkens and fills with unexpected arrows and numbers and lists as I try to say this connects to that to this. Soon I am lost. The computer beckons, but I resist its organizational charms. I cannot find the ideas when I have to concentrate on the keys, hunting for single letters when I am thinking in complete thoughts. I return to my notebook and realize that its structure is inadequate for the shaping of my thoughts the regularity of the lines patterns in predictable ways, yet my mind wanders another, more dimensional path. This dilemma has been with me for years, and, with deference to my childhood, I have taken up a method of research and composition akin to pin the tail on the donkey. I tear apart my notebook and begin to notate on small scraps of paper, soon taped together along the wall beside me. White, yellow, and brown papers help me to distinguish between ideas. Lists become constellations, numbers neighboring galaxies. Soon layers appear, and string is added to facilitate connection. It is a thing of beauty.

But beauty is not my objective, and I move to the computer to try and bring order to my precious model of words and string. The cursor blinks patiently at first, but I detect a hidden urgency in its intermittent posture. At times I believe it is watching me, daring me to enter its dark field to trace an alphabet of stars that will illuminate distant readers. But my words resist the uniformity of the typewritten lines as well, and soon the string is back, taped from screen to wall, a tiny tightrope my thoughts navigate freely and without fear. I traverse the potential intersections at a fiendish pace, editing with Scotch tape and mind alike, order growing among the apparent chaos. I note its likeness to a model of entropy moving toward a condition of rest.

While few would argue that this method of composition is appropriate for all writers, I would like to suggest that, as an idea, it offers a valuable model for design research occurring during the latter stage of the design process. At this juncture, the literal search for information has concluded and the race to shape the mass of data into some semblance of a coherent argument begins. Upon reflection, the student/

designer may raise the question, What does it take to define and defend an idea? Certainly, the answer is variable and dependent upon the specifics of the design problem. But a general strategy of problem assessment, definition, and argument can be facilitated by a spatial approach to research that is rooted in a metaphor of travel, dwelling, and interaction.

In one sense, research (or a quest for knowledge) begins at the level of experience, the given, or data, of any problem. The Latin *experientia* speaks of a voyage across knowledge or a venturing out to the boundaries. Its Greek counterpart connotes a similar venture to the outer bounds but also implies a return home. Homer's *Odyssey* offers an appropriate metaphor for this spatial conceptualization of research as a search for knowledge that marks both profound and articulate connections between concepts traversing edge and center.

To extend this philosophical thread, we can examine Aristotle's classification of knowledge into three general categories—theoria, praxis, and poeisis—as a way of linking visual and verbal spatial research strategies. Theoria is defined as an abstract or cognitive knowing, while praxis is a practical knowledge that comes from doing, from activity or the development of a manual skill. Poeisis, on the other hand, is defined as knowledge that is involved in making, producing, or creating something. With poeisis, research is the creative act.

With this said, what, then, are the implications of Aristotle's *poeisis* to the model of design research that I am proposing? If we are to conceive of research as moving beyond a method of collection into the realm of connection and creative endeavor, then the act of designing becomes primarily an act of research—of travel defined as exploration and transforming encounter. Knowledge gained, manifest in terms of the clarity of the communication, is directly attributable to the process of making—a process involving all three of Aristotle's delineations.

Further, such a concept of design as research, and research as travel, evokes an architecture of joinery and kinetics situating sites of encounter within an evolving information structure. These sites, conceived as places of collection and juxtaposition, assist both problem assessment and problem definition, two integral aspects of the design process. Through this model, students are led to ask, How do concepts negotiate themselves in external relationships, how is one concept a site of travel for another? Instead of focusing on ideas as separate and integral, an approach to design that functions at the component/product level, this spatial conceptualization of research provides a structure for problem solving at the systems/community level. Research is transformed from a simple connect-the-dot activity to a strategy of multilinear systems analysis.

While many students understand that research can be categorized by intent—historical, analytical, descriptive, or experimental¹—few conceive of research as anything beyond mere data collection. Despite the rhetoric of the so-called MTV Generation, it is the rare student that actively thinks laterally or is able to make connections between what they are learning in the classroom and what they are experiencing outside of it. As a result, the concept of design as the sum total of the varied experiences (cultural, political, technological) they confront each day must be

brought into their design process. Alternative methodologies that link visual and verbal research strategies in the act of making work can facilitate these connections. Such methodologies look at the relationship between multiple experiences and points of view as well as propose critical perspectives that encourage the designer to spatially conceptualize both historical and cultural contexts in ways that allow for the development of effective communication strategies. The idea of a "wanderground" between here and there marked by an insistence on multiple, external connections further allows for the inclusion of a discussion of the cultural, technological, and visual contexts in which the research is occurring. Numerous concepts provide sites for the departures, arrivals, and transits that take place during any research program; identifying their value at the systems level is critical to an understanding of the design process as a mechanism for organizing essential experiences.

Yet, an emphasis on design process can produce a challenging dilemma: travel to the edge of anything and the path becomes much more seductive than the noted destination. The process adapts itself to the pleasures of the path—to the pureness of discovery—and the process of journey extends into oblivion. A delineation of the boundaries of the design question at hand is both necessary and critical for establishing, and maintaining, focus. Assessment and problem definition involve identifying a set of parameters within which the work will be made and evaluated. Once these parameters have been defined, the important question then becomes, What does it mean to be articulate within those parameters? Articulation requires strategy—clarity is no simple task.

What, then, are strategies for making work that explores process as an extension of experience? First, two questions must be posed: Is the work of value? To whom? Establishing the significance of the work will help to situate communication objectives within meaningful contexts. Second, consume in a radical way. Read, see, and experience everything through the lens of the design question at hand. When design is reconsidered as a negotiation and exchange of experiences, the process of making work becomes a notation on connections across, among, and between. Third, come to an understanding of what compels and what persists. Treat the work like a memory that cannot be shaken. Uncover the ache of the question and soothe it by giving it form. Begin with the smallest piece of the equation and allow it to grow unencumbered by the weight of the whole. Take small steps, fumble if necessary, but return and try again. Persist. Compel. Consume.

Last, nurture an appreciation of the mundane. Forego singular visions of the sublime—at least in the beginning. Sometimes it is simply the making that is the required strategy—momentum must begin somewhere. Make and measure, and do not be surprised if the poetic emerges from deep within the bowels of the ordinary.

Design as research. Research as travel. Travel as experience. Experience as design and a return to the beginning where words and string continue their movement toward a condition of rest.

NOTE

- 1. Meredith Davis, "What's So Important about Research?" *Statements*, American Center for Design (ACD), vol. 6, no. 1 (Fall 1990). Davis, in a recent ACD article, argues for four distinct kinds of research:
 - *Historical research*, which seeks to reveal meaning in events of the past. Historical researchers interpret the significance of time and place in ways that inform contemporary decision making or put current practices into perspective.
 - Descriptive research observes and describes phenomena.
 - Analytical research generates quantitative data that requires statistical assistance
 to extract meaning. Analytical research requires testing and estimation and is
 particularly concerned with relationships and correlations in an attempt to predict
 outcomes.
 - Experimental research attempts to account for the influence of a factor in a given situation. Experimental research defines relationships of cause and effect by changing the factor to be studied in a controlled situation.



The Problem with Problem Solving

Julie Lasky

know a designer whose working habits were shaped by years at a daily newspaper. "I can't get out of the habit of just solving the problem and moving on to the next thing," she once confided. Though she has weeks, not hours, to do layouts now, she is panicked by the thought of lingering experimentally over her designs. To her, "solving the problem" means arranging words and images so that they are reasonably visible, reasonably legible. She doesn't feel she has the luxury to dally with process. She doesn't take delight in running the obstacle course of size, budgetary, or time constraints. She doesn't think of decision making as a smorgasbord of possibilities, each imparting its own subtle flavor. Instead, she reaches for a layout scheme the way one reaches for the first container at hand to collect water from a leaky roof: a stainless-steel bowl, a mixing bowl, a pitcher, the aquarium tank you put away after the tropical fish died—no, not the Ming vase; that's inappropriate. Any of the others can do the job, though. The problem's solved, move on.

I think of this woman whenever I encounter those well-worn graphic design metaphors "problem" and "solution." They're legacies of the days when designers needed to persuade clients that their work was scientific and required special skill. This analytical language has been useful for design educators, too; classroom problems are intellectual training wheels before students tackle problems in the real world. Out there, the goal-directed arrow of problem/solution suggests that design produces results. From the client's point of view, results are what really matter. Clients aren't much interested in the road between problem and solution. But are designers also running the danger of losing sight of process? Do the ideas of problem and solution help the end overshadow the means?

When I first encountered the term "problem" applied to graphic design, I was a staff editor for a publisher of professional books. My background had been in English literature and academic publishing. I circled the word and stuck a gummed flag to the manuscript with a question mark, just in case the author had made a mistake.

It was jarring because "problem" carries two associations, and neither seemed to fit. The first is a puzzle. There may be different means of getting to the solution,

but ultimately every square must be filled in with the right letter, every jigsaw piece locked into the right place, or a physical law or formula must be derived correctly. Only one right solution. Hardly an appropriate metaphor for design.

Second is "problem" in the sense of problem child—something troublesome. It's the leaky faucet keeping us awake at night. If we can solve the problem, we can put the world back in order, and it hardly matters whether we replace the washer on the faucet or wrap a rubber band around the spigot and tap, so long as the infernal thing stops dripping. There is a goal here. It is very simple and clear. Stop that obnoxious sound. I don't care how you do it, just do it. Designers care very much how they solve problems, however, and they're not often troubled by the conditions that gave rise to them.

Here's the funny thing. Problem solving is basically what any person with a social security number does, from a waiter figuring out how to balance a dozen trays on his arm, to a biologist trying to understand why a cancer cell divides uncontrollably. Yet designers are alone in claiming it as a job description. Isn't the surgeon in the operating theater solving a problem? Of course she is, but the problematic nature of her profession is taken for granted, and it seems foolish to mention it. Years ago, a friend announced that she planned to enroll in law school because she "liked solving problems." "You could always hang wallpaper," I offered. "Houston, we have a problem," means that something is wrong, not that an astronaut has punched the time clock.

Designers need not insist so much on the intellectual rigor of their work. Design is analytical. It doesn't have laws, exactly, but a lot of rules and limitations narrowing the creative pyramid from infinite possible ways of completing an assignment to, say, only a few hundred thousand. Problem: Design, on a budget of \$18,000, a brochure that will be distributed to 30,000 tree surgeons at a convention. Solution: Could you predict one in your wildest dreams? Winnowing down the possibilities through the sifters of finance, audience, materials, suppliers' capabilities, time, appropriateness, and personal taste, one arrives at something that is probably not printed on virgin paper. But who knows? Maybe it is. In the meantime, the effective designer has put a great deal of thought into the matter.

My problem with the publication designer's use of the word "problem" is that she doesn't have a problem. There is no negative situation that requires redressing through any possible means. Careful trial and deliberation may be called for, but a layout isn't a puzzle. The "problem" is filling up the page with words and images that elucidate the content and complement one another and inspire readers to continue reading. Now tell me, when will we know that those conditions have been met? Define, if you will, "elucidate," "complement," and "inspire." Or for that matter, define "words," "images," and "read." Does skimming count?

I am not a total relativist. I agree that it is possible to say when pages are well designed and when they are not. It is even possible to reach a consensus. But to cast this elusive scheme, with its many opportunities and outcomes, into the language of problem/solution is to risk defining the problem too broadly or narrowly and solving it too hastily. When one is facing a problem, constraints are roadblocks that must be

knocked down, rather than a kind of gentle pressure fostering creativity. One is, almost by definition, in a negative state that needs solving, though it might be better to think of it as an indeterminate state that needs resolving. It's fine to be goal oriented in our description of what designers do, but there are so many goals. Can't we also say, "exercise taste," "flaunt imagination," "organize data," "leave a mark," "take a stand," "raise curiosity," or "heighten senses"?

Does anyone see a problem in that?



Ricochet Critique: Improvisation in Design Teaching

Roy R. Behrens

n the late 1970s, while teaching at a large urban university in the Midwest, I invented the following teaching device, called the "ricochet critique."

A graphic design problem is presented, and the work is completed outside of class during a period of a week or ten days. On critique day, the solutions, unsigned and hidden by cover sheets, are stacked on a table and then randomly unveiled for viewing. During the critique, each student, in turn, is required to choose any single solution, with the exception of his or her own, and to talk about it in detail, extemporaneously, pretending that he or she created it.

"These are the steps that I went through in solving this problem," the student hypothesizes, "and these are the reasons I did what I did." Or, "I am largely pleased with this solution, but there are certain aspects, as I want to explain, that remain unresolved." As the critique progresses, other members of the class are encouraged to make observations or ask questions, including the work's actual creator, providing that he or she doesn't reveal who made the work.

The ricochet critique was a fascinating gamelike teaching method—the results were inevitably surprising—but it was exhausting for everyone involved, and to critique a problem was almost as challenging as to solve one. Throughout these sessions, nothing was said directly; everything was an indirect ricochet. As a result, the students spoke more freely about the work of their peers, were less offended by open criticism, and were forced to concentrate not on their animosity toward the person next to them, but on tangible qualities of the work itself: How effective is the solution? What are its most conspicuous strengths and weaknesses? At the same time, through improvisational role-playing, they had to empathize with another (albeit anonymous) person, and to reconstruct what had gone on in the mind of the student designer whose work they had arbitrarily chosen.

Prior to inventing this method, as an artist, graphic designer, and writer, I had found that solutions to problems arise with reliable frequency not only by grappling with problems directly but by working indirectly, by delaying closure and purposely browsing or fooling around on the fringes of an idea. I was often reminded of my childhood experience of looking up at the night sky and discovering that faint stars

appear more distinct when, paradoxically, I looked to the side of them, rather than staring straight on.

As a teacher, I had also concluded that the content one intends to teach and what students actually learn are often, perhaps inevitably, two different things. Looking back on my own education, I remembered least the factual information that was presented sternly by unimaginative teachers. What stood out instead were moments of self-discovery—inside and outside the classroom—unresolved questions, and a sequence of odd and amusing mistakes or pedagogical bloopers. If education, as someone said, is what remains after you have forgotten what you were taught, what stayed in my mind was the opposite of the stuff of textbooks. And in the end, I decided to invent problems in design to which I truly didn't know the answers; to conduct class in an animated, comic, and often erratic style; and to devise methods of class discussion—like the ricochet critique—that were as provocative, unpredictable, and puzzling as the original problems themselves.

I thought about all this a few years ago when I ran across an unattributed aphorism about teaching: "The key to teaching is to appear to have known all your life what you learned this afternoon." How wrong, I thought. It should be the exact opposite: "The key to teaching is to appear to have learned this afternoon what you have known all your life."

When students in his life-drawing class became complacent, the Austrian painter Oskar Kokoschka would arrange for the model to suddenly "die" in front of them. William James delivered his Harvard lectures dressed in multicolored ties, red-and-black checkered trousers, and riding boots; he laughed so frequently and was so full of antics in the classroom that his students pleaded, "Please, Doctor, be serious for a moment." When the naturalist Louis Agassiz lectured to teachers—ostensibly about grasshoppers but really about teaching—he insisted that each of them hold in their hands throughout his lecture a live squirming grasshopper. "Habitualization devours works, clothes, furniture, one's wife, and the fear of war," said Victor Shklovsky, and art exists—and isn't it also a reason we teach?—so that "one may recover the sensation of life; it exists to make one feel things, to make the stone *stony*."

Twenty years ago, I owned nearly a hundred neckties. One semester I offered a modest award to the design student who was first to notice when I wore the same tie twice in a single course. This was complicated, as it meant that I often switched ties as I walked from one class to the next, and I constantly had to make note of the ties that I wore from day to day, from class to class. Some of them were highly similar (six similar but different camouflage patterns, for example), which led to the need for alternative ties in my briefcase, to prove that I wasn't repeating one.

When students resorted to sketching my ties instead of concentrating on my lectures, I was reminded of Søren Kierkegaard's "The Rotation Method," in which he describes his experience as a college student in a course that was taught by a terrible bore. Kierkegaard was determined to drop the course when he suddenly noticed that the man perspired profusely when agitated. Perspiration would form on his forehead as he lectured, stream down to his brow, and collect as a drop at the tip of his nose. Kierkegaard became fascinated. The man's perspiration, instead of his

endlessly boring harangue, became the object of Kierkegaard's attention. Instead of leaving the course, he began to invent more provocative questions to ask the teacher, to see if he could cause the sweat to flow more rapidly.

In a demonstration of innate form responses, I once brought a large live chicken into the classroom and attempted to get it to freeze at the sight of a stuffed owl. I prepared artichokes for my students to demonstrate how to eat one and to show them the beautiful pattern that's found on the top of an artichoke heart (based on the Fibonnaci number series, like that of sunflowers and pinecones). I invited a biologist to come to our class to talk about the mating behavior of roadrunners. And, as an excursion into clothing design, I persuaded my students that I had a pet monkey, listed its measurements, and asked that they create a miniature vest (displayed on a stylistically appropriate coat hanger) that epitomized a certain period of design history.

Improvisational teaching has never been easy because it requires resourcefulness, quickness, and wit on the part of the teacher. It is even more difficult now because colleges and universities throughout the country are being dismantled and quickly transformed into compliant, unimaginative trade schools. Job training and cosmetic accountability have become as sacred as collegiate football, and it is unthinkable, even subversive, that a teacher would "fool around" in the classroom with taxpayers' money. Nevertheless, for those who have witnessed the richness it brings to the ambiance of the classroom and to problem solving, the virtues of improvisation are undeniable. And among its chief virtues are the humor and freshness that ricochet from the students themselves.

In the 1970s, I dressed almost daily in a corduroy sports jacket with elbow patches, which back then was the virtual uniform for a rookie college professor. My students found this amusing, and one day when I arrived at typography class, they were already seated and staring at me. I became suspicious. They looked different, in part because somehow they all looked the same. A moment later, the answer became apparent: They were all wearing identical typographic T-shirts, each bearing the same printed message, impeccably lettered and perfectly spaced—it read, CORPS DE ROY.



manning Connections

Scott Santoro

An embarrassing moment as a graphic design teacher came when I made a comment to a student whose work was static; dead. I wanted her to find a way to liven up her designs and told her she needed to "break out of the box." Looking for inspiration, I asked what her parents did for a living and she replied, "They own a funeral home. They're undertakers."

I don't think she was being a smart-aleck and I really did have good intentions—it's just part of the way I teach, to probe a little. The belief is that by looking into past experiences and family histories, designers can expand their visual vocabulary and learn to make meaningful connections. I've been practicing this myself since 1988, from my days as a Cranbrook student. It was there in the midst of deconstruction theory that I decided to have a personal investment in my method of production.

Plumbing was "it" for me—generations of my family all directed fluids. The metaphor was satisfying, a blue-collar contrast to my white-collar profession. Systems behind the walls became analogous to systems in the mind; tools and processes I knew so well were now consciously massaged, as a layer, into a tough, everyday aesthetic. In the spirit of Magritte's "This is not a pipe," the surrealism of word and image became a looking-glass to "see" graphic design better.

Teaching this approach is another matter. It's hard to get design students to mythologize their lives. And yet, as a teacher, I know that the more input, the richer the output. Ultimately, if I can get design to begin to mean something to them personally, I've done my job.

WHEN IT WORKS

An undergrad student of mine, Chakaras, had served in the military and had a strong sense of discipline and authority. He allowed his experience to translate beautifully into an investigation of badge-like iconography, and grid systems countered with a kind of typographically distressed snafu (an acronym used by soldiers meaning "Situation Normal, All Fucked Up"). The visual metaphor of the military also came out in his research and play with camouflage and gestalt theory.

His study opened up an ongoing layer underneath his commercial, problem-solving graphic design.

WHEN IT DOESN'T WORK

The choice not to include one's past might occur when others expect clichés. No one necessarily wants to be bound by where one is from or what one did before. Being from India could involve designs that are colorful and ornate, or not; a family of accountants might not offer any exploitable formulas, especially if you hate math; a love for hip-hop doesn't have to mean that layouts include graffiti—but maybe.

WHEN IT'S CHALLENGING

Ali showed me his portfolio full of images of human body organs. Short of thinking that pornographic gore was his obsession, I finally had to ask where it was all coming from. Did I even want to know? It turns out that both of Ali's parents are doctors, and he was on a medical track until graphic design came calling. The imagery found its way in and brought shocking, yet beautiful, mechanisms to his layouts.

Another student, Mike, explained that the metaphor he had found in grad school was none other than Mr. T of *The A-Team* fame. What's incredible was how he was able to use this character to drive an examination of pop-culture, heroworship, and celebrity-ism. Eventually, Mike became the persona of Mr. T, including himself, literally, in many of his designs.

The fact that someplace or something might feed your work is, in effect, acknowledging connections with larger systems—culture, community, and environment. The art historian E. H. Gombrich, who made analytical studies between art and the psychology of perception, wrote, "Anyone who can handle a needle convincingly can make us see a thread which is not there."

In a sense, connections between personal histories and graphic design aren't really there either. The value of a link is only made real by believing in it. Not being afraid of seeing yourself in your work is the first step.



Self-Taught Teacher

Marian Bantica

Marian Bantjes

n August 2004, I was approached to teach a continuing studies class in typography at Emily Carr Institute in Vancouver, Canada. I had never taught anything before in my life, but despite having only one week to prepare, I accepted.

LESSON 1

I've always heard that preparation was a bitch, but this is ridiculous. What I know about typography I learned over many years working as a book typesetter—what you might call a classical training. Because I never like to make things easy on myself, I have decided that a course in typography should be taught from an historical perspective, i.e., from exactly the perspective I know almost nothing about.

So my very first task, after accomplishing the fun part of designing beautifully typeset templates for all my materials, is to hit the books. A stack of seven design and typography books that have been languishing on the floor all summer have come into heavy use as I cram for each section I'm about to teach.

What is interesting about my education is how much I actually know without knowing that I know it. Going through the books systematically, I find that I am not so much learning things completely anew, but filling holes in a puzzle, each piece of information interlocking with something else already in my brain: "Oh, so that's why . . ." or, "Well then that must be the origin of . . ."

But I am exhausted and my brain hurts.

LESSON 2

I decide to teach the history with a bit of "fast forward" thrown in—that is, to show contemporary typefaces that were either influenced by or based directly on historic examples. Although this may put undue emphasis on certain nonessential typefaces (e.g. Herculaneum, Clairvaux), it does seem to effectively provide the instant gratification of relevance to my students. I can see them physically sit up and take

note when they realize that this thing that was carved in a piece of stone longer ago than they care about has resulted in something that they can actually *use*.

LESSON 3

I love my students!

For my second class, after an in-class exercise on using a pen with chiseled nib, I give them the homework assignment of making a sentence or paragraph with the pen nib and including an ornamented capital in the style of the illuminated manuscripts. I am nervous that this is asking too much of them but, viewing the results, I feel a euphoria akin to falling in love. I do love them! Each and every student suddenly looks adorable to me! Although I know, rationally, that they have done all this work for the *grade*, I can't escape the feeling that they've done it for *me*. I feel like I've received twenty-one handmade presents, and my knees are weak with gratitude. In my exuberance, I am giving a lot of As, but they deserve it.

LESSON 4

After learning the origins of many, if not most, text faces, I assign my class to go out into the world and bring me back a real-world printed sample of either Bembo, Bodoni, Centaur, Baskerville, or Garamond with a written comparison to the face and rationale for why they concluded the match.

I still think this is a difficult assignment, and I am not sure I would have been able to complete it myself, but once again they surprise me. Most of them find a match, a couple of them find Centaur in incredibly unlikely places (a sailing magazine advertisement!), and some of them have the most interesting hits and near misses. My favorite sample is a Baskerville set letterpress in an old and beautiful copy of *Winnie the Pooh*: a treasure that I positively gush over like a madwoman. I believe they think me a fanatic, but I hope they can also see I have a point.

LESSON 5

Contrary to popular opinion, grading is fun. In fact, it brings me an alarming amount of happiness. It seems somehow wrong that I should gain pleasure from grading and sorting people in this way, and yet the logic of it, the way everything falls into place as expected fills me with satisfaction.

For each assignment I draw up a chart, allotting a certain percentage for required aspects of the assignment, and first I go through each one in this objective process, lining them up on the floor with grades attached on post-its, then I overview them all in relation to each other. Most of the time a picture of my class emerges. The good students on one side, and the weaker ones on the other. Although occasional adjustments have to be made, the rightness of it is overwhelmingly gratifying. My system works, and here is proof!

LESSON 6

I take a break from history and spend a few lessons teaching them the practical knowledge that I know from years of experience. I toy with consulting a few more books to brush up on my knowledge, but decide instead to just sit down and start writing. I write about twenty-four pages, complete with examples.

In my brain-dump of knowledge I include a section on the proper use of quotation marks and apostrophes (including, but not limited to, the difference between quotation marks, inch-marks, apostrophes, and primes) and a few other things that are, strictly speaking, editorial. But given the number of small (and large) signs and notices that are blatantly illiterate in this regard, I'm determined to arm my soldiers with at least an awareness of this typographic war.

I also teach them proofreaders' marks and give them a proofreading test, which causes panic among the ranks until I reveal that they won't be marked on it. These are happy times, as I no longer dread a question I might not know the answer to, and they revel in what is clearly practical knowledge that they can impress their friends with.

LESSON 7

The computer is the spawn of the devil.

By edict of the school, the last three classes are spent on hands-on work on their final assignment. This is misery for me. As soon as they get in front of the computer, I lose them. It is incredible how inattentive they become. The computer acts like some evil toy that diverts their attention (to the Internet) and seems to willfully encourage them to ignore many of the things I had just taught them. The final assignment for me has become a laborious act of trying to harness a team of twenty-one horses who really just want to wander off and eat grass.

LESSON 8

Am I a bad person for feeling delight at their dreadful awe when I announced, in the very first class, the existence of a test? I had only a vague idea of what would be on it, but I was certain there was enough partially objective, only semi-opinionated knowledge that they really should know before being set loose on the world. The anatomy of the letterform, units and rules of measurement, definitions of terms, and a few trick questions regarding hyphenation and punctuation. I've been looking forward to this, partially, I admit, because they have not.

The day has finally arrived and they have been fretting for weeks. I know they all studied, and they almost all aced it. My bonus questions were, perhaps, a mistake, resulting in a number of marks over 100 percent. I am wondering if I should have made the whole thing harder, but in reviewing the material, I am glad that they know these basic things, and am happily giving the A-plusses.

LESSON 9

After my last class, during which I spent some time showing them my own work, one of my students came to me and said, "After I saw your work, I realized how much more we have to learn." It was the highest compliment—not on my work, but on my teaching. I can't think of a better lesson for them to come away with.

Now I occasionally get e-mails from some of them. They tell me they are "type geeks," buying books, going to presentations by Robert Bringhurst, and, most importantly, scrutinizing text and typefaces wherever they go. The world can use a few more type geeks.



Hybrid Teaching: From Practitioner to Professor

Catherine Jo Ishino

As a young designer in New York City in the 1980s, I remember feeling intimidated, then dismissive, while listening to scholarly papers read by noted academics at design conferences. The self-defensive murmuring seemed audible: "Easy for them to lecture us. Maybe design should be more politically, socially, or ecologically correct. But they're clueless about what we do—bet they never worked in the industry—dealt with budgets, overheads, tight deadlines, and quirky design staff, then put up with crazy clients and still managed to do good work!"

But that was then.

Now I'm one of them. I am a professor of graphic design teaching at University of Minnesota's Design Institute. Having migrated to this side, I now see that those rarefied lecturers served as the practitioners' conscience. And yes, it is easier on this side of the enterprise to lecture about design "correctness."

So why did I decide to convert? After fourteen years as a video designer, then art director at national TV news organizations (CNN, ABC, NBC, and PBS), I quit. Working on news coverage of the first Gulf War sent me into existential crisis. And although I worked at *The MacNeil/Lehrer NewsHour*, one of the most highly respected programs on TV, I still found the value of what I was doing questionable. At the time, over 90 percent of U.S. citizens got their daily news from television. I became increasingly disillusioned with the inside machinations of the mass media and the government censorship I saw being imposed.

I had also become involved with a loose-knit group of activists who made music videos and documentaries for human rights causes. Working for both groups became increasingly difficult. I was burning myself out and, not seeing many gray haired ladies in the TV news business at the time, I wondered what would be my best path to a more viable and tranquil future. Since I was finding I couldn't influence the media to my satisfaction from the inside, I set out to influence future practitioners before they went inside. So I opted for "downward mobility," became a "media exile" in the cloistered world of academia and earned my MFA so I could teach.

As I have come to discover, teaching graphic design is a powerful force for

change. I see how we educators can shape the field and the huge responsibility we bear. In 2001, AIGA said there were more than 500 graphic design programs in four-year colleges and universities and nearly 2,000 two-year colleges in the United States. Right now, that could represent as many as 250,000 design students that we have taught and graduated since then. Furthermore, the U.S. Labor Census in 2002 reported: "Individuals with little or no formal education in design . . . will find it very difficult to establish and maintain a career . . . most designers need a bachelor's degree, and candidates with a master's degree hold an advantage."

Given these statistics and my background in practice, I have found walking the line between teaching "ideal" theory and "real" practice the most balanced approach to my pedagogy. In the past ten years, I have developed hybrid strategies and assignments, so I'm able to fuse these two worlds. My most successful hybrid projects are public service announcements (PSAs). They fulfill an immediate societal need—one of the primary reasons I opted for teaching over practice—and they act as an excellent learning vehicle.

In the spring of 2004, I instigated a semester-long, intermedia project with Graphic Design 3. Their brief was to create one large information and branding design campaign to facilitate a nonpartisan, "get out the vote" promotion for the 2004 presidential election. The press was reporting because the outcome of the race was going to be so tight, every vote would be vital. Since eighteen to twenty-five year olds had the lowest voter turnout rate in 2000, they concluded if this demographic were to get out and vote, they could determine who would be the next president of the United States.

This was as real an impact as any design student (or designer for that matter) could hope to make on their world.

I structured the class like a "real" working design studio. I acted as the creative director overseeing the entire campaign. After showing their portfolios, the twenty students divided up into their medium-specific design teams. Each conducted original research in their area—print, Web, and video—to uncover why their demographic did not vote and what might stimulate them to do so. Also, they were getting the feel for how each medium best worked to convey specific information. For instance, they found the Web was good at revealing information that is broad as well as deep; its nonlinear navigational capabilities could be put to good use in linking out to tangential sites and could bring together the media we were creating for our campaign into one place.

Next, the entire class came together and each group reported its findings. Then, a poll was designed to test what had been discovered and see if it applied to University of Minnesota–Duluth students. Their University of Minnesota–Duluth findings correlated with their independent research. The campaign had to be upbeat, contemporary, and directed specifically at their age group's concerns—educational costs, jobs, and the war in Iraq.

From here, students came up with a single campaign slogan and branding system. They merged their visual and verbal content into one collaborative, intermedia project. Then students applied the information they had gathered—why

voting was important for young adults, where and how to register as well as vote, and where the candidates stood on issues important to students. Then they linked their home page to other pertinent topics on our subject matter. One of the classes even added an interactive game to determine how a user should vote, given how the candidates lined up on the issues the user deemed important. Also, they included a chat room where users could converse with others on campus. Finally, both classes set up PDFs and streaming video for their poster series and television campaign to be downloaded and distributed further.

All the while, I had students reading, writing, and discussing information design—Sylvia Harris' Voting by Design project for the University of Minnesota's Design Institute, MTV's election coverage and voting campaign, the *New York Times* and local newspaper reports, Tufte's "Envisioning Information," and Shredhoff's "Experience Design." We analyzed classical communication principles from these sources and combined those with contemporary postmodern design notions.

Finally, their work was placed in the public realm prior to the national election. They set up a table in our student union with posters, videos playing, and Web site access to interact with and observe their audience reactions. Their works were displayed in the department of art and design. The school newspaper wrote an article interviewing students who worked on the projects, as well as others who were influenced by it. The final campaigns appeared on our university's homepage granting access to 10,000 voting-age students campus-wide.

After the election, the following news reports came out: "Exit polls showed three of four new voters were between the ages of 18 and 29 [Pioneer Press]. The new voters contributed to Minnesota's nation-leading 77.3 percent turnout. Of the 2.8 million Minnesotans who cast ballots Tuesday, about 250,000 were first-time voters . . [AP]." I would like to think that my students and I played a part in helping to influence some of these new voters with our design campaign. At the very least, I know the design students who worked on this project became aware of the potential of design, outside of the normative realm of commercially driven interests. They also found out in authoring their own works, how vexing and empowering being one's client potentially can be. As for me, art directing a project like this is what makes teaching and graphic design worthwhile. Ultimately, I am glad I decided to make the crossover from practitioner to professor and have found a way to integrate these two design methodologies into one hybrid pedagogy.

For visual reference on the "get out the vote" projects, please see: www.d.umn.edu/art/gallery/vote/arevolution and www.d.umn.edu/art/gallery/vote/educateyour

POSTSCRIPT: The next semester, I began with a new crop of students to campaign against the epidemic of obesity in the United States, which has now surpassed smoking as the number one preventable death. Sixty percent of us are overweight right now. Stay tuned to see how this supersized project turns out . . .



Kenneth Fitzgerald

n my first year teaching design, a joint task force of the AIGA and NASAD (National Association of Schools of Art and Design)¹ identified me as an instructor "of concern." I warranted suspicion as a recent MFA graduate with "little or no professional practice or teaching experience and whose master's may be the first degree with a major in graphic design." Guilty on all counts.

The alert came in a 1997 report, "Selecting and Supporting Graphic Design Faculty." It was a timely study. New design programs were proliferating and enrollment escalating in established ones. The economy was on a roll, giving designers even less incentive to choose teaching over practice. As a result, schools were hiring faculty whose engagement with design practice ranged from tenuous to wholly absent. I was teaching some undergraduates with more professional experience than I had.

Put forth as "analytical and consultative only," the report allowed for exceptions. But was I one? Am I now, years into a career and facing a tenure decision? I believe I can "do" design—yet don't care to. At least, not the way the field regards as significant. Experts in the field have to certify my work as noteworthy. With dubious professional credentials, scrutinizing design's educational values isn't a theoretical concern for me.

Nor is it to the design field as a whole. What are the standards that define the nature and role of a design educator? Articulating what makes a good design teacher describes the field's values as much as pronouncing what makes a good designer.

In place of a definition for a good teacher, design offers equivalence. A good designer *is* a good teacher. Of course, when you consider a specific individual's facility there are exceptions. But in general, the cliché is inverted: those who can, *should* teach. Professional repute equals teaching potential, with designers of renown the most desirable instructors. This assessment cuts across the spectrum: from full-time tenure-track faculty to individuals whose primary dedication is to their practice. After that, design doesn't have much in the way of objective standards.

There is logic at work here but how much of a factor is notoriety? At issue isn't whether practitioners bring a valuable perspective to education. They obviously

do and have done so throughout history in various disciplines, not just design. It's also proper to think educators might achieve and maintain esteem for performing the art they profess.

With apologies for the pun, it's a matter of degree. Is professional achievement overvalued in education? Could the privileging of celebrity be holding design back from realizing its potential as a discipline—and shortchanging students? And could the incursion that concerned the AIGA/NASAD group actually be an opportunity? Designers often dismiss or downplay nonpractitioners' opinions. But do you have to be able—or desiring—to make graphic design to evaluate it?

If a designer's answer to that last question is *yes*, what does it say about the attitude toward clients? (Perhaps *they* are the ideal design educators.) If you cite the need to be formally sophisticated, then you've also said something that doesn't quite track with the rhetoric of design being problem solving.

Unsurprisingly, as I outline an alternative to the common description of a design educator, it looks increasingly like me. This is a problem with drafting guidelines: they inevitably resemble the drafter. At best, they're idealized portraits—what we aspire to be. At worst, they're full employment acts and a rationalization of the status quo.

As design is engaged in pure culture, describing the specific skill set a master practitioner possesses is difficult. A music teacher, for instance, can exhibit an expertise with an instrument. In design, it's near doctrine that talent with designmaking tools (a flair with software) doesn't make you a designer.

The asset that practice brings is experience. The knowledge of what *has* worked is significant. But does that necessarily lead to the capacity to speculate on culture—to imagine what *might* be? This means much more than hypothesizing formal novelty. It's considering design's role in society: how and when it may be employed. We must also recognize that the majority of students will not go on to practice. Who might best provide for them? I don't know—but I can relate.

To craft meaningful guidelines for teachers, we must consider the nature of the process they'll be engaged in. Is it education or training? Both are worthwhile pursuits, as long as the institution proclaims which it's providing. A program that claims to offer training for aspiring graphic designers should be weighted toward practitioners as faculty.

Academia has dual, eternally conflicting functions. It's a place where knowledge is preserved *and* advanced. The former requires conservatism in its literal sense, while the latter demands that we challenge the status quo. Ideally, an educator respects and speaks to both these purposes. If not, programs should seek balance across its faculty.

Balance was an important and encouraging aspect of that AIGA/NASAD report. It pragmatically advised combining the savvy with the inexperienced faculty. (And I can testify to personally benefiting from this arrangement.) It recognized alternative methods of research—things other than doing commercial design. Overall, the report remains a thoughtful and expansive view of design education. Of course, where it raised caution, I saw an opening. Yet I will go further. As an interloper from

fine art, I'm not far *enough* removed from design. The field has been absorbing my kind forever. Design must recruit more educators with backgrounds in the other liberal arts. The insights about design that I most admire, that illuminate how design is part of the continuum of culture, come from such individuals. Isn't this design's dream—that serious people take it seriously? And then, spread the word?

For all of us, standards must be an internal devotion. Being dedicated and inspiring is the *minimum* standard for educators. Finding new ways to encourage students to excel is what comes with the job. What more are we doing to further knowledge? How are *we* being tested? Before we ask students to challenge their preconceptions, to not be in thrall to celebrity and surface, we must, as teachers, do so ourselves.

NOTE

1. www.aiga.org/resources/Content/1/4/8/documents/faculty.pdf



Memory, Instinct, and Design: Beyond Paul Rand's "Play Principle"

Michael Golec

He wonders also about himself—that he cannot learn to forget, but hangs on the past: however far or fast he runs, that chain runs with him. It is a matter for wonder: the moment that is here and gone, that was nothing before and nothing after, returns like a specter to trouble the quiet of a later moment.

-Friedrich Nietzsche (1873)

delivers the "chain" of memory to an unsuspecting subject. The reception of a variety of experiences and images, real and/or imagined, remains always and forever with that person. We do not forget. We cannot put aside, overcome, or disregard anything, especially that which is conveyed to us through experience and education. As Nietzsche proposes, it is not possible to completely deny our past. Yet, there are those of us who wish this were possible; they desire a loss of memory so that they may return to some primal state, so that they might act on instinct alone. Granted, the world in Nietzsche's day was no more civilized than today, but somehow, in our current postindustrial/information society, we too feel that instinct escapes our grasp. We cannot fail to remember our civilized selves.

The question is, Do we possess any less instinct than our forbearers? And if so, How is it that we have lost our capacity for free activity? Can it be that the accumulation of experience and information pushes instinct aside? Indeed, Nietzsche goes on to write that learning banishes the free spirit and annihilates instinct. But still, we dream of a state where, unencumbered by trained responses and conditioning, we engage the world directly like a child or an animal. We know that to do so would entail a willful loss of memory.

Nietzsche suggests that to forget is to return to a time before learning. Forgetting is to revive the child or the purely instinctual animal who is not bound to repeat all that is learned. Yet, Nietzsche states that we "cannot learn to forget. . ." Is forgetting then impossible? Coincidentally, it is Nietzsche who forgets, as the French philosopher Jacques Derrida notes in his exegesis of Nietzsche's writing. Derrida quotes a fragment from Nietzsche's *Joyful Wisdom*. The German philosopher writes, "I have forgotten my umbrella." By his own inscription,

Nietzsche remembers that he forgets. There is a momentary lapse of memory, but it is not absolute—erasure, for Nietzsche, and for us, is never complete. This is the acute paradox of Nietzsche's specter. If we cannot learn to forget, and that which is not learned is instinctual, then forgetting must be instinctual. And memory, a capacity we are born with, works in much the same way. By Nietzsche's logic, recollection must be instinctual because if it is not taught, thus it must be innate. Essential to this essay is, however, a reading of Nietzsche's assertion as a remembrance of a past before learning, before the annihilation of instinct. My intention is to reveal that most important specter—instinct—which cannot take solid form but is ever ready to remind us that we can remember to forget. This activity, furthermore, is necessary to learning.

So, what of learning? Particularly, and this is straight to the point, what of design and learning? As expected, the graphic designer is not exempt from Nietzsche's spectral phenomenon, from momentary loss and subsequent reclamation. On the contrary, he or she engages the ghostly visage that is memory, and, most importantly, the designer uses Nietzsche's spook to a single purpose, that is, in the process of designing.

Learning to design is, on a fundamental level, a matter of trial and error. To discover what works best, the designer arranges his or her materials until the appropriate solution is found. But from what place does a designer draw material? Of course, the exterior world. The things a designer sees excite and inspire. The world is overstuffed with stuff, and designers are contracted to venture out and make sense of the proliferation of images and ideas. What prepares a designer for such a task, for organizing a number of communicative morsels that ideally impact a targeted audience? A number of factors come to mind: life experience, university or college education, vocational training, apprenticeship, art and design history, and instinct. What most consider to be second nature—the apprehension of an object, or an idea, sans reason—is Nietzsche's spectral manifestation of deposited history. That is to say, what was once dormant rises like Nikolai Gogol's ghost of Akakii Akakievich to startle and inform the designer. It is a memory (inscribed upon the subject through education, experience, and conditioning) that surfaces in direct relation to a project, or problem, at hand. Nonetheless, if we continue to adhere to Nietzsche's spectral manifestations, then, as the designer continues to hone his or her craft, instinct vanishes. But not completely. As we will see, instinct reasserts itself, much like a playful ghost might appear, to contribute to the designer's education and practice.

There remains, within the field of graphic design, an expectation on the part of clients and designers toward innovation. It is thought that a designer—forgetting the rules, forgetting history—forges ahead and creates new forms that, in turn, contribute to the designer's growth within his or her field. Yet, how can unique solutions to design problems exist if the designer is simply the product of a design education? If, as Nietzsche proposes, one cannot forget, then how is it possible to ditch the rules that govern good design? It seems essential to the cultivation of a design practice that experimentation must continue so that yet another experience is added to the designer's arsenal of maneuvers.

At best, the idea of innovation assumes an overturning, or questioning, of what was learned. But prior to this anticipated usurpation, a designer is given a project, the details of which are spelled out in a brief. When given an assignment, a designer is supplied a set of rules that are intended to govern a coherent outcome. For example, in the summer of 1990, I was one of twenty students who traveled to Brissago, Switzerland, to embark upon a five-week program to study design with Armin Hofmann and Paul Rand. It was the first week of class and Rand assigned his Léger project. After a brief slide introduction, which focused on the French artist's production (a vividly colorful, tubular, transparent style), the students were instructed to develop a series of typographic images (the word "Léger" was used) that evoked the economy of the painter's oeuvre. Simple. I had at my disposal the name Léger and a rudimentary understanding of the painter's work, plus Rand's outline. This is what I knew. These were the rules. Yet, how was I to impress, surprise, and delight my instructor? Was I to forget all that I knew of the design process?

Now, according to Rand, in order to innovate—to construct a thing that is unique—the designer must enact a scene of play. Apparently, this activity allows a designer to freely explore a myriad of possibilities. Nevertheless, every game has its rules, and, as the saying goes, the rules are made to be broken. Play creates boundaries, which, in turn, are breached—this is innovation. In other words, the given structure of a project, which is dictated by previous design successes as determined by an instructor (or client), is challenged and invigorated by a designer's instinctual maneuvers. Rand writes in "Design and the Play Instinct," "a problem with defined limits, with an implied or stated discipline (system of rules) that in turn is conducive to the instinct of play, will most likely yield an interested student and, very often, a meaningful and novel solution." The scene of play, or what Rand calls the "play principle," is a discourse between the objects (typography, illustration, and photography) at hand and their multiple relations. The rules are important, and without them, as Rand asserts, "there is no motivation, test of skill, or ultimate reward—in short, no game." Rand continues his formulations in "Intuition and Ideas":

Without regard to available systems ... the designer works intuitively.... Very often a system is used merely as a crutch ... regardless of need.... A system can be applied either intuitively or intentionally, interestingly or tediously. There is always the element of choice, sometimes called good judgment, at others good taste.

Rand makes clear that instinct is outside the system, that it is not part of, but is in certain circumstances drawn to, the system. By understanding this, we comprehend yet another aspect of Rand's game. He implies that rules are broken and boundaries tested and crossed by his desire for a design student to achieve a "novel solution." The rules, in and of themselves, are not sufficient. There must be an added element. Play, then, is a means to forget the rules if only for a moment, to return to instinct. The designer then remembers this moment of forgetting, this breaking of the

rules, and applies this memory to the project at hand. Whether the playful moment leads to a good or a bad design is not important; on the contrary, what is essential is that the designer retains this moment, which is stored for use. Therefore, we can conclude that play always leads to learning, and can be considered, as Rand believes, an implement for design education. While the "game" functions as a tool for learning, it also serves to suggest alternatives to the rules; it "is an equally effective means for exploring the use of unorthodox materials. . . ." Ultimately, the play principle should result in the rupture of the given structure, while retaining the instructor's (or client's) primary goals.

Rand's serious play as problem solving is, as most design students will agree, an established mode of education. As such, Rand's play principle establishes any number of specters that will surely, and by his own educational purpose, intentionally "trouble the quiet of a later moment." What may very well be an instinctual questioning of a project's structure is retained as memory and thus ceases to be instinctual. If indeed there can be an instinctual maneuver, it is but a flicker that is apprehended by the designer and stowed away for subsequent appearances. The play principle constructs a scene of remembrance of forgetting.

To further elucidate Rand's play principle, I will introduce yet another figure. When playing, as the psychoanalyst Sigmund Freud asserts, the subject is removed from the everyday—he or she forgets daily concerns, restrictions, rationalizations, etc. The subject acts instinctually. Now, when the designer plays, he or she also forgets-forgets the rules of the game. Again, if play leads to an exciting and new solution to the problem at hand, the designer learns from the game. To be even more specific, I might add, Rand's instructional theory is a tool for learning; it is not, as Rand proposes, learned. The play principle delivers what cannot be forgotten, what is relegated to some buried place—memory. But first it draws an intuitive response, that which is outside of, or beyond, the play principle. The action beyond learning is actually before learning. Furthermore, if instinct is likened to a child's response, then what is beyond the play principle is actually before Rand's scene of play. Returning to the time before learning allows the designer to continue learning, thus the play principle is not a model for memory per se, rather it accesses the very root of creation, which soon becomes just that which cannot be forgotten. This is precisely why play is a tool for learning, or, in other words, play is situated toward learning.

Again, participation in Rand's designer's game promotes unique solutions that challenge the original restrictions of a project. It is not too surprising to find that Rand is not alone in his idea. By attempting to explicate artistic genius, Freud suggests that play, fantasies, and daydreaming account for creativity. As Freud explains in "Creative Writers and Daydreaming," play is unreal and is unconnected to the concerns of the everyday. Therefore, play is not bound by social or historical constrictions or preconceptions. As one grows older, however, one ceases to play, hence play is exchanged for daydreams and fantasies. Moreover, Freud believes that daydreams and fantasies bear the trace of an original moment. Freud writes that a subject who daydreams regains "what he possessed in his happy childhood." But the subject's gain, as Freud states, is predicated on a wish, which "makes use of an

occasion in the present to construct, on a pattern of the past, a picture of the future." Taking a cue from Freud's essay, and addressing Rand's play principle, I propose that a designer's innovation (future) is predicated on the interplay of pre-memory (instinct), memory (past), and the rules of the assignment (present). In other words, Freud's notion of the conjured past influences the present, which, in turn, determines the future. For Freud, creation is a continuation of child play, not the child playing, which overcomes the barriers that inevitably constrict creative solutions. But prememory is most important to this essay's assertions, for it is here that I locate, as does Freud and Nietzsche, instinctual activity. The experience of instinctual moments, however, is soon relegated to memory. And it is the conjured past—the return of the dormant child, or animal—that is the specter. In the end, instinct always succumbs to memory, and the childlike act is learned and cannot be forgotten. As this specter is present during the problem-solving process (Rand's game), it ruptures the stasis of the assignment. This is how a designer overcomes the inevitable constriction of the instructor's (or the client's) brief. It is the specter, the memory of the game, that allows the designer to push elements around, to determine compositional quality, to become aware of the boundaries. That sudden spark that sets him or her to push things around, like the attention-starved spook who flings the family heirlooms and furniture, the unforgotten often provokes spectacular rearrangements. Confronted by the specter of design education, the designer is compelled to act, to question, and to achieve fresh forms.

During the summer of 1990, I had the opportunity to see one of these ghosts. Keenly aware of the blank white sheet that lay before me—it literally reflected the void that was my mind—I was struggling with Rand's Léger project. I just didn't know where to start. Yes, of course, one begins with pencil and paper. One sketches. At least that is what I had been taught. Ideas are generated in this manner. The freedom of drawing, the mind unencumbered by preconceptions, and the ability to discern that which is useful all add up to the scene that Rand refers to as the play principle. I should have been playing. Instead, I was "angsting." I had no idea.

Then Rand came to my little table (the class convened in a primary school lunchroom). He sat down beside me and surveyed my desert. Picking up a stray pencil and pulling at a pad, Rand set to play. After a moment, he rose and moved on to the next little table, and I was left with a charming sketch of a ghost with "LE" hovering just to the left of Rand's apparition—*le spectre*, or the specter.



Some Things Change . . .

Chris Pullman

In the past decade, we have witnessed a series of amazing changes in the way we think about the profession of graphic design. Here is my short list.

$2D \rightarrow 4D$

Once graphic design meant flat, static, two-dimensional.

Now it encompasses multiple, hybrid media. It is not just visual, but involves a variety of the senses, more like life itself, which plays out in a four-dimensional world.

$Object \rightarrow Experience$

Once what you were making was an object.

Now it is more often an experience.

$Composition \rightarrow Choreography$

Once the designer's art was composition.

Now it is choreography. In a fluid, four-dimensional world, the problem is not so much to get the fixed thing right as to find an elegant sequence of evolving relationships. This involves understanding how the conventions of typography and the dynamics between words and images change with the introduction of time, motion, and sound.

$Fixed \rightarrow Fluid$

Once you made it stay put. Great care was taken to get everything in just the right spot, just the right relationship.

Now, increasingly, the output is a variable, not a constant. Think of the way

your Web decisions look on somebody else's screen. The new problem is to design the *rules* for the relationship of things, not a single predictable outcome.

Craft Based → Technology Based

Once the profession was genetically linked to the ancient crafts of hand typesetting, bookbinding, drawing, and cutting.

Now it no longer is so physical, mediated by technology that can make it feel almost virtual. The basic tools are suddenly so different that, as McLuhan predicted, the things we can make, or even dream up, will be different.

Cheap → *Expensive*

Once for a few hundred dollars and some dumb tools you could open up a shop. *Now* the cost of entry is much higher and the overhead never stops.

Isolated, Solo \rightarrow Collaborative, Team

Once you could do just about everything yourself. Paul Rand ran a one-and-a-half-person shop for most of his professional life.

Now the paradox is that while the personal computer and plunging software costs have revitalized the tradition of the one-man band (with a publishing house or a postproduction studio on your desktop), the trend is toward collaborative, multidisciplinary teams of people pushing toward a common goal. It's not just *your* opinion anymore. Collaborating calls for a different set of genes, a different kind of ego, a tolerance for complexity and consensus.

One Voice → Many Voices

Once it was possible to assume that there was one language (yours), one culture, one set of meanings.

Now "mass communications," which were based on that notion, have given way to targeted communications; broadcast shifts to narrowcast; one-to-many becomes many-to-one. And the visual and verbal language of the end user is almost certainly different from your own.

Piecework → Strategic Thinking

Once most of us did piecework, making a new thing to fit within a small universe of other things.

Now, while piecework won't disappear, the new focus is on strategy: design as strategic planning, design as a business resource. This implies a different level of thinking and participation, even a different vocabulary.

Naïve → *Self-aware*

Once design didn't have much conscious history. You just did it.

Now we *have* a history and people are actually *writing* about it. Ironically, few young people know anything about it.

$Neutral \rightarrow Personal$

Once the designer's role was thought to be a neutral mediator between the message and the recipient. This was the modernist way: stay *out* of the way, be clear, be unobtrusive, and facilitate.

Now there is a tolerance, even an appetite, for interpretation. Theoreticians point out that since it is next to impossible to *not* bring your baggage to the transaction, one might as well recognize or even celebrate one's intrusion on the message.

These shifts have vastly expanded the expressive options for visual communications and fundamentally altered the way graphic designers practice. But while much has changed, many of the essential qualities of being a designer have stayed the same.

For example:

Design Is Different from Art

I have always felt that being a designer and being an artist are quite distinct activities, attracting people with different goals and preferences. Where a person ends up on this continuum is more a matter of chromosomes than anything else. Someone who becomes a successful painter or sculptor or performance artist is likely to be a person who derives their energy and intellectual satisfaction from solving problems that come from inside *themselves*. In contrast, someone who ends up as a successful designer is probably a person whose energy and intellectual satisfaction comes from solving someone *else's* problems. Each of us inevitably brings to the task of designing a unique load of experience and bias, which can and should express itself in our work. But the current attention paid to the importance of "authorship" in design shouldn't mask the underlying distinction between personal expression and the puzzle of figuring out a problem posed by others.

Design Is Content Independent

One of the great satisfactions of being a designer is that the core skills of problem solving and storytelling are not linked to any one range of content. What are you interested in? How wide and deep is your life experience? The thing most likely to constrict one's range of content options within the profession is a limited personal repertoire of formal or stylistic expression.

Design Isn't Necessarily a Pro-Social Profession

In the early days of the modernist movement, design was seen as an agent of positive social change. But then, as now, the seeming pro-social acts of facilitating communication, providing access to ideas, and promoting understanding don't necessarily assure a positive outcome. It depends on what the message is. Throughout one's professional life, the key decision is: *Which* problems will you use your skill to help solve?

Graphic Design Has Its Roots in Language

Graphic design is unique among all design disciplines because of its deep roots in language. Graphic communications rely on the interaction of words and images to convey a message that is almost always dependent on language and its cultural context. As a consequence, the heart of our practice is typography, a set of conventions that allow us to represent, however crudely, the rich inflections and rhythms of spoken language.

The Visual Power of Design Derives from the Idea of Contrast

If you ask why something works and you push back far enough, eventually everything seems to be based on contrast: the ability to distinguish one thing from another. Composition, sequencing, even legibility all rely on devices that affect the contrast between things. Contrast seems to control many of the phenomenon essential to visual communication: grouping things into families, creating theme and variation, establishing hierarchies, and providing interest.

Nothing Happens Out of Context

Few things we make have no precedent. It is important to understand how one thing fits into the larger family of things to which it belongs. You can't enjoy the variation if you don't know the theme.

The Goal of Design education Is Resourcefulness

A good education is one that gives you the resourcefulness to solve the problem you haven't anticipated. It should provide experiences that give you the ability to express yourself in a variety of media. And with the inevitability of change in both the tools and the scope of design, it should probably keep focusing back on the fundamental mechanisms that control what makes an experience authentic, accessible, and understandable.



The Last Slide Show

Alice Twemlow

n October 2004, Eastman Kodak announced that it had produced its last slide projector. The news gave quite a jolt to many teachers of design history who had not already converted their slide collections to a digital format. The fact that the 35mm slide is destined to become a technological relic—just like the magic lantern slide or the floppy disc—and that the traditional slide library is being replaced by dislocated virtual image collections, give pause for thought for many in design education.

Slide libraries tend to fall somewhere between the purviews of libraries and individual departments. There are no standard methods of classification or acquisition and, hence, they vary greatly in the quality of their content, their organization, and so on. With a dedicated visual resources curator at its helm, a slide library can be a rich resource for teachers and students alike. More usually it is a strange repository of the idiosyncratic whims of generations of teachers who've passed through its doors. While these eccentricities are often endearing—a whole cabinet devoted to punk graphics or a particularly bizarre and complex cataloging system inherited from a previous era, for example—they can also be problematic. Apart from gaping holes in a collection, another more insidious problem is the tendency for slides to be organized by designer and design movement, which encourages time-pressed lecturers to teach accordingly.

Compare this situation with digital images and the advantages are obvious: Since digital files can be duplicated so easily, it's simpler to reuse images in different lectures. You can store complete lectures as documents, which take up much less room than stacks of carousels. Also, a computer database is much more flexible than a card index system in a slide library and allows nonlinear searching and retrieval, so there's the potential for far greater amounts of cross-referencing across disciplines and periods and for the inclusion of more contextual material. Digital images also allow for more fluid display than slides; providing you have access to the software, you can pan across or zoom into an image to highlight a detail. Instead of being limited to single or side-by-side presentation format, you can display images in multiples to create a collage effect, enabling more subtle visual analysis. With the integration of motion and sound you can include video clips and even

replicate the experience of reading a book, for example. With digital images, therefore, there's the potential for better quality design history teaching. And yet, the celebrations you would expect are far from universal.

Christine Sundt is a visual resources curator at the University of Oregon and one of the most respected slide librarians in the United States. While excited about the benefits of the "simple and elegant, highly transportable and accurate, versatile" digital format, she points out a number of caveats. How long will digital files last? she asks. Can we be certain that a 2004 digital format such as a TIFF or a JPEG will be as readable in 2050 as a Kodachrome slide shot in 1940 is today? Can we justify the considerable expense of conversion and its necessary quality control, the accurate labeling of images, the specialized presentation software necessary to reap the rewards of the digital format, the subscriptions to the various images banks, the database management systems that facilitate keyword and subject access, and the new projection equipment and its maintenance? (A lecturer can fix the majority of problems with an analogue slide projector, but a technician is required for a digital projector.) Another major problem that design educator Lorraine Wild identifies is the low resolution of video projection. "I'm afraid we are educating a generation of students who simply will not know what sharp type looks like," she says.

At CalArts, Wild teaches what she terms "a complicated syllabus that cross-references graphic design with other design practices" and is in the process of transferring her enormous but aging collection of slides to digital. Currently, to put any lecture together using a slide library, Wild has to look under "graphic design, poster design, book arts, print graphics, nineteenth-century architecture, twentieth-century architecture, as well as interiors, furniture, fabric, glass, metal, and wood." It's a complex process and one she feels will be simplified by a digital picture database. Her transfer process is not completely smooth, however. "When I went to scan the slides, I discovered that the image quality was not good enough to survive scanning to a size that could be projected." The alternative is to find the originals and re-shoot them but, in Wild's experience, that can be tough. "For instance, my slide of the cover of Herbert Bayer's Bauhaus exhibition catalogue of 1923 was shot from an original in the Yale Art and Architecture library, but my scan is now a scan of a reproduction in a recent Bauhaus book. It's okay, but not quite the same."

Design education guru Meredith Davis knows a lot about slide libraries. As a member of the National Association of Schools of Art and Design Commission on Accreditation, she visits many schools each year, in addition to reading 280 visitation reports. "Visual resource collections are all over the map," says Davis. "There are very sophisticated setups, such the one at Oregon University or the Art Institute of Chicago, directed by someone who really understands classification systems, is knowledgeable about copyright issues, looks to the variety of faculty use, and who looks at what's available outside to add to the collection. On the flipside, you have entirely idiosyncratic collections, often [found] in a closet, and run by someone who has no idea of what the issues are in terms of copyright or access, no training at all, and using a weirdly structured system."

As educational institutions of both stripes join the scramble to digitize, the

big issue, as Davis sees it, has to do with the provenance of images. "Teachers and librarians have a tendency to go to books for images so the same few get recycled. Very few graphic design history books have resulted from real work in archives and unlike architecture and art, graphic design does not have companies making slide sets from archives. So faculty tends to use homemade slides—most usually copied from Meggs—and that governs what they teach. They're not serious historians, and have never seen most of these objects in real life."

Denise Gonzales Crisp, chair of graphic design at North Carolina State University and a self-described "digital gal," is happily conversant with the benefits of digital presentation (apart, she says, from the "lack of adequate software that assumes you know where you're going and doesn't allow for lateral thinking"). Gonzales Crisp says that slides, both through their format and the cataloging system that guides their use, favor "iconic examples of work and classic views of objects or places," while digital images allow for more complexity and subtlety.

Do certain types of graphic design work better on slide than others? Davis believes so. "Monolithic identities by Rand and Vignelli and projects that can be captured by a style manual are what tend to be covered by slide collections," she says. Examples of a more contemporary, organic approach to corporate identity, on the other hand, are much harder to capture in this medium, because there are often multiple designers involved, fewer rules, and huge amounts of applications to be assembled.

"We are all involved in moving forward to the next phase of teaching and digital technology plays a big role in it," says Sundt, but, she warns, digital hasn't yet been proven to be the best solution. "Many schools could not afford to have a full-time slide curator, and yet they have the idea that they can have a full-fledged digital collection as if it manages itself." Without adequate financial support and commitment to infrastructure, institutions might be better off sticking with slides, or a combination of the two.

At Oregon, Sundt says, faculty are happy to continue using the visual resources collection of 300,000 slides thanks to a database she developed to help them work with it, and to the fact that low-res digital images accessed by password are available as study aids for students. "Going digital actually puts more burden on faculty," Sundt points out and Wild attests to that. "They have to invent their own classification system with a robust dataset for each image (a file name is not enough; there are so many reasons to show a slide), and store huge amounts of data on their computers."

The transition from 35mm slides to digital files is inevitable and at many institutions it is already in process. The benefits of the switch are numerous, but it is important that universities tread carefully and invest sufficiently in the expertise and resources necessary to ensure not only that we don't replicate the negative aspects of the slide library in a virtual environment, but also that we don't add any more. We would do well to heed the warning of Nicholson Baker who described the overly cavalier changeover from card to online catalogues that took place in libraries in the 1980s as a "national paroxysm of shortsightedness."



Design Interactive Education

Max Bruinsma

Some time back I began a lecture for postgraduate students of art and graphic design by stating that they had probably all learned the wrong trade. Most of them had an educational background in disciplines that today could be best described as "old crafts." Now it was not my intention to demoralize them, but I wanted to confront them with a problem that is at the heart of being a designer or an artist or a writer or an editor these days. Of course, as a writer, critic, and editor, I was talking about my own problems too. To an ever-expanding extent, the work of artists and designers overlaps the work of other specialists in the field of cultural communication. And this is not only the case in complex applied multimedia environments—it holds true even for the autonomous or fine arts.

For what is the context of art and design today? How do they function in our culture and society? What is the role of artists and designers in what is called the information age?

It is obvious that understanding the idea of "information" is a most important key to these questions. More than ever, the bulk of cultural production files under "info." We need to be updated every second on any topic to be able to exist as cultural beings. Information—from the hard facts of economy and the news to the seemingly trivial data transmitted by advertising and the entertainment industry—is at the core of our existence. But such "information" is not the stuff that evokes what the great eighteenth-century German philosopher Immanuel Kant called *Interesseloses Wohlgefühlen*, the kind of thing that is in itself valuable, without any connection to practical use or economic gain. That is where the great idea of autonomous art comes from: the creation of a thing of beauty as a value in itself, as a purely spiritual thing that has no use but being precisely that, a thing of the disinterested mind. These days it is hard to be disinterested. We are bombarded by information and we are compelled to do something with that information, to act on it, to deal with it.

THE MERGING OF CONTEXTS

In this cultural panorama, both artists and designers are, in a very practical sense, "information agents"—that is to say, they traffic meaning; they transport ideas,

concepts, and opinions; they visualize structures and contexts. In short, they condense information into cultural content. By calling both artists and designers information agents, I want to stress two aspects of visual culture today. First, the visual production of artists and designers functions in a framework that embraces such diverse media as paintings, books, catalogs, magazines, computer terminals, television screens, films, installations, exhibitions, and performances. These same media are employed by other information agents too: writers, directors, producers, advertisers, politicians, salespeople, musicians, actors, supermodels, TV-makers—all of these, and more, make use of the same media, the same formats, the same information, the same concepts as those used by artists and designers. Of course, each of them works differently and from another background, another bias, a different idea of what to accomplish through these media. But they all are, so to speak, in the same room. In fact, they work together in constructing our visual culture, a realm where visual information flows freely from one context to another, constantly shifting form, changing content, but, at the same time, adding up to this all-embracing fabric called "late-twentieth-century Western visual culture."

The second aspect is the viewer of all this visual productivity. The eye of the postmodern viewer has acquired a great proficiency in "reading" information—be it verbal or visual, an artistic or a consumer product. Designers and their clients, the providers of information products, should be well aware of the growing visual literacy of their audiences. Whatever they design, the viewer will read it into his or her own context. No artwork or design is an isolated or autonomous object anymore.

Of course, to some extent this has always been the case—any cultural production relates to culture as a whole. But there are some interesting historical differences. A century or more ago, no sane and civilized person would have thought of putting a painting next to a vacuum cleaner in a museum and saying, "Behold, our culture!" This person would be well aware that both products were, in a very general sense, cultural products and, as such, things of their time, but they would never be put on the same level, let alone be confused. Nowadays, we're quite used to seeing paintings and industrial products on the same level as cultural products, each with its own context, but not necessarily of a fundamentally different nature and sometimes quite easy to confuse. When Jeff Koons puts a vacuum cleaner in a glass box, it's art. When Sears puts a vacuum cleaner in a cardboard box, it's a product. So nowadays it's the box that makes the difference, not the product itself! And there are a lot of artists who not only use, but themselves make, perfectly functional products and present them as artworks, and many designers who make perfectly viable artworks that are sold as products.

There are strong reasons to argue that the practices of art and design are slowly but surely merging, and that for both designers and artists it's more a question of context and concept than of principle that decides whether they're making art or design. They work in the same room, and they can choose the box in which they want to present their output.

TALKING ABOUT BOXES

I've avoided mentioning computers for some time, because what I am saying here is applicable to cultural production at large, not only to computer-based art and design. But, of course, the computer environment is the best example of a context in which traditionally different disciplines merge.

It is no coincidence that the computer is the epitome of the information age. For a computer, any input is information—it's all the same: artwork or design, photo or video, image or text or sound, moving or still—it's all bytes and pieces. One of the interesting things about computers is that their architecture compels their users to adjust to a certain practical routine in handling that digital information, which is technically the same for everyone, whether they are working on a hypertext or an architectural construction or a graphic design or an interactive artwork. Behind the computer, they all go through the same moves. These moves are fundamentally different from the moves students have learned to be the traditional skills of an artist or a designer. They can't sketch on a computer the way they used to do with a pencil on paper, and they don't build their designs on the screen the way they used to build them on their drawing boards. On a computer, the basic thing you do is to order information. And the next thing you do is to edit that information. Practically, you do these two things regardless of whether you are an artist, a designer, an architect, or a writer. When using a computer, you order and edit.

Now imagine that in the very broad field of what I call the production of visual culture—of visual art, graphic design, television, advertising, film, journalism, photography, performance, and theater—a growing number of professionals start using the computer as their main tool to conceptualize and design their visual statements. If this were the case, regardless of the materialization of a project or the box in which it is presented, all these disciplines would necessarily share a way of conceptual thinking. On a conceptual level, all these disciplines would work the same way; all would have to address the same practical questions of ordering and editing information.

And this is what is happening now. I don't say that working with computers is the only way to make art or design these days, but I do say that when the computer becomes a very important tool in the creative processes of our culture, which it already is, this will affect culture at large. In many manifestations of today's visual culture, you don't have to see the computer to know it has been there. And if artists or designers want to be culturally effective, if they want to reflect meaningfully on what makes the society in which they work tick, then they have to be aware of these things. A designer can make beautiful and valuable books and posters or even Web sites, and not be part of what these books and posters and sites are about; an artist can make beautiful and valuable paintings or sculptures or even CD-ROMS, and not be part of the contexts in which the work is shown.

CHANGING EDUCATION

What does all this mean for graphic design education, apart from the obvious fact that design education can't be isolated anymore from education in other fields of cultural production?

How do the effects of the computer, new media, and the changes in our communication environment reflect on today's design education? Did these technical and cultural innovations change education, and have educators adjusted themselves appropriately?

Not completely. Insofar as graphic designers are communications generalists par excellence, they are supposed to be capable of managing any formal aspect of communication processes, regardless of the medium for which it is produced and through which it is presented. But they should become more conscious of the fact that they're not the only ones who communicate. Designers have to rethink their role in multimedia communication. The traditional role of a designer as a rather autonomous professional who gives form to work that other professionals have finished earlier has become unproductive—or even counterproductive—in a lot of communication processes. In the new electronic media, any formal decision has a direct effect on the contents that are being communicated. Thus the designer has, in effect, become coauthor and coeditor of the message.

This new, extended role of the designer has already been compared with "collective enterprises" like television, film, and theater. In these media, form and content are formulated jointly by a range of specialists in areas such as scenario, direction, set design, camera, dramaturgy, and acting. More and more, graphic designers are becoming members of similar teams of form-and-content givers. Their role as sole-responsibles for the formal end product is strongly challenged. Thus, graphic designers have to reconsider their place in the new hierarchy of design teams in a computer-based environment. Graphic designers' main contribution to the effectivity of communication products is today more a matter of "conceptual functionalism" than of formal virtuosity. Now that they can do virtually anything they want, the main question for designers ought not to be what or how, but why. Why would you want to use any of these new and sophisticated technologies? Too often the answer is, just because they're there. Designers should be able to argue their choice of means on the basis of the content they want to communicate and formulate it consistently with the technical, social, and cultural characteristics of the media they use. In the end, designers should be trusted to say to their clients, after careful analysis of the brief, "You don't need the fancy Web site you ordered—you need a few good people at the phone."

For design education, these visions of the extended role of designers point back to a functional archetype we know from architecture: the designer as *homo universalis*. For, to encompass all the aspects that touch on the design process—to weigh all of these against their influence on form and content of the design—the designer has to have knowledge of an incredibly broad array of social, creative, communicative, and technical processes. He's back again: the designer as *demiurge*,

the quasi-omnipotent creator of worlds! The problem facing the Leonardos of our times, however, is that all these aspects are infinitely more difficult to knit together than they were in the Renaissance. A corporate graphic design manager at a large industrial firm seemed to point to this problem when, during a discussion, he related an image of vast project teams in which the graphic designer is just one of the specialists. But the same individual was driven to near despair when confronted with the question of who should bind together all these specialist efforts? Who should have an overview and direct the concept? "That is a problem," the corporate design manager said.

For design education, specialism versus generalism is the implicit problem beneath the debate on the consequences of working with new media. Of course, one needs specialists—operators, programmers, HTML editors, illustrators, image manipulators—just as one needs photographers, typographers, and printers. But maybe there's an even greater need for designers who are capable of seeing the whole picture before it's made. People who know enough of each specialism to direct the totality of the ever-more-complex design process. These are not necessarily the same people who execute the visual end product. In multimedia communication, the role of the designer is shifting from visualizing to conceptualizing.

This implies, in effect, a division into two aspects of graphic designers' activities. On the one hand, there are the specialists, the conceivers and (technical) realizers of presentations, the "imagers"; on the other hand, there are the generalists, the conceivers and managers of conceptual consistency. Of course, these two extremes are not divided in the absolute sense, and it will be up to personal interests and individual talents of designers to decide which direction they will want to explore. It's a difference of scale and of content. Both generalist and specialist are creative "conceptualizers" in the sense that they have to think up something that isn't exactly there, be it image or concept. Traditionally, graphic designers have always had a strong conceptual side to their work, and they have always worked in an argumentative way. Actually, they've always tended more toward generalism than specialism. And you can be a specialized generalist, as long as your trade is consistent and not too complex. Now it is exactly here that things have changed a lot in recent years. The "trade" has subdivided into very diverse and technologically complex specialisms, and what is probably even more important: the divisions between design and other fields of cultural production have, as I have pointed out, been blurred to a rather dramatic extent.

TEACHING TO COMMUNICATE

So, in a world of "desktoppers" and savant typographers, what is the role of the professional graphic designer? And how can they be best educated? It is here that the "division" takes place: alongside the people who can deal with technologically complex details—the "digital artisans," as they are beginning to be called—we need designers who can deal with organizing highly complex clusters of communication tools. They're the ones who can bind together, in meaningful and enticing ways, the

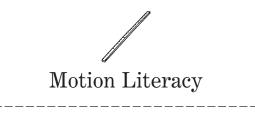
different contextual and technological levels of the product. They have to be able to judge content in terms of the organization of very diverse forms and means and media. Thus, they have to have a thorough basic knowledge of *all* the forms and means and media. Their main asset is the argumented vision, not so much the actual visualization. They formulate the concepts and map the contexts.

When such is the state of the profession, it becomes clear where lies the problem or, better, the challenge of current design education. The way it is organized, certainly in Europe, design education delivers neither specialists nor generalists. Design academy alumni know the basics of their trade, but they are not seasoned typographers, book or exhibition designers, or Web whiz kids. On the other hand, the art and design schools are too much geared toward the mediation of more or less specialized knowledge to deliver real generalists—designers who have developed the broad general knowledge and the trained academic thinking that will enable them to cope with complex conceptual problems.

In this diffuse situation, an "interactive" supply of knowledge seems to be the best that design education can offer. In order to cater to the realities of the work, which asks for very diverse professionals, we need to diversify design education—not by installing ever more specialized but autonomous schools and courses, but by structurally uniting the contexts within which young people learn whatever they want, and have, to learn about communication. Customization would be, in my opinion, the best way to link the disparate demands of the "market" to the diversity of interests among students. They should be able to make their own courses—an argumented choice from a broad range of specialized and general subjects on different levels—obviously within predetermined criteria. This not only means that the "walls" between the design disciplines and the ways in which they are taught should be opened, it also—and primarily—implies a much easier communication between art, design, and scientific education.

The term "communication" is used here in the sense of "communicating vessels"; students in any institution—university, art, or design schools—who qualify and are interested should be stimulated to follow courses in the other institutions. Theory, criticism, and practice should be linked in a more meaningful way than they are now. For a certain type of designer/generalist, we need to strengthen the academic level of thought, for which an overlap between art schools and universities would be helpful. For others, there should be more ways to acquire practical experience in the fields that they cover as theoreticians and/or organizers. The educational institutions should think about what they can mean for each other in terms of preparing their students for a world in which any one thing has to do with everything else. And most of all, they should teach their students—be they academics, designers, or artists—to work together, to understand the complexities and challenges of each other's projects, and to realize that these projects are different faces of the same dice.

So don't just teach interactive design; design an interactive education!



Jan Kubasiewicz

With the easy accessibility of kinetic tools, motion and communication design are more than ever integrated into one discipline. And since designers are becoming more concerned with injecting motion into their work, motion literacy—the act of trying to understand how motion can be used to communicate more effectively—is essential.

Making type, an illustration, or a diagram move on a screen is a relatively easy task. However, achieving clarity of communication through the language of motion proves more challenging for many designers than achieving fluency in kinetic tools.

Communicating via motion involves issues of both "what" is moving across the screen—typographical, pictorial, or abstract elements—and "how" that something is moving.

The "how" question refers to the kinetic form and its grammar, defined by both space and time dimensions of motion such as velocity and amplitude. Kinetic form itself may convey a broad spectrum of notions and emotions: from a sensible gesture, through a dramatic tension, to a violent collision. Of course motion in combination with pictures and words (and sound, if available) multiplies those irresistible opportunities in making meaning.

The meaning of motion on a screen, similar to all other aspects of communication design, relies on conventions and artistic techniques. A "cross-fade," two scenes conveying a lapse of time, or a "split screen," meaning simultaneous happenings, are just two examples adopted from the cinematic vocabulary—the source of inspiration for motion designers. The language of cinema in its century-old history evolved into a complex, universal system of communication, combining the visual, sonic, and kinetic aspects into a synchronized, multisensory experience, and that language now becomes a new realm of communication design.

While perceiving visual/sonic/kinetic information simultaneously through multiple channels and over a period of time, the mind attempts to organize these discrete messages into a story, however abstract that story might be. A story must have its beginning, middle, and end, but a story does not necessarily have to be told in this order. Therefore, the designer's awareness of different timelines—one of the story and another one of the storytelling—is essential. Equally essential is the designer's awareness of the "plasticity" of time, and consequently, the designer's ability to manipulate time—real time, its representation and perception—through motion, sequence, and multiple-channel correspondence (use of multimedia). Time, as intertwined with motion, becomes the structural design element as well as the *subject* of design.

One of the most spectacular historical examples of the design process for a multimedia structure is a postproduction diagrammatic storyboard for *Alexander Nevsky*, a 1938 film by Sergei Eisenstein, a Russian film director and one of the first theorists of the medium. That storyboard is a timeline in which visual representation of the film components are precisely synchronized into a sequence of "audio-visual correspondences" including film shots, music score, a "diagram of pictorial composition," and a "diagram of movement." The "diagram of movement" represents specifically the camera work resulting in onscreen motion. Choreographed very precisely, in fact to a fraction of a musical measure, this "diagram of movement" attests to how essential onscreen motion—and its meaningful integration with all other elements of his vocabulary—was for the cinematographer. The same challenge of integrating motion as a meaningful component of communication design should remain the focus of research and practice for contemporary designers.

Currently, the integration of motion and typography is perhaps the most extensively exhibited practice of motion design. Kinetic logos and taglines very successfully "scream" their brand names and services, even from the muted TV screens. But a great potential of type in motion is not limited to TV commercials and film titles. Adding motion and time dimensions to typography is to add new possibilities to the *imaging* of verbal language. Kinetic typography complements traditional typography by exploring "real-time" visualization in a spirit of phonetic properties of spoken language, such as spontaneity, intonation, etc. The dynamic visualization of these properties, possibly codified at some point and customizable, would promote the user's personal preference of onscreen, typographical "behavior" of words and lines in such cases as closed captioning, for instance.

The concept of the kinetic "behavior" of an onscreen design object—such as typography, an illustration, or a diagram—especially the behavior triggered interactively by a user, is one of the central issues of motion literacy. For a user, such kinetic behavior may be perceived as a dynamic transformation of some spatial properties of the initial object, which occurred as a result of pointing, dragging or clicking. For a designer, to design a kinetic behavior means to define a matrix of specific dynamic parameters of transformation of that object mapped to specific variables of input. Injecting motion into interactive design means entering the environment of algorithmic thinking and that is why suddenly the language describing it became very technical.

Integration of motion with information graphics has a tremendous potential of contributing, through interactive visualizations, to various disciplines of science,

economy, and education. Dynamic diagrams, charts, and timelines, seem to be the only practical solutions for understanding complexity of large-scale information structures. However, translating complexity of data into clarity of visual information will not be easy on designers, since increasingly sophisticated computational imaging requires new conventions and strategies for dynamic visualization, and very often, the solutions adopted from traditional information design, do not work successfully in an interactive environment.

Interacting with complex data within hypertext structure is a special kind of motion, involving the concept of multiple representation of information dynamically linked text, image, audio, video, etc. Multiple representation of information is the real advantage for the user and a challenge for the designer since in the context of interactive media, information is not fixed but fluid. According to Lev Manovich, it is "something that can exist in different, potentially infinite versions." Therefore, interaction is supposed to give the user a sense of the unique process of walking a personal path through databases to the most appropriate form of content delivery, according to the user's own individual preference or special needs. And since this unique path to knowledge is a result of action and reaction, a stimulus-response loop repeated ad infinitum, designers must always ask themselves how much motion is appropriate to their audience, to the content and context. After all, motion is not the purpose for its own sake but a way of serving the purpose of communication and since design requires equilibrium of nonmotion and motion, absence of motion is just a case of potential motion. And yes, motion is integral to design.



Computers Don't Speak, Type Does

Michael Worthington

n his 1974 book, Compendium for Literates, 1 Karl Gerstner recorded the possible variations of how words may exist in the printed medium. His approach was clinical, his observations were ordered logically and delivered scientifically. Gerstner's writing made me wonder how these rules, or set of possibilities, for printed typography would be different for the screen and for motion-based typography—how they might be explored and exploded, surpassed or confirmed, and how teaching screen-based typography differs from teaching traditional print-oriented typography. Most graphic designers understand how printed type conveys its message to an audience, what its form signifies, but few understand how that differs in the environment of the screen. In the screen-based world of typography, what was stable in the print world becomes movable, alterable, and temporal. Some of Gerstner's possibilities for static typography seem irrelevant, restrictive, or untranslatable in this new world. If his rules have been made anachronistic by current technology, I found myself questioning whether the written word should still be such a major part of our communication process. Should there be a new system of communication for new media? Why use type at all when you will be able to have live video, computer animation, constant audio, icons, and digital imagery that merge into a mass of navigable online space—and maybe even thinking, talking computers?

The prospect that typography and the written word might evolve into something more—i.e., with motion and sound becoming an integral part of the alphabetic system—is extremely seductive; a new "alphabet" that combines its audio and visual representations. A "magical" form of communication. Consider how writing has evolved through various technological advances (carving in stone, painting on paper, mechanized printing, etc.). It has always been a magical tool and has always had the ability to reconstruct images, meaning, and events from an abstract platform across space and time, between best friends or total strangers. Even though the letterforms themselves—and their means of production and dissemination—have altered wildly, the magic of the written word as communication has remained. This alphabetic magic differs from the communicative magic of the image. Chris Crawford succinctly sums up the difference between pictorial and

textual elements in reference to game design.² He defines depiction as "being intrinsically direct" (i.e., pictorial elements) and representation as "being intrinsically indirect," needing interpretation to reach the entity represented (i.e., text). Traditionally, depiction lends itself to visually dense or obscure problems (a picture paints a thousand words); information that might be gathered by reading page upon page of descriptive text can be conveyed instantly in a pictorial screen. The problem of depicting complex concepts—such as, for example, society, respect, or even new media—may be solvable by a series of images or icons, but they have nowhere near the specificity, or speed of understanding, that text has in conveying these constructs (a word paints a single picture). There are situations when type is the logical choice (for example, when you have a list of four hundred similar items from which to choose) because it functions in ways that other media cannot and at times when nontypographic media is more suitable (for example, in relation to speed of access, the two-hour movie versus the book that takes two days to read).

Language has poetic qualities—the ability to create different images within the minds of different readers—which may be impossible to represent visually. Crawford gives us the example of Bob Dylan's "Mr. Tambourine Man": "And take me disappearing through the smoke rings of my mind, down the foggy ruins of time, far past the frozen leaves, the haunted frightened trees, far past the twisted reach of crazy sorrow." Crawford writes, "Consider the futility of trying to communicate these phrases with depiction. What would 'the twisted reach of crazy sorrow' look like?" And to whom? The poetics of language can act as a gateway to a myriad of meanings (a word paints a thousand pictures), yet can be specific enough to feel personal to an individual (a word paints your very own picture).

The functionality and poetic possibilities of the alphabetic system mean that the written word will not disappear in the environment of new media—though when to use which means of representation should be a considered decision—the future won't be devoid of the written word and dominated by talking computers. Yet, type does speak. Typography's "voice" is apparent in the forms of the letters themselves. The variations allowed within the limits of legibility give room for some emotive form, some "reading" of the font itself: a secondary signifier (the primary signifier being the representation of a mental image conjured up by the sound of the word). This is apparent when watching children draw letters that enforce the word's primary signified by use of the secondary: making words look "short" or "tall," "thin" or "fat." Set in a certain typeface, the word can be more specific in its communication. A "dog," for example, can be a happy tail-wagging dog in Keedy Sans, a vicious dog in Crackhouse, a mongrel in Dead History, or a thoroughbred in Univers. Suddenly, the words have character; they are read visually as well as literally.

This reading of the expressive qualities of type spans beyond the choice of typeface. In print, we read the composition, the format, and the context before we even get to the content. We hear the tone of voice before we understand what it is saying. These elements come into play on the screen too, though in screen-based typography we are given ancillary information through the relationship the text has with time and motion. By virtue of its existence in a time-based medium, type has

further expressive possibilities, further layers of signification. Words are given life, characters are given character: motion gives more information. The onscreen typographer is armed with additional communicative ammunition; but haven't time and motion always been present in print design? Well-designed print typography uses hierarchy and composition to create a rhythm that leads the eyes: headlines to pull you in, bodies of text to slow you down, pictures and type to skip over or return to. The difference is that on the screen both the reader's eyes and the media's surface (the screen) are in motion. Our preconceptions of reading can be challenged: left to right, top to bottom, no longer has to be the norm. Motion can become a tool of hierarchy. Like color, our eye is drawn to it, even when it is applied to a small area. Motion can be used as a structural device. Words can appear from any direction, prompting the reader through a text.

The screen introduces possibilities for a three-dimensional typographic environment, fully navigable and interactive. At present, creating these "hypertypographic" environments is time consuming, and often the end result seems to be hackneyed cinematic flying type. A structural rethinking of the way typographic information works, along the lines of Muriel Cooper's work at MIT,³ is needed, but with the inclusion of typography's connotative aspects, rather than using typography only as a means to structure information.

Within the two-dimensional flat-screen space, depth is offered by the representation of three-dimensional worlds, but there is also another depth: the fourth dimension, time. Time can be used to create multiple layers of meaning (without adding formal confusion) through devices such as hidden text and multiple readings. Wordplay can be layered over time; critical or supportive subtexts can be hidden in one moment and apparent in the next; different voices can be housed around the same core content. An intrinsic part of onscreen typography is that the designer becomes more involved with the text (both editing and creating): perhaps this is because the text feels fluid and unfinished in the digital realm, hence it has less authority, is less threatening, and designers are more willing to become involved not only with the form of the words, but with the words themselves.

Because there are few models or standards for interactive work, it should still be viewed as a platform in flux. It provides an opportunity for form and content (typography and writing) to merge into something specific to the realm of the screen, a place where the collapse of the idea that a designer is merely an addition to the writing/meaning of others might seem natural.

Critical analysis of motion typography for computer screens is difficult because, even now, few people have seen a substantial body of interactive work. Every critique is a virgin critique—comments naïve and uninformed—because comparisons are difficult to make, there is no scale to form a system of judgment, and there is little discourse beyond asking what program the work was made with. The increased capabilities of the Web have made it easier to view the work of others, but, unlike in the print world, there is no canon of work, no "good reference" section, no historical genres into which work can be categorized. In one respect, this is liberating; there are no limits to what can be done, no creative restrictions, no formal

preconceptions of the end result. In other respects, it is less wonderful. Seeing what already exists is vitally important—to gain a perspective on the plethora of motion-based typography as a whole and try to make sense of it on a global rather than on a local scale, or even to rebel against and to reinvent it.

New media develop in an exponential manner. They build on the previous at a furious rate. Each interactive creative experience is not just a lesson for the individual maker, but also a work that is assimilated into a broader understanding of screen-based digital work. Rather than a total loss of authorship, there is a sense of sharing. You have to make this stuff and put it out there—let it have a life of its own, be altered by others (particularly on the Net), be toyed with and abused. Like a typeface, it only really comes to life when it is used by someone or, rather, in this case, experienced by someone. There is a liberalism that is essential to this production, leaving both design and text open to alteration and multiple interpretation is intrinsic to new media: the idea of creating a "readable" experience rather than a scripted space. The thinking and conceptualizing of these new spaces is more appealing than constructing well-styled possibilities with the available tools. Until the discipline of onscreen design stabilizes, you can always wish for it to be easier, for the technology to be ahead of what is currently possible. However, advances in technology will not substantially alter the fundamental energy of a piece. How the graphic form communicates the idea—including notions of function, appropriateness, and style is still paramount, though new media designers also have to work on developing the concepts of experience and interaction. At the moment, "the future of new media design is in the hands of game designers making worlds rather than graphic designers making interfaces."4

Karl Gerstner's Compendium for Literates provides an excellent catalog of typographic possibility for the time when it was written, but times, typography, and the nature of graphic design have changed since then. As new media move away from mimicking print into its own unique territory, it becomes clear that the rules, metaphors, and processes of print cannot be imported wholesale into the interactive realm, nor can they be taught in the same way. Typography that exists for print and typography that exists for the screen are different: after all, they are functioning in different contexts. That is not to say that all the typographic knowledge that has been acquired by graphic designers should be abandoned. The process is selective. Some information is relevant. Some is not. Typography in new media need not look like a book page, but ignoring all typographic convention is premature too. The fundamentals of expression and hierarchy, which often seem at odds with the medium, will be necessary until text and new media reach a stable point where new conventions will be born. Meanwhile, creators of new media will have to learn to write differently, to design differently, and to use the technology to expand typography's expressive voice. To stay ahead of commerce and avoid becoming redundant, design students must become versed in a more varied set of skills than previously required. To cope with this, design education must incorporate subjects traditionally seen as the property of other disciplines: the techniques of animation, timing, and sequencing for motion; the fundamentals of narrative structure; a creative

attitude toward working with audio and video; and an openness to experimenting in order to design the future. These skills should not be tacked onto the end of conventional typographic training. They should be informed by and mixed with traditional knowledge at all levels of design education and thereby made an intrinsic part of typographic education.

NOTES

- Karl Gerstner, Compendium for Literates, trans. D. Q. Stephenson (Cambridge: MIT Press, 1974). [Kompendium für Alphabeten: Systematik der Schrift Arthur Niggli (Teufen, 1972).]
- 2. Chris Crawford, Representation versus Depiction: Interactive Entertainment Design. Chris Crawford's writings can also be found at www.erasmatazz.com/Library.html
- 3. William Owen, "Design in the Age of Digital Reproduction," *Eye* 4, no. 14 (Autumn 1994).
- 4. In conversation with Brett Wickens, a graphic designer and contributing editor for *Eye* magazine, Los Angeles, 1997.



Writing: The Future of Digital Media

David Womack

It is tempting to think of writing the way the Bush administration thinks of old Europe: A once-great empire now eclipsed by the modern world. The vast tracts of text that our ancestors once used to preserve their musings for posterity are being replaced by shorter and shorter snippets pinched between (or within) advertisements and pictures.

Nowhere is this truer than in digital media. Ellen Lupton observed in "The Birth of the User" that on the Web, "How texts are used becomes more important than what they mean." "Users," Lupton tells us, "expect to feel 'productive,' not contemplative." Words in this context are primarily instructional: signaling actions too complex to be captured by an icon. Text may also satisfy a certain nostalgia, providing a visual and intellectual texture that the older generation finds comforting. You could find out more about a process or product if you wanted to, though, these days, perhaps no one ever does.

But something happened recently that made me suspect that writing—not as the process of churning out text but as a way of communicating information—may not go gently into that good night. It started with a design problem.

I was trying to figure out why a page I had made in Dreamweaver was rendering incorrectly in certain browsers. The problem made me recall an essay by Jessica Helfand called "The Dematerialization of Screen Space." She writes that Web designers are trapped in a medium "in which visual expression must filter through a protocol of uncompromising programming scripts... as rigorous as those that once defined Swiss typography." Four years after she published this description, my beautiful design still had to pass through a layer of code that inevitably spit out something that bore only a passing resemblance to my original creation. So much has improved—bandwidth, the integration of front- and back-end technology—and yet this fundamental problem persists: the Web still thwarts the best laid-out plans.

And then it dawned on me. The problem isn't going away—not now and maybe not ever—because the problem lies in the very idea of designing for digital media. The Web, at heart, is not a visual medium. Yes, Web sites and other digital media usually manifest themselves as structure and image, but these elements are not inherent to them. The native language of the Web is language. Language drives

form, not the other way around. This will come as no surprise to programmers, but I think many designers have yet to grasp its full implications.

In her essay, Helfand goes on to compare digital designers to "little filmmakers, directing on a pathetically small screen." A better metaphor, it seems to me, would be to compare designing a Web site to writing or storytelling. One of the reasons I prefer this metaphor is that it gives the designer some sense of the Herculean tasks that programmers perform. Imagine having to describe a picture in such detail that each person who reads it, no matter who or where they are, is left with the exact same image in their minds. The programmer writes the story and your Web browser imagines it on the screen. Now, if every browser imagined things in exactly the same way, then the problem would be less critical. However, the long-term trend seems to be toward more variation in browsers rather than less: information must now be available for screens the size of a cell phone and the size of a Rembrandt. And information must be accessible to people who can't see screens at all.

From this perspective, it is little surprise that rendering an image exactly is still problematic. In fact, it seems like maybe we got off on the wrong foot to begin with. Maybe the question is not how much detail we can include to insure that the image in the designer's mind is represented exactly: it's how little we have to say to get our point across. This is an issue that writers have been wrestling with for centuries.

Naked
On a naked horse
In pouring rain.

—Kobayashi Issa (Japanese poet, 1801)

These eight words defy context; they communicate across continents, languages, and centuries. I suspect that the future of digital media lies not in the exacting eye of the graphic designer but in the mutable language of the poet.

Programming a Web site may never be the same as writing a haiku, but it is worth remembering that the first written languages were not love poems or odes, but tax records. What started as scratches on a clay tablet evolved to accommodate William Shakespeare. Similarly, computer code is incorporating increasingly broad and abstract concepts into ever-evolving syntax. Computer programming even satisfies the foreign language requirements at some universities.

With this in mind, students of digital design should not write off writing. Designers who want to be fluent in the medium need to really understand language and literature: what it is made of, how it works, and what it means. Language not only describes innovation, it innovates.

NOTES

- 1. Ellen Lupton, "The Birth of the User," *Voice: AIGA Journal of Design* (January, 7, 2005). Essay adapted from *Thinking with Type: A Critical Guide for Designers*, *Writers, Editors, and Students* (New York: Princeton Architectural Press, 2004).
- 2. Jessica Helfand, "Dematerialization of Screen Space," in *Screen: Essays on Graphic Design, New Media, and Visual Culture* (New York: Princeton Architectural Press, 2001).



Starting from Zero: Teaching Writing to Designers

Warren Lehrer

Why—a burst of grandeur, of thought or of emotion, eminent, a sentence pursued in large letters, one line per page, in a graduated arrangement—wouldn't this keep the reader in suspense throughout the whole book, appealing to this power of enthusiasm—all around, minor clusters, of secondary importance, explicatory or derivative—an array of flourishes.

-Stéphane Mallarmé, from his essay, "The Book, Spiritual Instrument"

Before studying graphic design in graduate school, I was a driven if somewhat spacey fine arts undergrad plagued by synesthesia.¹ While my main course of study (in the late 1970s) was painting and printmaking, I wrote poetry and stories and played music on the side. My entire education (as perfectly described by Sir Herbert Read² in his book *Education Through Art*) helped segregate my various activities into neatly defined compartments.

One day, during my junior year of college, I decided to show one of my painting teachers a stack of my secret, obsessively dense word-pictures. The drawings combined handwritten words and onomatopoetic letterform clusters, with abstract, doodle-like markings. I'd never shown these drawings to anyone before. My teacher studied the pile, shook his head disapprovingly, wagged his finger in my face, and said, "You're a good student, Warren, but you're barking up the wrong tree here. Never combine words and images. They are two different languages. They are not meant to work together." I left his office feeling like I had been given a mission in life. (Education works in all kinds of ways.)

Years later I came to realize there was truth in my teacher's admonition. Picture making and the written word began splitting apart when the Phoenicians and other civilizations throughout the world shifted from iconic to phonetic writing systems. The invention of moveable type, though a great democratizing force, helped mechanize the reproduction of stories further and further away from storytelling's pictorial (and oral) roots. While literature and visual art grew to become distinct fields, most graphic designers, as well as practitioners of visual literature, seek that (perhaps primordial) place where word and image still come together.

In today's globalized, digitalized, new-millennial, post-postmodern, information age, the primacy of the icon is back with a vengeance, poetry is oral again, music is bound to images, people are *watching* more than reading, and everything from politics to personal identity is branded. For better and for worse, graphic designers, via bits and atoms, deliver much of this cultural landscape. Hopefully we are informed, conscious mediators. Very often, we are more than just mediators. We are collaborators, sometimes even producers and authors of the things we design. Many design educators have come to realize that this awesome responsibility—gift, power, voice—requires an education that goes beyond a strictly visual training.

It's hard to seriously consider "authorship" as a component within a graphic design program that doesn't offer at least one writing class. In addition to any creative writing or journalism classes design students might take, I recommend offering at least one writing class tailored specifically for design students, taught by a practicing writer/graphic designer. Still a bit of an oddity, there are more and more author/designers around who can teach writing through design—as an integrated expression.

We bring lot of baggage to writing, much of which works against developing an authentic voice as a writer. Many visual art and design students are especially nervous about writing. Too many are not readers. Some have managed to avoid writing. Others define themselves as exclusively "visual people." More and more students are foreign-born and are petrified about writing in a language that is not their native tongue. Most beginning writers approach language in pedestrian ways and assume rote structural formats. For these and several other reasons, I begin my writing for designers' classes like I begin most classes—from zero.

Here is a synopsis of a graduate course I teach in the SVA Designer as Author graduate program. My class is called "Writing and Designing the Visual Book." I begin with two alchemy projects exploding/transforming pre-existing works:

- 1. "Make a Dada Poem" as instructed by Tristan Tzara³: Essentially cutting up a found text and putting it back together, new. As soon as the student is confronted with the freedom of undoing, they are faced with choices. First, what text to use? Then how should I put the words back together? In lines? In phrases? In fields? In columns? In the round? What kind of paper should I use? Students read/perform the poems in class. We study their visual/literary syntax. Surprising word combinations and unexpected metaphors ooze from the seeming randomness. As Tzara predicts, "And here you are—a writer! Infinitely original and endowed with a sensibility that is charming." Dada poems help break through generic uses of language and the normal stiffness/fears of the new writer.
- 2. "Change a Book" project (inspired by an assignment given by Jan Baker): Each student finds a preexisting book and transforms it into a more visual object. A book on nutrition becomes a container for junk food. Someone's favorite book is carefully unbound and folded down into daily dosages and put into a pillbox, to be read as good medicine. A book about Joseph Cornell

is encased in a Cornell-like box replete with metaphysical, biographical references. Both the Dada poem and the alchemized book, done in the initial week of class, suggest that language, both in form and content is ready to be remade.

Having shaken things up, we begin at a place where there are no rules, no conventions, as of yet. Theater exercises are used to get students out of their heads. Playing an exercise known as prop rounds, students pantomime ways of seeing an object as something else. A blue towel becomes a swimming pool or a magic carpet. An orange traffic cone is a huge toothpick, then an exclamation mark. This leads to a "Word/Image Equation" or titling project. Each student makes or finds five images or objects. Then they write three very different titles for each object—each title transforming how we perceive the image/object. An egg (photographed with strong shadows and mid-tones) is titled: Bastard. Bed & Breakfast. Fragile Geometry. Students also title the entire set five times. Then they design all this into a book.⁴ In the end, students have confronted some basic issues of pairing images with words having words and images work together synergistically instead of redundantly. Using just a few words at a time, they are writing! They also have to discover a book structure and design that best suits this odd repetition of images paired with changing titles. Each student titles his or her book, binds it, designs a cover—the works. This is a two- or three-week project.

Time for students to really start writing. In class, they begin with large sheets of newsprint paper, brushes and ink. I suggest a topic, they write, but with no words. We do this several times. Students think I'm crazy as they discover their own preliterate writing systems, handwriting, and visual syntax. They're writing wordless angry pieces and lyrical pieces, perhaps discovering that place where writing and drawing come together. Having loosened up, they are asked to continuous-write (no scratching out, no edits, no worrying about writing masterpieces, no lifting brush or pen off the paper) in twenty minute stretches, using actual words, starting with "This morning" in one stretch, then "I remember," then "Growing up" then "At this moment." Voila! They have the means for keeping a daily writing journal. Even the nervous design students who say, "but I'm a visual person" are writing nonstop.

Next step—rewriting and editing. Additional writing exercises in verb usage, sense writing, writing good sentences, and basic grammar and parts of speech help students become critical wordsmiths. Nonlinear, experimental writing structures are also explored. Each student edits four short pieces based on continuous writing and other exercises. Next they compose five typographic variations for each text. In class, we analyze how the different settings affect the reading. Students prone towards expressive typography, now suddenly writers as well, confront how their designs reinforce or distract from the intent of the words. Design students inclined towards a more neutral typographic approach might feel liberated to try different things, since they wrote the text. In the end, each student confronts the notion of *composing* a text in a given space through typography, not as style, but as an

integral expression/vehicle for meaning, rhythm, voice, structure. Texts with opposing views on the role of typography like *Printing Should Be Invisible (The Crystal Goblet)* by Beatrice Ward and *Words in Freedom* by F. T. Marinetti or *The New Art of Making Books* by Ulises Carrión are discussed and contrasted.

Students continue writing short texts. In another one-week project called "Book as a Space/Time Capsule," students set an original text of no more than fifty words through a sixteen-page book. Instead of setting the text in a block or paragraph, students take full advantage of the book as a time-based medium, considering pacing, silences, turning of the page, surprise, juxtaposition, development, etc. They also learn about page imposition.

Bookbinding workshops include a few simple multipart structures like "dosa-dos" and "French door" bindings (see Keith Smith's Structure of the Visible Book). The class does some writing exercises that require interviewing and nonfiction reporting, and one where students write about an object or image from five different voices or points of view. In the last assigned project, students are asked to write and design a bifurcated or multipart book. Through this three or four week project, students develop their ability to write, compose, and structure a book that portrays multiple perspectives. A book called "A-Part," depicts two sides of a troubled relationship. Perforated down the middle and bound on both the left and right sides, the reader has no choice but to separate the cover at the perforation. On the left you read the woman's perspective; on the right, the man's. As you rip your way through the book, the couple grows further and further apart. In the end, they break up, and you are left with two separate books, his and hers. Another bifurcated book, bound as a French door and annotated Talmud-style, looks at how specific passages from the Bible are used to back up opposing arguments on abortion, guns, gay marriage, etc. Another book takes the reader inside four adjacent apartments on the same floor of one apartment building. With a tip of the hat to Georges Perec's Life: A User's Manual, the reader eavesdrops past four doors into the coexisting and occasionally intertwining lives of the building's inhabitants.

Students learn how to bind a 100-page, multi-signature book. They also look at a wide variety of visual literature (historical and contemporary) and book structures and discuss new technologies and the future of the book. Students have about five or six weeks to write and design (compose) a final book project, subject matter and format of their choosing. Final projects have included: a book documenting urban gardeners and their struggles against the city; a cinematic novella about leaving home and mental illness; an idiosyncratic book diagramming how one person is affected by the lives of six other people who in turn have been affected by many other variables; a Polaroid-sized box of picture/story cards called *Gifts Outside Your Window* with reproductions of Polaroids taken around the city, and on the backs, short fictional stories and vignettes of people seen and imagined; and a video-text animation depicting the experience of Alzheimer's disease projected onto a blank book floating in the middle of a room. Some books are one of a kind, some are made in a small edition, others have been developed further and published.

Even if many design students never actually become writers, authors, or

producers of their own work—there's no doubt that the experience of writing, researching, and designing their own projects from zero on up, helps them become better graphic designers and mediators of language and culture.

NOTES

- 1. Often described as the confusion of the senses, *synesthesia* is the phenomenon of simultaneous perception, as in hearing a color or tasting a word. Sir Herbert Read (see Note 2) and others claim that we are all born with synesthesia, and, through education, this fluid connection between the senses gets systematically beaten out of us.
- English poet, anarchist, critic of art and literature, Sir Herbert Read wrote many books, including his 1943 Education Through Art, which critiqued traditional art education and proposed a more open approach that fosters imagination, greater interaction between the senses, and lifelong creativity.
- 3. One of the founders of dada, Tristan Tzara describes how to make a dada poem: "Find a newspaper. Find a pair of scissors. Find some glue. Find a piece of paper. Choose an article as long as you are planning to make your poem. Cut out the article. Cut out each of the words (and phrases) that make up the article and place them in a bag. Shake gently. Take out and paste (onto the new paper) each of the scraps one after the other in the order in which they left the bag. The poem will be like you. And here you are—a writer! Infinitely original and endowed with a sensibility that is charming."
- 4. To see examples of student books from Lehrer's SVA class, see Ellen Shapiro's article titled "In Good Hands," *Print* (November/December 2000).



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Robert Appleton

A surprising thing happened at my university: In a typography class that I've taught since 1994, which relates abstract sound and design, I suggest that one of my students explore the theme of making a typeface interact with abstract sound files. And although I realize that at this time in the morning—halfway between breakfast and English Composition—my student is half asleep, I explain that this project is a component of my own research and I'm anxious to open it up to students. So I ask him (Joe) if he wants to work with me. He agrees, does very well, earning himself a good grade, and the result proves once again that my premise to integrate type and sound is valuable both as a teaching tool and as a practical working method.

All of this was in the spring of 2003. I told Joe that I'd show his interactive typebook along with other student works at the Alliance Graphique Internationale Congress in Helsinki that September, where I was to make my first presentation as a new AGI member. And I told him that I wanted to include his piece in an article I was preparing for *Graphis* about these ideas of mine, and the artistic and educational successes we have had in class. I mentioned to Joe that he would receive credit for his work as both designer and student and I would be credited as both art director and professor.

At this point Joe decided that he wanted to help me further with my research. I applied for a grant, which would pay for equipment costs and a student research assistant. The grant was delayed, but Joe was still interested enough to sign up for a directed study in spring 2004—with no guarantee of payment (a sure sign of willingness).

Spring came, and the grant was still delayed. I couldn't buy the new software and hardware and I couldn't pay him. So I did the next best thing—I asked him to assist me with current projects for my clients as well as our second student show. The client work meant I could pay him for his efforts on the student show, and although we were not working on my research, he was learning what it takes (a great deal of effort) to do good design for real clients.

What happens next is where this story takes an unexpected turn.

Joe was graduating at Christmas, and by fall he needed a grade for the

directed study he'd done with me the previous spring. He and I had decided at the time that he should take an incomplete and do a second version of his 2003 typebook over the summer—since with our best efforts, we couldn't begin my new research without the equipment, and I couldn't grade him on work he'd done for clients of mine. By fall, Joe and I had reached a disagreement over his grade for the directed study: His second version of the interactive typebook—created on his own over the summer—was not very interesting and I believed it was worth a lower grade; he disagreed. He wanted to negotiate the grade, and when I declined to do this, he became upset. Students are under incredible pressure at graduation—when all expectations come rushing in from parents, faculty, university administrators and most of all from themselves. Joe was probably feeling all this very intensely. My concern was that my research had not been advanced by his directed study. So I came up with a solution: I asked Joe to make one small correction in the drawing of a letterform that had been bothering me since the 2003 interactive typebook and then give me the source files. I could then take these where I felt they needed to go as a teaching tool—with new students. I could give him a better grade for directed study because he would now have helped my research. And he would still have both the first and the second books to use in his portfolio.

I made this suggestion in an e-mail in which I also mentioned the *Graphis* article again, and he responded with "I see [the typebook] as something that was not done collaboratively or as something that I am willing to hand off. I don't feel that giving you the source files are worth a better grade. Although it ties into your research it was my design and my concept . . . I don't think it's fair to use my work as a starting point." I e-mailed him back, pointing out that he was guided through the process stage by stage in class and that he could therefore not claim the entire project as his own original work. I suggested that until he finds his own authentic voice, he should willingly acknowledge influence and help wherever he receives it. And I copied this correspondence to my department chair and other parties.

The department chair asked me for a written explanation of the situation with the student. And he responded with a letter: "In the absence of any articulated agreement, work produced by a student in a class remains under the ownership of that student. . . . Concept is a characteristic of a student's response to the challenge. . . . Critical review and suggested courses of action to develop and improve a student's work . . . are . . . not requiring compensation beyond that of a paycheck . . . and . . . it is also not advised to continue this project with another student, as that would further exacerbate the initial complaint."

This letter sounded like a variation on an idea I've heard before—the "work for hire" clause, which some companies still try to enforce—but written from another point of view and giving all rights to a different client, the student.

This response was very disappointing, and I expressed that to my chair and the associate dean. It seemed that in the interest of expediency and the hope that this would all go away, my department was quoting university regulations that didn't apply. The idea here seems to be this: While I'm teaching others what I know and they don't, if any students choose to claim my knowledge as their own, then my

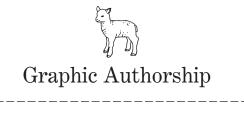
employer will support them against me and I will be asked to give up ownership of my work. Now, that is completely unacceptable to me—as I believe it would be for any designer with any artistic integrity or personal voice and a contribution to make to a student's future.

If this decision were correct, it seemed to me, no students could expect a better education than the one they'd receive from a second-rate textbook—because no designer or professor with any original contribution to make would be willing to teach under these circumstances.

Eventually, I was able to reach an intellectual property attorney who is also a former designer. His comment, though not conclusive, helped me resolve the situation temporarily at least. He pointed me to <code>www.copyright.gov</code> (the U.S. Copyright Office's Web site), where, in the FAQ, it states: "Copyright does not protect ideas, concepts, systems, or methods of doing something. You may express your ideas in writing or drawings and claim copyright in your description, but be aware that copyright will not protect the idea itself as revealed in your written or artistic work."

What this has meant, for me at least, is that I could respond to my chair that the university could not prevent me from developing my ideas, and their admonition that I am "not advised to continue this project with another student" is outside the laws of the United States.

Copyright and ownership are complex issues—and it is necessary to interpret them wisely, particularly in education, where the stakes involve the future of our students and the professionals who educate and inspire them.



Michael Rock

What does it mean to call for graphic designers to be authors? "Authorship," in one form or another, has been a popular term in graphic design circles, especially those circles that revolve around the edge of the profession, the design academies, and the murky territory that exists between design and art. The word has an important ring to it, and it connotes seductive ideas of origination and agency. But the question of how designers become authors is a difficult one, and exactly who are the designer/authors and what authored design looks like depends entirely on how you end up defining the term and the criterion you chose to determine entrance into the pantheon.

In order to subject the problem of design authorship to close examination, it is first necessary to dispense with some definitions before moving on to more specific design examples and suggestions for possible theories of graphic authorship. It may also be useful to reexamine the preconceived qualities we attribute to this powerful figure, the author, and wonder how those attributes apply to a profession traditionally associated more with the communication than with the origination of messages. Finally, it is interesting to speculate about how theories of authorship can serve to legitimize marginalized activities like design and how authorial aspirations may actually end up reinforcing certain conservative notions of design production—notions that might contradict the stated goals of the budding designer/author.

WHAT IS AN AUTHOR?

The issue of the author has been an area of intense scrutiny over the last forty years. The meaning of the word itself has shifted significantly over history. The earliest definitions are not associated with writing per se, in fact, the most inclusive is, "the person who originates or gives existence to anything." But other usages clearly index the authoritarian—even patriarchal—connotations: the "father of all life," "any inventor, constructor, or founder," "one who begets," and "a director, commander, or ruler."

Basically, all literary theory, from Aristotle on, has in some form or another been theory of authorship. This paper, however, is not a history of the author, but a discussion of author as metaphor, so I start with recent history. Wimsatt and Beardsley's seminal text, *The Intentional Fallacy* (1946), drove one of the first wedges between the author and the text, dispelling the notion a reader could ever really "know" an author through his or her writing. The so-called death of the author, proposed most succinctly by Roland Barthes in 1968, 1 is closely linked to the birth of critical theory, especially theory based in reader response and interpretation rather than intentionality. Michel Foucault used the rhetorical question, "What Is an Author?" as the title of his influential essay of 1969, which, in response to Barthes, outlines the basic taxonomy and functions of the author and the problems associated with conventional ideas of authorship and origination.²

Foucaultian theory holds that the connection between the author and the text has transformed and that there exists a number of author-functions that shape the way readers approach a text. These stubbornly persistent functions are historically determined and culturally specific categories.

The earliest sacred texts were authorless, their origins lost in ancient history (e.g., the Vedas and the Gospels). In fact, the ancient, anonymous origin of the text served as a certain kind of authentication. The author's name was symbolic, never attributable to an individual. (The Gospel of Luke, for instance, could be a diversity of texts gathered under the rubric of Luke.)

On the other hand, scientific texts, at least through the Renaissance, demanded an author's name as validation. Far from objective truth, science was based in personal invention and the authority of the scientist. By the eighteenth century, Foucault asserts, the situation had reversed; literature was authored and science became the product of anonymous objectivity. When authors came to be punished for their writing—i.e., when a text could be transgressive—the link between author and text was firmly established. Text came to be seen as a kind of private property, owned by the author, and a romantic criticism rose up that reinforced that relationship, searching for critical keys in the life and intention of the writer. With the rise of scientific method, on the other hand, scientific texts and mathematical proofs were no longer authored texts, but were seen as discovered truths. The scientist revealed an extant phenomena, a fact that anyone faced with the same conditions would discover. Therefore, the scientist and the mathematician could claim to have been first to discover a paradigm, and lend their name to the phenomenon, but never claim authorship over it. (For instance, the astronomer who discovers a new star may name it, but does not conjure it.)

Ownership of the text, and the authority granted to authors at the expense of the creative reader, has fueled much of twentieth-century obsession. Poststructuralist reading of authorship tends to critique the prestige attributed to the figure of the author and suggest or speculate about a time after his fall from grace. The focus shifts from the author's intention to the internal workings of the writing itself; not *what* it means but *how* it means. Barthes ends his essay supposing "the birth of the reader comes at the cost of the death of the author." Foucault imagines a time when we might question, "What difference does it make who is speaking?" All attempt to overthrow the notion that a text is a line of words that releases a single, theological

meaning—the central message of an author/god—and refocus critical attention on the activity of reading and readers.

Postmodernity began to turn on a "fragmented and schizophrenic decentering and dispersion"⁵ of the subject, noted Fredric Jameson. That sense of a decentered text—i.e., a text that is skewed from the direct line of communication from sender to receiver, severed from the authority of its origin, and existing as a free-floating element in a field of possible significations—figured heavily in recent constructions of a design based in reading and readers. But Katherine McCoy's prescient image of designers moving beyond problem solving and by "authoring additional content and a self-conscious critique of the message . . . adopting roles associated with art and literature" was, as often as not, misconstrued. Rather than working to incorporate theory into their methods of production, many self-proclaimed deconstructivist designers literally illustrated Barthes's image of a reader-based text—"a tissue of quotations drawn from innumerable centers of culture"7—by scattering fragments of quotations across the surface of their "authored" posters and book covers. (The technique was something like, theory is complicated, so my design is complicated.) The rather dark implications of Barthes's theory, note Ellen Lupton and J. Abbott Miller, were fashioned into "a romantic theory of self-expression."8

Perhaps, after years in the somewhat thankless position of the faceless facilitator, many designers were ready to start speaking out. Some designers may be eager to discard the internal affairs of formalism—to borrow Paul de Man's metaphor—and branch out to the foreign affairs of external politics and content.⁹ In that way, by the 1970s, design began to discard the kind of scientistic approach that held sway for several decades. (Even as early as the 1920s, Trotsky was labeling formalist artists the "chemists of art.")¹⁰ That approach is evident in the rationalist design ideology that preached strict adherence to an eternal grid and a kind of rational approach to design. (Keep in mind that although this example is a staple of critiques of modernism, in actuality, the objectivists represented a small fragment of the design population at the time.)

Müller-Brockmann's evocation of the "aesthetic quality of mathematical thinking" is certainly the clearest and most frequently cited example of this approach. Müller-Brockmann and a slew of fellow researchers like Kepes, Dondis, and Arnheim worked to uncover preexisting order and form in the manner a scientist works to reveal a natural "truth." But what is most interesting in Müller-Brockmann's writing is his reliance on tropes of submission; the designer "submits" to the will of the system, "forgoes" personality, and "withholds" interpretation.

In his introduction to *Compendium for Literates*, which attempts a highly rational dissection of writing, Karl Gerstner describes the organization of his book, claiming "all the components are atomic, i.e., in principle they are irreducible. In other words, they establish a principle."

The reaction to that drive for an irreducible theory of design is well documented. On the surface, at least, it would seem that contemporary designers were moving from authorless, scientific text—in which inviolable visual principles were carefully revealed through extensive visual research—toward a more textual

position in which the designer could claim some level of ownership over the message. (This at the time that literary theory was trying to move away from that very position.) But some of the basic, institutional features of design practice have a way of getting tangled up in zealous attempts at self-expression. The idea of a decentered message does not necessarily sit well in a professional relationship in which the client is paying a designer to convey specific information or emotions. In addition, most design is done in some kind of collaborative setting, either within a client relationship or in the context of a design studio that utilizes the talents of numerous creative people, thus the origin of any particular idea is increasingly clouded. And the ever-present pressure of technology and electronic communication only further muddies the water.

IS THERE AN AUTEUR IN THE HOUSE?

It is not surprising to find that Barthes's *Death of the Author* was written in Paris in 1968, the year students joined workers on the barricades in the general strikes and the year the Western world flirted with real social revolution. To call for the overthrow of authority in the form of the author in favor of the reader—read that "masses"—had real resonance in 1968. But to lose power, you must have already worn the mantle. Thus, designers had a bit of a dilemma overthrowing a power they may have never possessed.

The figure of the author implied a total control over creative activity and seemed an essential ingredient of high art. If the relative level of genius was the ultimate measure of artistic achievement, activities that lacked a clear central authority figure were necessarily devalued.

Almost ten years earlier, film critic and budding director François Truffaut had proposed *la politique des auteurs*, a polemical strategy developed to reconfigure a critical theory of the cinema. The problem facing the auteur critics was how to create a theory that imagined the film, necessarily the work of broad collaboration, as a work of a single artist and thus a work of art.

The solution was to develop a set of criteria that allowed a critic to decree certain directors as "auteurs." In order to establish the film as a work of art, auteur theory held that the director—heretofore merely a third of the creative troika of director, writer, and cinematographer—had ultimate control of the entire project.

Auteur theory—especially as espoused by American critic Andrew Sarris¹2—speculated that directors must meet three essential criteria in order to pass into the sacred hall of the auteur. Sarris proposed that the director must demonstrate technical expertise, have a stylistic signature that is demonstrated over the course of several films, and, most importantly, through choice of projects and cinematic treatment, demonstrate a consistency of vision and evoke a palpable interior meaning through his work. Since the film director often had little control of the material—especially in the Hollywood studio system that assigned directors to projects—the signature way he treated a varying range of scripts and subjects was especially important in establishing auteur credentials.

The interesting thing about auteur theory was that, unlike literature, film theorists, like designers, had to construct the notion of the author as a legitimizing strategy, as a method of raising what was considered low entertainment to the plateau of fine art. By coronating the director as the author of the film, the *critics* could elevate certain subjects to the status of high art. That elevation, in turn, would facilitate new freedoms granted to the director in future projects. (Tantrums could be thrown in the name of artistic vision. "I'm an artist, dammit, not a butcher!" Expensive wines could be figured into overhead to satisfy rarefied palates.)

The parallel to design practice is quite striking. Like the film director, the art director or designer is often distanced from his or her material and often works collaboratively, directing the activity of a number of other creative people. In addition, over the course of a career, the designer works on a number of diverse projects that have widely varying levels of creative potential, so any inner meaning must come through the aesthetic treatment as much as it does from the content.

If we apply auteur criteria to graphic designers, we yield a body of work that may be elevated to auteur status. For instance, technical proficiency could be fulfilled by any number of practitioners, but couple technical proficiency with a signature style and the field narrows. The list of names that could fill those two criteria would be familiar, as their work is often published, awarded, and praised. (And, of course, the selective republishing of certain work, and exclusion of other, constructs a unified and stylistically consistent oeuvre.)

But, great technique and style alone do not an auteur make. If we add the third requirement of interior meaning, how does the list fare? Are there graphic designers who, by special treatment and choice of projects, approach the issue of deeper meaning the way a Bergman, Hitchcock, or Welles does?

Of course, how do you compare a film poster with the film itself? The very scale of a cinematic project allows for a sweep of vision not possible in graphic design. Therefore, as the single design project lacks weight, graphic auteurs, almost by definition, have long-established bodies of work in which discernible patterns emerge. The auteur uses very specific client vehicles to attain a consistency of meaning. (Renoir observed that an artistic director spends his whole career remaking variations on the same film.) Think of the almost fetishistic way that a photographer like Helmut Newton returns to a particular vision of class and sexuality no matter what he is assigned to shoot.

However, many great stylists don't seem to make the cut, as it is difficult to discern a larger message in their work, i.e., a message that transcends the stylistic elegance. (You have to ask yourself, What's the work about?) Perhaps it's the absence or presence of an overriding philosophy or individual spirit that diminishes some designed work and elevates others.

We may have been applying a modified graphic auteur theory for many years without really paying attention. What has design history been if not a series of critical elevations and demotions as our attitudes about style and inner meaning evolve? In trying to describe interior meaning, Sarris finally resorts to "the intangible difference between one personality and another." ¹³ That retreat to intangibility—the "I can't say

what it is, but I know it when I see it" aspect—is the Achilles' heel of the auteur theory, which has long since fallen into disfavor in film criticism circles. It never dealt adequately with the collaborative nature of the cinema and the messy problems of moviemaking. But, while the theory is passé, its effect is still with us; the director is, to this day, squarely in the middle of our perception of film structure.

The application of auteur theory may be too limited an engine for our current image of design authorship, but there are a variety of other ways to frame the issue. There exist a number of paradigms on which we could base our practice: the artist book, concrete poetry, political activism, publishing, illustration, and others.

The general authorship rhetoric seems to include any work by a designer that is self-motivated, from artist books to political activism. But artist books easily fall within the realm and descriptive power of art criticism. Activist work may be neatly explicated using allusions to propaganda, graphic design, public relations, and advertising.

Perhaps the graphic author is actually one who writes and publishes material about design. This category would include Josef Müller-Brockmann and Rudy VanderLans, Paul Rand and Erik Spiekermann, William Morris and Neville Brody, Robin Kinross and Ellen Lupton—rather strange bedfellows. The entrepreneurial arm of authorship affords the possibility of personal voice and wide distribution. The challenge is that most split the activities into three recognizable and discrete actions: editing, writing, and designing. Even as their own clients, design remains the vehicle for the written thought. (Kinross, for example, works as a historian, then changes hats and becomes a typographer.) Rudy VanderLans is perhaps the purest of the entrepreneurial authors. *Emigre* is a project in which the content is the form—i.e., the formal exploration is as much the content of the magazine as the articles—the three actions blur into one contiguous whole. VanderLans expresses his message through the selection of material (as an editor), the content of the writing (as a writer), and the form of the pages and typography (as form giver).

Ellen Lupton and partner J. Abbott Miller are an interesting variation on this model. A project like *The Bathroom, the Kitchen, and the Aesthetics of Waste*, an exhibition at the MIT List Gallery, seems to approach a kind of graphic authorship. The message of the exhibit is explicated equally through graphic/visual devices as well as text panels and descriptions. The design of the show evokes the design issues that are the content; it is clearly self-reflexive.

Lupton and Miller's work is primarily critical; it forms and represents a reading of exterior social or historical phenomena and explicates that message for a specific audience. But, there is a subset of work that is often overlooked by the design community, the illustrated book, which is almost entirely concerned with the generation of creative narrative. Books for children have been one of the most successful venues for the author/artist, and bookshops are packed with the fruits of their labors. But many illustrators have used the book in wholly inventive ways and produced serious work. Illustrator/authors include Sue Coe, Art Spiegelman, Charles Burns, David MacAulay, Chris Van Allsburg, Edward Gorey, and Maurice Sendak. In addition, the comic book and the graphic novel have generated a renewed interest

both in artistic and critical circles. Works like Spiegelman's *Maus* and Coe's *X* and *Porkopolis* extend the form into new areas and suggest expanded possibilities.

POWER PLOYS

If the ways a designer could be an author are complex and confused, the way designers have used the term and the value attributed to it are equally so. Any number of recent statements claim authorship as the panacea to the woes of the browbeaten designer. In an article in *Emigre*, author Anne Burdick proposed that "designers must consider themselves authors, not facilitators. This shift in perspective implies responsibility, voice, action. . . . With voice comes a more personal connection and opportunity to explore individual options." A recent call for entries for a design exhibition entitled designer as author: voices and visions sought to identify "graphic designers who are engaged in work that transcends the traditional service-oriented commercial production, and who pursue projects that are personal, social or investigative in nature" (italics mine). In the rejection of the role of the facilitator and in the call for transcendence, there is the implication that authored design holds some higher, purer purpose. The amplification of the personal voice compels designers to take possession of their texts and legitimizes design as an equal of the more traditionally privileged forms of authorship.

But if the proclivity of the contemporary designer is toward open reading and free textual interpretation—as a litany of contemporary theorists have convinced us—that desire is thwarted by oppositional theories of authorship. The cult of the author narrows interpretation and places the author at the center of the work. Foucault noted that the figure of the author is not a particularly liberating one. By transferring the authority of the text back to the author, by focusing on voice, presence becomes a limiting factor, containing and categorizing the work. The author as origin, authority, and ultimate owner of the text guards against the free will of the reader. The figure of the author reconfirms the traditional idea of the genius/creator, and the esteem or status conferred on the man or woman always frames the work and imbues it with some mythical value.

While some claims for the value of authorship may simply call for a renewed sense of responsibility, at times they seem to be ploys for property rights, attempts to finally exercise some kind of agency where traditionally there has been none. Ultimately, author equals authority. The longing for graphic authorship may be the longing for a kind of legitimacy, or a kind of power, that has so long eluded the obedient designer. But do we get anywhere by celebrating the designer as the central character? Isn't that what fueled the *last* fifty years of design history? If we really want to move beyond the designer-as-hero model, we may have to imagine a time when we can ask, What difference does it make who designed it?

Perhaps, in the end, authorship is just not a very convincing metaphor with which to describe the activity we understand as design. There are few examples of work that is clearly the product of design authors and not designer/authors, and the few clear examples tend to be the exceptions to the rule.

I propose three alternative models for design that, rather than glorify the act and sanctify the practice, attempt to describe the activity as it exists and as it could evolve: designer as translator, designer as performer, and designer as director.

The first model, designer as translator, is based on the assumption that the act of design is essentially the clarification of material or the remodeling of content from one form to another. The ultimate goal is the expression of the content rendered in a form that reaches a new audience. (I am drawn to this metaphor by Ezra Pound's translations of poetry composed in Asian characters. Pound translated not only the literality of the character, but the visual component of the poem as well. Thus, the original is rendered as raw material reshaped into the conventions of Western poetry. The translation becomes a second art.)

Translation is neither scientific nor ahistorical. Every translation reflects both the character of the original and the spirit of the contemporary as well as the individuality of the translator. (An 1850 translation of *The Odyssey* will be radically different from a 1950 one.)

In certain works, the designer remolds the raw material of given content, rendering it legible to a new audience. Like the translator of poetry, the designer not only transforms the literal meaning of the elements, but must translate the spirit as well. For example, Bruce Mau's design of a book version of Chris Marker's film *La Jetée* attempts to translate the original material from one form to another. Mau is certainly not the author of the work, but the translator of form and spirit. The designer is the intermediary.

The performer metaphor is based on the traditional performing arts of theater and music. The actor is not the author of the script, the musician not the composer of the score, but without actor or musician, the art cannot be realized. The actor provides the physical expression of the work. Every work could have an infinite number of physical expressions. Every performance recontextualizes the original work. (Here, imagine the range of interpretations of the plays of Shakespeare.) Each performer brings a certain reading to the work. (No two actors play the same role the same way.)

In this model, the designer transforms and expresses content through graphic devices. The score or script is enhanced and made whole by the performance. And so, the designer becomes the physical manifestation of the content—not author, but performer: the one who gives life to (who speaks) the content, who contextualizes the content and brings it into the frame of the present.

Examples abound, from early dada, situationist, and fluxus experiments to more recent typographic scores like Warren Lehrer's performance typography or experimental typography from Edward Fella or David Carson. The most notable example is perhaps Quentin Fiore's performance of McLuhan. It was Fiore's graphic treatment as much as McLuhan's words that made *The Medium Is the Massage* a worldwide phenomenon. (Other examples include any number of "graphic interpretations," such as Alan Hori's reinvention of Beatrice Warde's "Crystal Goblet" essay or Scott Makela's improvisation on a Tucker Viemiseters' lecture, both originally printed in Michael Bierut's publication *ReThinking Design*.)

The third model is the designer as director and is a direct function of bigness. This model is possible only in projects of a large-enough scale that the meaning can be manufactured by the arrangement of the project's elements. It is only in large-scale installations, advertising campaigns, mass-distribution magazines, and very large books that we see evidence of such a paradigm.

In such large projects, the designer orchestrates masses of materials to shape meaning from given content. Working like a film director who oversees a script, a series of performances, photographers, artists, and production crews, the meaning of the work is a product of the entire production. Large-scale, mass-distribution campaigns, like those for Nike or Coca-Cola, are examples of this approach. Curatorial projects such as Sean Perkins' catalog *Experience*, which creates an exhibition of other design projects, is another example of this model.

But perhaps the clearest paradigm is Irma Boom's project for SHV Corporation. Working in conjunction with an archivist for over five years, Boom shaped a narrative out of an undifferentiated lump of raw data. The meaning and narrative of the book is not a product of the words, but almost exclusively the function of the sequence of the pages and the cropping of the images. It is a case of the designer creating meaning almost exclusively through the devices of design. The scale of the book allows for thematic development, contradiction, and coincidence.

The value of these models is that they accept the multivalent activity of design without resorting to totalizing description. The problem with authorship is that it encourages both ahistorical and acultural readings of design. It grants too much agency, too much control to the lone artist/genius, and discourages interpretation by validating a "right" reading of a work.

On the other hand, work is made by someone. And the difference between the way different subjects approach situations, the way different writers or designers make sense of their worlds, is at the heart of a certain criticism. The challenge is to accept the multiplicity of methods that comprise design language. In the end, authorship is only a device to compel designers to rethink process and expand their methods.

If we really need to coin a phrase that describes an activity that encompasses imaging, editing, narration, chronicling, performing, translating, organizing, and directing, I'll conclude with a suggestion: designer = designer.

NOTES

- 1. Roland Barthes, "The Death of the Author," in *Image-Music-Text*, trans. Stephen Heath (New York: Hill and Wang, 1977).
- 2. Michel Foucault, "What Is an Author?" in *Textual Strategies*, ed. Josué Harari (Ithaca: Cornell University Press, 1979).
- 3. Barthes, 145.
- 4. Foucault, 160.
- 5. Fredric Jameson quoted in Mark Dery, "The Persistence of Industrial Memory," *ANY*, 10.

- Katherine McCoy, "American Graphic Design Expression," Design Quarterly, no. 148 (1990): 16.
- 7. Barthes, 146.
- 8. Ellen Lupton and J. Abbott Miller, "Deconstruction and Graphic Design: History Meets Theory," *Visible Language* 28.4, ed. Andrew Blauvelt (Fall 1994): 351.
- 9. Paul de Man, "Semiology and Rhetoric," in *Textual Strategies*, ed. Josué Harari (Ithaca: Cornell University Press, 1979), 121.
- Leon Trotsky, "The Formalist School of Poetry and Marxism," in *Literature and Revolution*, trans. Rose Strumsky (Ann Arbor: University of Michigan Press, 1960), 110.
- Josef Müller-Brockmann, Grid Systems in Graphic Design (Stuttgart: Verlag Gerd Hatje, 1981), 10.
- 12. Andrew Sarris, The Primal Screen (New York: Simon and Schuster, 1973).
- 13. Andrew Sarris, "Notes on the Auteur Theory in 1962," in *Film Culture Reader*, ed. P. Adams Sitney (New York: Praeger Publishers, 1970), 133.
- 14. Anne Burdick, "The State of Design History," Emigre 27.
- 15. "Re:Quest for Entries," designer as author: voices and visions exhibition.



The Blogucation of a Graphic Designer

Armin Vit

Once considered self-centered, voyeuristic, and underground, Weblogs are now important media outlets, dependable internal communication systems—informative resources on a bevy of topics—and are even becoming viable educational tools. Slowly.

Graphic design in the last two years—like New York, Hollywood, politics, and the adult industry¹—has been flogged by blogs in an unexpected and positive way. Previously, to engage in conversations about graphic design, one had to attend varied events or lectures or join a support group. To read about graphic design issues, one had to wait for the latest issue of a magazine or the most recent design book. It was a slow and often a nonengaging experience. Now, open-ended and quickly updated blogs like Speak Up, Design Observer, and AIGA's VOICE provide a new dynamic that allows instant exchange of information, ideas, and criticism with designers from across the country and the globe, as well as interaction among students, entry-level designers, seasoned professionals, and everything in between—from the comfort of one's own computer.

For graphic design students who visit blogs, this presents an excellent opportunity to continue their education outside the classroom, to plunder the vast available resources for their studies, and to develop an ability to talk about graphic design. If course syllabi—a good number list blogs as required reading—serve as any indication, educators are quickly realizing their potential as an educational tool. However, the term *blog* carries the connotation of lonesome Web developers, living in their parents' basement and chronicling the developments of their latest Web apps, understandably scaring educators away. Even its election as word of the year² and its accompanying description fail to note blogs' potential as influential elements of culture, politics, business, and education, or to acknowledge that their content is more than an "online personal journal with reflections, comments, and often hyperlinks." Graphic design blogs—mentioned above—go well beyond this premise and it is only the back-end technology³ and front-end format⁴ that define them as blogs, conceivably limiting their acceptance in the academic ranks. Perhaps a new term is required to remove the word's geeky stigma.

Nomenclature notwithstanding, here are three key factors that point to the blog's allure and appeal for educators and students:

- 1. Resource: Information on graphic design is hard to find in libraries and bookstores; it's even more difficult to find anything relevant online. Blogs, however, are quickly filling that void. No matter what subject students look for, there is a good chance Google will return results pointing to any of the above-mentioned Web sites. Speak Up alone has over 900 posts (posts = articles, if you will) covering a wide range of topics from business issues to book reviews to discussions on the why and how of graphic design. Once there, with links and comments from site participants, the resources quickly multiply. A good example are posts covering designers like W. A. Dwiggins, Alvin Lustig, Ladislav Sutnar, and others, about whom information does not abound. On any of these blogs, an initial post will generate anecdotes, links to other Web sites, or book recommendations that add breadth to the original exploration.
- 2. Network: Students are usually limited to classmates, teachers, and visiting designers in their schools; interaction with other students or professionals in other parts of the world is rare. With blogs, these boundaries are nonexistent. Any designer with an Internet connection can participate in discussions, bringing varied points of view and perspectives, regardless of location, background, professional accomplishment, or spelling abilities. Students can also interact with experienced professionals in a very organic manner. For instance, at Speak Up there are many inquiries received from students that are published to provide feedback specifically for their theses, class projects, or just for curiosity's sake. And once school is over, relationships established online can prove fruitful in the long run.
- 3. Dialogue: As with anything in life, it is always better to "talk about it." Blogs provide a forum where students can ask questions and receive feedback; where they can express an idea and have it rebutted or seconded; where they can observe the nuances of talking about graphic design; and, simply, where they can speak with like-minded individuals. By encouraging thoughtful comments, conversations in Speak Up, Design Observer, and VOICE help expand students' ability to speak eloquently about their profession whether they are interacting with a client, a fellow designer, or their neighbors. It would seem simple to talk about graphic design; however, it is at times surprising how many designers do not know how to explain their work or what they do.

However, these favorable elements can easily turn counterproductive. The on-the-fly nature of blogs gives way to incorrect information, poor references, inconsequential rants, airings of personal grudges and biases, absolutely terrible spelling and grammar, as well as confrontations with all kinds of people, from

bullies to overly sensitive and stubborn individuals. Just like real life. Nonetheless, blog participants acknowledge their potential as influential sources of education and do make an effort to create a healthy environment where information can reside and conversation occur.

So far, "independent" blogs are the most successful, attracting many contributors, readers, lurkers, and attention. A handful of design programs like Cranbrook, Yale's 2005 Graphic Design thesis students, and the Rhode Island School of Design's *Design Crit*⁵ have taken a stab at blogs as a way to enhance communication between faculty and students and as a companion to their daily classes and crits. But judging by the low comment counts and lack of outsiders, inschool⁶ blogs fail to excite students, as they once again minimize the scope to the same, everyday people—and as students, the last thing one could want is "hanging out" online with their teachers during off-school hours. This clearly establishes the community aspect of blogs as one of its most valuable features—without a community, conversation dies.

It seems unlikely that in-school blogs will have the same impact as general blogs, where participation comes from each individual's own will and interest and not because it counts for five credits. To become successful and truly effective educational resources, in-school blogs must take advantage of the medium's ability to tap into otherwise unavailable resources: holding online crits with a professional designer in Europe, Asia, or Latin America; brainstorming with students and faculty from different schools working on similar projects; organizing a book club where the authors can contribute in their free time; anything that expands beyond the school's limits. If that can't happen, educators will have to be content with pointing to general blogs. Or wait.

Now that they have become part of the mainstream, blogs are just starting to build up credibility and seem poised for better uses in different realms. In education, the blog format could play a pivotal role in the popular online degree and distance learning programs provided by most universities. For students thousands of miles apart and enrolled in the same online program, a blog could act as the virtual classroom that people have been talking about for decades. As new, Web-savvy (and Web-dependent) students enroll in college, traditional teaching methods won't suffice or won't be as pleasantly accepted as they are today. With continuing technological advancements and greater acceptance of these new technologies, it is not unrealistic to expect that students will download syllabi, class assignments, or teacher feedback to their palm, cell phone, or, who knows, even their iPod. Blogs are just the beginning.

NOTES

- 1. Popular blogs include www.gothamist.com and GawkerMedia's three sites: www .defamer.com, www.wonkette.com, and www.fleshbot.com
- 2. Merriam-Webster selected *blog* as word of the year for 2004 based on the most looked-up terms on its site during the previous twelve months. *Blog* n. [short for

- Weblog] (1999): a Web site that contains an online personal journal with reflections, comments, and often hyperlinks provided by the writer
- 3. Most blogs are operated through content-management systems like MovableType or Blogger, which allow instant and easy publishing and provide features like commenting, archiving, and searching.
- 4. They are usually in a two-column layout with the main entries in the big column and varied information in the smaller column (usually with a *blogroll*, an endless list of links to other blogs); blogs are presented in a chronological manner (newest post at the top).
- 5. Design program blogs include www.cranbrookdesign.com, http://graphicdesignthesis05 .blogspot.com, and www.designcrit.com
- 6. In-school is analogous to in-house.



The Designer as Producer

Ellen Lupton

The slogan "designer as author" has enlivened debates about the future of graphic design since the early 1990s. The word "author" suggests agency, intention, and creation, as opposed to the more passive functions of consulting, styling, and formatting. Authorship is a provocative model for rethinking the role of the graphic designer at the start of the millennium; it hinges, however, on a nostalgic ideal of the writer or artist as a singular point of origin. The avant-garde movements of the 1910s and 1920s critiqued the ideal of authorship as a process of dredging unique forms from the depths of the interior self. Artists and intellectuals challenged romantic definitions of art by plunging into the worlds of mass media and mass production. As an alternative to designer as "author," I propose designer as "producer." Production is a concept embedded in the history of modernism. Avant-garde artists and designers treated the techniques of manufacture not as neutral, transparent means to an end, but as devices equipped with cultural meaning and aesthetic character. In 1934, the German critic Walter Benjamin wrote "The Author as Producer," a text that attacked the conventional view of authorship as a purely literary enterprise.² He exclaimed that new forms of communication film, radio, advertising, newspapers, the illustrated press-were melting down traditional artistic genres and corroding the borders between writing and reading, authoring and editing.

Benjamin was a Marxist, committed to the notion that the technologies of manufacture should be owned by the workers who operate them. In Marxist terminology, the "means of production" are the heart of human culture and should be collectively owned. Benjamin claimed that writing (and other arts) is grounded in the material structures of society, from the educational institutions that foster literacy to the publishing networks that manufacture and distribute texts. In detailing an agenda for a politically engaged literary practice, Benjamin demanded that artists must not merely adopt political "content," but must revolutionize the means through which their work is produced and distributed.

Benjamin attacked the model of the writer as an "expert" in the field of literary form, equipped only to craft words into texts and not to question the physical life of the work. The producer must ask, Where will the work be read? Who will read it? How will it be manufactured? What other texts and pictures will surround it? Benjamin argued that artists and photographers must not view their task as solely visual, lest they become mere suppliers of form to the existing apparatus of bourgeois publishing:

What we require of the photographer is the ability to give his picture the caption that wrenches it from modish commerce and gives it a revolutionary useful value. But we shall make this demand most emphatically when we—the writers—take up photography. Here, too, therefore, technical progress is for the author as producer the foundation of political progress.³

Benjamin claimed that to bridge the divide between author and publisher, author and reader, poet and popularizer is a revolutionary act because it challenges the professional and economic categories upon which the institutions of "literature" and "art" are erected. To enact this revolutionary shift, the author must embrace the new technologies of communication.

Benjamin's Marxist emphasis has a tragic edge when viewed from the vantage point of today. By the time he wrote "The Author as Producer," abstract art was already at variance with Stalin's state-enforced endorsement of social realism. Benjamin applauded dada and surrealism for challenging the institutions of art, and yet, such experimental forms were forbidden in the Soviet state he so admired. Benjamin's theory of the author as producer remains relevant today, however, as writers, artists, designers, and editors challenge the existing structures of media and publishing, opening new paths of access to the means of manufacture and dissemination.

In the 1920s, Benjamin met László Moholy-Nagy, the Hungarian constructivist who had become a prominent figure at the Bauhaus. Benjamin's 1928 collection of essays *One-Way Street* reflects on experimental typography and the proliferation of such commercial forms as the pamphlet, poster, and advertisement, which were upending the classical book as literature's sacred vessel. Benjamin wrote, "Printing, having found in the book a refuge in which to lead an autonomous existence, is pitilessly dragged out onto the street by advertisements and subjected to the brutal heteronomies of economic chaos. This is the hard schooling of its new form." Describing the relation of authorship to technology, Benjamin predicted that the writer will begin to compose his work with a typewriter instead of a pen when "the precision of typographic forms has entered directly into the conception of his books. One might suppose that new systems with more variable typefaces might then be needed." 5

Such "new systems" are, of course, ubiquitous today in the form of software for word processing and desktop publishing. These tools have altered the tasks of graphic designers, enlarging their powers as well as burdening them with more kinds of work to do. Such is the rub of despecialization. Benjamin celebrated the proletarian ring of the word "production," and the word carries those connotations

forward into the current period. Within the professional context of graphic design, "production" is linked to the preparation of "artwork" for mechanical reproduction, rather than to the intellectual realm of "design." Production belongs to the physical activity of the base, the factory floor: it is the traditional domain of the pasteup artist, the stripper, the letterer, the typesetter. The "desktop revolution" that began in the mid-1980s brought these roles back into the process of design. The proletarianization of the editorial process offers designers a new crack at materialism, a chance to reengage the physical aspects of our work. Whereas the term "author," like "designer," suggests the cerebral workings of the mind, "production" privileges the activity of the body. Production is rooted in the material world. It values things over ideas, making over imagining, practice over theory.

When Benjamin called for authors to become producers, he did not mean for them to become factory workers alienated from the form and purpose of the manufactured thing. Likewise, the challenge for educators today is to help designers become the masters, not the slaves, of technology. There exist opportunities to seize control—intellectually and economically—of the means of production and to share that control with the reading public, empowering them to become producers as well as consumers of meaning. As Benjamin phrased it in 1934, the goal is to turn "readers or spectators into collaborators." His words resonate in current educational models, which encourage students to view the reader as a participant in the construction of meaning.

How can schools help students along such a path at this critical juncture in our history?

- Language is a raw material. Enhance students' verbal literacy, to give them the confidence to work with and as editors without forcing them to become writers.
- Theory is a practice. Foster literacy by integrating the humanities into the studio. Infuse the act of making with the act of thinking.
- Writing is a tool. Casual writing experiences encourage students to use writing as a device for "prototyping," to be employed alongside sketching, diagramming, and other forms of conceptualization.
- Technology is physical. Whether the product of our work is printed on paper or emitted from a screen, designers deal with the human, material response to information.
- The medium is on the menu. Familiarize students with the many ways that information and ideas are disseminated in contemporary life. Give them the tools to find their rightful place in the food chain.

The power of the term "author"—its cultural authority—lies in its connection to the written text. In order for designers to take charge of the content and social function of their work, they need not become fluent writers, no more than an art director must become a professional photographer or illustrator in order to use these media effectively. In the business of film, a producer brings together individuals with

a broad range of skills—writing, directing, acting, cinematography, editing, and so on—in a work whose authorship is shared. For the designer to become a producer, he or she must have the skills to begin directing content, by critically navigating the social, aesthetic, and technological systems across which communications flow.

POSTSCRIPT, FEBRUARY 2005

I wrote this essay in the summer of 1997, just before embarking on a major shift in my career: the decision to become chair of the design program at Maryland Institute College of Art (in addition to serving as curator of contemporary design at Cooper-Hewitt, National Design Museum, a post I have held since 1992). I wrote the essay before ever having taught a studio design class. Although I had taught many courses in design history and theory at the undergraduate, graduate, postgraduate levels, I had never taught design students about how to design.

It is interesting, thus, to look back eight years later at an essay conceived as my own personal manifesto for graphic design education. The idea of production as a mode of authorship has, indeed, proven hugely important to my work as an educator. But in light of my own involvement with authorship in the conventional sense, I have engaged my students much less with *writing* than I would have expected. I have focused, instead, on making things.

In Maryland Institute College of Art's recently launched graduate program, we are experimenting with what I call underground capitalism. An ongoing project of our graduate studio is BUY*PRODUCT, where students conceive and produce original products and offer them for sale at various venues, from local shops and the Internet to tables set up in the campus café. The products range from T-shirts and bound books to home furnishings and housewares, all conceived from a graphical point of view (image + message + material). For their thesis work, some students are developing products that they first "tested" in the arena of BUY*PRODUCT into goods to be manufactured and marketed commercially. The students have become producers in much the sense described at the end of my essay, with an emphasis on the materiality of the end result. Our studio is equipped not just with the expected computers, but with a silkscreen setup, a sewing machine, a spiral-binder, and a Xyron 900 sticker-maker.

BUY*PRODUCT inspires students in ways that traditional assignments involving hypothetical clients simply don't. It is an idea that could be easily implemented at any design program. The BUY*PRODUCT experience has given me a new list of bullet points to include in my productivist manifesto. Creating products and offering them for sale, even in a localized, small-scale way, has brought me to the following insights about design:

- *Shopping is interactive*. Watching people walk into our "store" and pick up objects, open them up, turn them over, and then decide whether or not to buy them, is at least as entertaining as having an in-class critique.
- Collaboration is in everyone's best interest. We all talk about collaboration in

art school, but it's hard to make it work because students want to have control (i.e., authorship) of their own work. BUY*PRODUCT fosters collaboration effortlessly, because the project can't succeed without group effort. As the old cliché goes, the whole is greater than the sum of the parts. In other words . . .

- You can't have a bake sale with just one brownie. BUY*PRODUCT combines individual, private authorship with intense collaboration. Each student has ownership of his or her own contribution (including the risk of financial loss and gain), yet each student is fundamentally connected to everyone else, because the success of the overall project relies on the profusion, variety, and connectedness of the goods on display.
- Design is social. Design lives in society, it builds society, and it needs a society of its own in order to flourish. BUY*PRODUCT draws together our own little community of design students, and at the same time it invites in people from other communities (fine arts students, faculty and staff from across the school, the general public) to experience design in a vivid way. Hands-off design exhibitions fail to engage these publics so directly. BUY*PRODUCT actually helps people understand what designers do.

Walter Benjamin may have found the capitalistic bent of all of this a bit repulsive. Looking back at the avant-garde design productions of the 1920s, however, one can note that much of the work we find most inspiring was done in a capitalistic framework. The brilliant posters that Rodchenko and Mayakovsky created in the early 1920s served to promote commercial goods that competed with privately produced merchandise. (Lenin allowed limited free enterprise during the early 1920s in order to jump-start the Soviet economy). Kurt Schwitters published his magazine *Merz* in order to promote his ideas to the international avant-garde; he sold subscriptions and advertising space to make it all possible, and that commercial aspect did nothing to degrade the final result. At the Bauhaus, graphic design was used to publish, promote, and sell the school's products and ideas more than it was considered an artistic vocabulary in its own right. Graphic design emerged as a powerful medium at the Bauhaus because it had a powerful function.

NOTES

- 1. Michael Rock offers a critical history of "authorship" in "The Designer as Author," originally published in *Eye* 5, no. 20 (Spring 1996): 44–53 and reprinted in this volume.
- 2. Walter Benjamin, "The Author as Producer," in *Reflections: Essays, Aphorisms, Autobiographical Writings*, ed. Peter Demetz (New York: Schocken Books, 1978), 220–38.
- 3. Benjamin, 230.
- 4. From "One-Way Street," in *Reflections: Essays, Aphorisms, Autobiographical Writings*, 77. My attention was drawn to Benjamin's acquaintance with Moholy-Nagy in a lecture

given by Frederic Schwartz at the Victoria and Albert Museum, London, March 21, 1997.

- 5. Benjamin, 79.
- 6. Benjamin, 233.



History with Attitude: A Subjective Tour of Studies in American Grapic Design Education

Ellen Mazur Thomson

n his Theatres of Memory, the Oxford historian Raphael Samuel reaffirmed the power of the present in directing our understanding of the past: "History is an argument about the past, as well as the record of it, and its terms are forever changing, sometimes under the influence of developments in adjacent fields of thought, sometimes . . . as a result of politics. . . . " History, he argued, must continually be revised, "stamped with the ruling passions of its time," yet to be convincing it must create "a consecutive narrative out of fragments, imposing order on chaos, and producing images far clearer than any reality could be." Historical studies that engage and excite us use the past to inform our present preoccupations and interests. Unlike critical appreciations of designers and objects (works of connoisseurship) or chronicles of styles and schools, recent studies in graphic design education have posed questions and constructed versions of the past that lend depth and complexity to contemporary issues.

These studies have recreated histories of graphic design education that confront issues of interest to contemporary practitioners: the status of graphic designers in American society; the benefits of establishing a core curriculum to define the professional; what is, or should be, the relationship between classroom instruction and the needs of design firms or advertising agencies. These issues are rooted in the history of the profession. They pose significant questions about the relationship between graphic design and the larger society. In addition, and not, I would argue, incidently, these studies are based on a wide variety of primary documentation, published and unpublished, that falls outside the scope of what is currently considered design history. This essay touches briefly on some of the studies that ask interesting questions about these materials.

One of the most engaging of these recent works was based on children's drawings, student artwork, magazines, ledgers, and instruction books the author found in the collection of the Cross family. In Drawn to Art: A Nineteenth-Century American Dream (Hanover, N.H.: University Press of New England, 1985), Diana Korzenik followed the members of a New England family as they moved from rural New Hampshire to careers in Boston's printing establishment and art schools. She was able to show that the Crosses, like many others between 1850 and 1900, saw art education as preparation for work in a new economic system. Drawing was "an avenue by which industrialization could be integrated into culture." (p. 22)

DESIGN SCHOOL STUDIES

The value of design to society has been a perennial topic in design education. Educators and design professionals alike have written about the graphic arts' contribution to the economic well-being of the nation—or, conversely, the degree to which the arts are corrupted by commercialism and democratization. In the nineteenth century, this was a central issue for those in the industrial drawing movement, a movement of importance to graphic design history because it shaped the training of illustrators, engravers, type designers, and printers. In William Minifie's Popular Lectures on Drawing and Design (Baltimore: School of Design of the Maryland Institute, 1854), he contended that the study of drawing and design is "not as a mere accessory that may be dispensed with at pleasure, but one of the fundamental branches of education." Minifie maintained that design education would directly increase opportunities in manufacturing and cure unemployment. Similarly, Walter Smith, an Englishman trained in the Arts and Crafts system, was hired by the state of Massachusetts to administer its 1870 law that required instruction in industrial or mechanical drawing for all students in the public school system. Smith's Art Education: Scholastic and Industrial (Boston: Osgood, 1873) is a fulsome justification of this provision. A decade later, the federal government sponsored Isaac Edward Clarke's six-volume Art and Industry (Washington, D.C.: U.S. Office of Education, 1885–98). Perhaps the first great work on art education for industry, it was appropriately monumental. Clarke passionately believed in the importance of instruction in the applied arts and gathered vast amounts of data and documents that he reproduced with detailed curricula of individual design schools, many of which began during this period.

Twenty years later, Charles R. Richards's *Art in Industry* (New York: Macmillan, 1922) combined in one volume information on design education, based on a survey of close to six hundred instructional programs throughout the United States and Europe. He described trade schools, schools connected with colleges and museums, and art schools that gave instruction in graphic design.

Modern studies of design schools go beyond institutional histories to explore the impetus for their creation and the context in which they operated. Nancy Austin in "Educating American Designers for Industry, 1853–1903" (*Proceedings of the American Antiquarian Society* 105, 1 [1995]: 211–30) uses the early history of the Rhode Island School of Design as a model to examine the beginnings of design schools in the United States—as institutions created during the industrial revolution to transform the training of artists to meet the needs of machine manufacturing. Austin's thesis—based in part on this material—is that the origins of consumer culture and the commercialization of art lie in the late eighteenth and nineteenth centuries and occurred as part of the industrial revolution.

Not surprisingly, feminism has also contributed to the focus of contemporary

art-education history. Using admissions records, published catalogs, census data, and personal interviews, Nina de Angeli Walls analyzed changes (over nearly a century) of the class and geographic origins, ethnicity, age, and aspirations of the women who attended the Philadelphia School of Design. "Educating Women for Art and Commerce: The Philadelphia School of Design, 1848–1932," (*History of Education Quarterly* 34, no. 3 [Fall 1994]: 329–55), unlike so much design history, combines statistical data with other materials, enabling the author to describe both quantitatively and qualitatively the women who attended professional design schools and the reasons they did so. Walls demonstrates that despite the change in student population, women used vocational training in the applied arts to gain entry into the middle class or maintain their status within it.

The Hochschule für Gestaltung in Ulm (1953–68) is the subject of an unusual study that uses documents of the period and comments on them by presenting—on the bottom half of the same page—contemporary interviews and essays by former teachers and students. *Ulm Design: The Morality of Objects*, edited by Herbert Lindinger (Cambridge: MIT Press, 1991), not only describes the school's curriculum, but the theory behind it and how the experience, in both personal and political dimensions, was perceived by participants then and thirty years later.

THE IMPORTANCE OF THEORY

Education theories are ultimately based in the philosophies of knowledge—explanations of visual perception, how we see, and how we understand and use what we see. Successive theories are based on new understandings of the way humans learn. The education philosophies of Johann Heinrich Pestalozzi, Friedrich Froebel, Arthur Wesley Dow, John Dewey, and, in the mid-twentieth century, Victor Lowenthal set the terms of the American art curriculum. Yet, design historians have, for the most part, ignored them. Arthur Wesley Dow (1857–1922) is the exception. Dow's emphasis on formal elements and his direct influence on advertising photography give his theoretical writing contemporary interest. In his hugely popular *Composition: A Series of Exercises Selected from a New System of Art Education* (New York: Baker & Taylor, 1899), Dow emphasized the application of abstract visual principles rather than technique. Two of Dow's pupils, the photographer Clarence White and painter Max Weber, incorporated Dow's theory into the curriculum of the Clarence H. White's School of Photography, where pioneers in advertising photography, including Anton Bruehl, Paul Outerbridge Jr., and Margaret Watkins, studied.

Most recently, Dow, White, and the school have been the subject of several studies written by historians of photography interested in White because he represents an alternative to the aesthetic tradition of Alfred Stieglitz and the photosecessionists. Bonnie Yochelson's "Clarence H. White Reconsidered: An Alternative to the Modernist Aesthetic of Straight Photography" (Studies of Visual Communication 9, 4 [Fall 1983]: 23–44), Susan Doniger's essay, "The Clarence H. White School of Photography" in Collective Vision (Athens: Ohio University Art Gallery, 1986) and Pictorialism into Modernism: The Clarence H. White School of Photo-

graphy, edited by Marianne Fulton (New York: Rizzoli, 1996), trace the application of Dow's philosophy.

INSTRUCTIONAL TEXTS

Perhaps nothing goes out of style more quickly, or is more revealing of its period, than the instructional text. For historians, they are invaluable to understanding how design was taught, what topics were included, what skills were considered important, and what styles were favored. Yet, most of these texts have not been subjected to scholarly analysis.

The exception is a fascinating study based on nineteenth-century instructional texts that focused on the early proponents of the industrial drawing movement. Peter Marzio examined the dilemma faced by late-eighteenth- and nineteenth-century art educators who wanted to find a role for the visual arts in a young democracy. His *The Art Crusade: An Analysis of American Drawing Manuals* (Washington, D.C.: Smithsonian Institution Press, 1976) describes the controversy over drawing instruction in the public schools.

As part of this movement, Louis Prang, the great chromolithographer and publisher, worked with the Massachusetts Commissioner of Art Education, Walter Smith, in developing a series of teachers' manuals. Prang expanded his operation to publish a large number of graduated lesson plans for both elementary and high school classes. Michael Clapper's "Art, Industry, and Education in Prang's Chromolithograph Factory" (*Proceedings of the American Antiquarian Society* 105, I [1995]: 145–62) analyzes Prang's publishing company as it influenced ideas about the use of art in industry and as a business enterprise.

Unlike Prang's publications, which were written for public school teachers and students, the United Typothetae of America sponsored a series of texts for use in trade schools. Originally entitled "Typographic Technical Series for Apprentices" and later the "U.T.A. Library," these publications provided technical information on machinery and materials, presswork, binding, printing history, accounting practices, and English grammar. They also addressed topics in design as in Laurence B. Siegfried's *Typographic Design in Advertising* (Washington, D.C.: Committee on Education, United Typothetae of America, 1930). The influence of these texts has yet to be explored.

If many of the studies cited seem to use design textbooks to illuminate cultural and social history, Edward R. Tufte's *Visual Explanations: Images and Quantities, Evidence and Narrative* (Cheshire, Conn.: Graphics Press, 1997) may be said to reverse the process and focus on the graphic strategies of nondesign texts. Tufte shows, among much else, how illustrations in textbooks on magic, dating from the sixteenth to the twentieth century, could add the element of time or multiple points of view, could "make verbs visible." Using books that were written to induct the would-be conjuror into the routines and skills of the magician, Tufte demonstrates how their graphics went beyond mere description to show both the trick as seen by the audience and the sequence of operations the magician used to achieve his illusions.

AUTOBIOGRAPHY AND BIOGRAPHY

Autobiographies almost always include accounts of the writer's education. Subjective by their very nature, they cannot be taken as a general picture, but they often give insights into the learning process that more objective studies miss. Unlike most histories, they trace the change from apprenticeship to school instruction.

Some of the earliest books describe apprenticeships rather than schooling. John Thayer, in *Astir: A Publisher's Life Story* (Boston: Small Maynard, 1910), recalls his training as an apprentice in a Boston print-shop composing room and how he expanded his skills by moving to Chicago to work and train in larger printing establishments. Will Bradley, in *Will Bradley: His Chapbook* (New York: Typophiles, 1955), recounts how, starting as a twelve year old in a small Michigan printing plant, he rose from printer's devil to master printer to self-taught designer, poring over magazine illustrations and exchanging ideas with friends. A rarely cited Goudy biography, Bernard Lewis's *Behind the Type: The Life Story of Frederic W. Goudy* (Pittsburgh: Department of Printing, Carnegie Institute of Technology, 1941), was written in cooperation with the subject and shows that Goudy learned many type production and printing skills by working with craftsmen in a variety of trades.

This transition from apprenticeship to school is explored by several authors in "The Cultivation of Artists in Nineteenth-Century America," a special issue of the *Proceedings of the American Antiquarian Society* (105, I [1995]). Donald C. O'Brien's "Training in the Workshop of Abner Reed" (pp. 45–69) uses three generations of family records, including unpublished diaries, letters, trade cards, and copperplate engravings, to reconstruct "the sequence and nature of the work of apprentices" in an engraving shop. David Tatham examines "The Lithographic Workshop, 1825–50" (pp. 71–78) to show that master craftsmen were forced to assume a teaching role because of the tremendous need for skilled draftsmen. Ann Prentice Wagner's "The Graver, the Brush, and the Ruling Machine: The Training of Late-Nineteenth-Century Wood Engravers" (pp. 167–92) describes the gender differences in training engravers as well as the consequences of introducing photographic methods of reproduction.

CONCLUSION

Taken together, these studies create a very different sense of American graphic design from that presented in standard works on the subject. The impact of Ruskin and Morris in the nineteenth century or European modernism in this century are not ignored, but they are shown to be only part of a complex evolution. This evolution is complex because no single narrative thread ties graphic design history from its past to the present. It is complex also in that the influences operating at any particular time on education and on design came from a wide variety of forces both within and outside the profession.



Art education from the famous past came out of a solid foundation of ideas. During the Russian Revolution and the Weimar Republic, artists brought their worldview into their classrooms. Can we teach graphic design today without such a foundation?

Graphic design today acknowledges two influential schools of style: the Bauhaus style of geometric abstraction and constructivism, the expression of Russian revolutionary theory. Both schools based their courses on theories of art developed by original thinkers such as Oskar Schlemmer in Germany and Varvara Stepanova in the Soviet Union. What those two shared was an overflowing richness of mind. From the depth of thought that motivated their own lives and actions, theoretical richness overflowed into teaching. At the Bauhaus it was intellectual-spiritual-mystical-rational; at Vkhutemas it was polemical-political. Both ideologies arose from allegiance to grand ideas that existed before any curriculum.

Schlemmer was the master considered by some to be closest to Walter Gropius's thought in founding the Bauhaus. So, it is not surprising that a month after Schlemmer joined the Bauhaus in Weimar, Gropius asked him to develop a curriculum. Schlemmer wrote his wife: "Gropius says he would like to start drawing from the nude for sculptors and would I take it over. I have agreed gladly and he says he will propose it. They should study the nude. Something may come of this. I am pleased about it." What came of it was one of the most remarkable classes in the Bauhaus or any art school curriculum—Schlemmer's course on "Man." As a platform for this course, the theoretical foundation on which his lectures and twice-weekly classes were based, Schlemmer drew upon philosophers, poets, psychologists, and natural scientists all the way back to Heracleitus, with stops at Voltaire and Lao-tzu or any other thinker that had something to say to him. Over two hundred pages of notes—some of them typed syllabi, some of them charts and diagrams—survived and were later published.

"Man," as a course, is a richly confusing attempt to divide the study of a human being into areas of the natural sciences, philosophy, and psychology, based on man's trinity of mind, nature, and soul or mind, nature, and psyche (sometimes called normative, biological, and philosophical)—and a tumultuous outpouring of notes and sketches. Impossible to follow as a curriculum, the notes Schlemmer left indicate the

intensity of his interest in the subject and his will to completely rethink the education of artists through drawing. Schlemmer endorsed the Bauhausler's cry, "We the modern moderns," and accepted the challenge of defining the "new life" of modernism.

A goal of early European modernism was to improve the life of humanity through art. Modernism was, in part and for Bauhaus masters like Gropius, a reaction against the war, poverty, and class divisions of the past. The human being was at the center of modernism. Schlemmer's course, intellectually based and creatively inspired, had nothing to do with the craft interests of the Bauhaus and everything to do with Schlemmer's views on the human body in relation to the universe, views derived from study with his teacher Adolf Holzel and obviously acceptable to Director Gropius.

Schlemmer thought man a "cosmic being." This means that he saw the human being as both a world in itself and as a unit in relation to the world. For an artist to draw this grand and cosmic creature, the draftsman needed to understand the history of mankind, the origin of man, the theory of race. His biology must be understood, also his sexuality; his relationship to air, light, warmth, and clothing; his anatomy; his nervous system; and his capacity for movement—this last especially interested Schlemmer, who directed the Bauhaus theater and taught in the theater department. Man as a philosophical creature must be shown, through an awareness of materialism, realism, idealism, concepts of God, and insights into the psyche, the will and the imagination. All this exists in Schlemmer's notes—the basis for his classes. The lists of books he consulted are by German authors whose names are not common to Americans: Ranke, Sachs, Schider, Dubal, Buschan, Hufeland—unless I'm alone in not knowing them. We know some of the philosophers he listed in his syllabus for studying the origins of life and "substances": Locke, Pascal, Descartes, Giordano Bruno, Hume. The corpus in Schlemmer's cosmos was no simple bag of bones.

To vary teaching possibilities, the class moved to the Bauhaus stage. There, dramatic contrasts of light and dark could be achieved with theatrical spotlights and shadows. The drawings from the course show fluid, strong abstractions of the figures. What seems remarkable is that the students themselves served as models, and in the nude. As much as anything else, the existence of nude drawings of students testifies to the total commitment of the Bauhaus community to the primacy of art over convention. Female models seem to have worn underpants, while male models are seen fully nude. The drawings are abstract, rather than realistic.

Schlemmer himself made drawings. In translucent renderings of the human body, he showed the organs nestling within; in some, the skeleton neatly inhabits the flesh, and in others, the musculature strolls along with the skin.

Though the course "Man" was based on a long bibliography, it must have motivated students mainly through the force of Schlemmer's charm as a person. All photographs of him—in costume for his *Triadic Ballet*, fencing on the roofs—and the diaries and letters he left reveal a playful, tolerant man with passionate convictions. With Itten, Kandinsky, and Klee, Schlemmer was part of the mystical faction that influenced the Bauhaus before the communism of Hannes Meyer or the avaricious intellectuality of Mies. In his notes on the "Man" course, Schlemmer quotes Goethe's

vision of an ideal community from *Wilhelm Meister's Travels* (a book I read at the Yale School of Art in a desperate, but unconscious, attempt to compensate for the intellectual barrenness of classes at that school). *Wilhelm Meister* is the story of a young German student's search for meaning through his *Wanderjahre* around Europe. The paragraphs Schlemmer extracted describe an ideal atmosphere for learning, a vision of what the Bauhaus could be. In Goethe's community, the facial expression of the inhabitants, the gravity of their manner, revealed "a secret spirit leading towards one great goal." Did the Bauhaus house such spirits? I think so.

Itten, who dressed in monk's clothes and demanded vegetarianism in the kitchen, was the most influential on the early Bauhaus, though not as well known as those masters who emigrated to America (Albers, Gropius, Mies, etc.). As one of the first masters appointed in 1919,² he originated the famous Foundation Course, the model at many art schools to come, through the influence of his book.³ Itten was a mystic who believed in the liberation of the creative artist through exercises on the roof and in the classroom, swinging the hand before picking up a pencil. Itten's method of teaching was intuitive, contrasted with Schlemmer's, which was based on summarizing the intellectual thought of all the ages. But both were powerful influences at the early Bauhaus.

At the other major school of art to which graphic design is connected, through constructivism, the spiritual was less important than the political. This art school was the state arm of the Russian Revolution. Malevich said in 1919 that "cubism and futurism were revolutionary movements in art, anticipating the revolution in the economic and political life of 1917." Artists such as Rodchenko, Tatlin, and Stepanova thought they had gone as far as they could by the early 1920s with Malevich's abstract painting, "reducing form to zero," and they turned to the useful task of teaching art to implement the ideals of the revolution. The school, called Vkhutemas (initials of the Vysshie Khudozhestvenno-Tekhnicheskie Masterskie or Higher Artistic Technical Studios), was an arm of the People's Commissariat for Enlightenment. The radical teaching faculty4 held conflicting opinions about the goal of the people's revolution, but aspects of constructivist theory such as composition, construction, and facture were settled in the 1921 debates among Varvara Stepanova and Aleksei Gan (later executed in a gulag) and radical artists Ossip Brik and El Lissitzky. In addition to creating curricula at Vkhutemas, constructivist thinker Stepanova formulated theoretical key issues of constructivism, namely, facture.

Facture, also called tectonics, derived, she said, from the "structure of communism and the effective exploitation of industrial matter." A rough surface demonstrated anti-elegance, the anti-aesthetic of the people. Fine printing was disdained as expression of a corrupt bourgeois who valued finish over content, the superficial over the deep truths of the text. Glossy paper, embossing, other luxurious traditions of printing were seen as demonstrations of wealth and exploitation of labor. Facture was a way of turning "art" into "production" by Stepanova and the constructivists. Her influential lectures resolved the matter that constructivism was "intellectual production."

Stepanova wrote that the constructivists' cry (did everyone have a cry?) was,

"Down with aesthetics and taste." Facture had no taste; it showed material honestly and showed the hand of the worker who had made it. His labor was evident in his work; the work a tribute to himself. Book covers and posters were not designed under orders of rich industrialist oppressors. Imperfect type, rough paper, and foreign materials, exemplified facture. There is no "quality control" in communism; it must be a capitalist concept. The style of constructivist graphic design resulted from available paper, found art, and the constraints of the letterpress printing presses in and around Vkhutemas.

What is the ideological foundation supporting graphic design programs today? It's not political, it's certainly not spiritual, and can we say it's intellectual? No, it must be technological. Everyone has a computer; more and more time is spent before the screen. As Americans, we have always excelled in technology, and perhaps we should accept that our basis for doing everything is faith in technology and let go of imitating alien styles; tear down the foundations that really don't reflect who we are. We should be confident in the profundity of our contemporary style; it reflects our true ideology. As the Apple (you recall that eating the apple gave the secret of knowledge to Eve) gets stronger and faster, we'll spend more time before the electronic altar. We are building on a sophisticated technical foundation; it is our intellectual base. Let us adopt the cry, "Up with the mouse and on with the millennium," and construct our curriculum on that mighty piece of plastic.

NOTES

- 1. Oskar Schlemmer to Tut Schlemmer, May 1, 1921, in *Diaries and Letters*, ed. Tut Schlemmer (1958; reprint, Middletown, Conn.: Wesleyan University Press, 1972).
- 2. With Lyonel Feininger and Gerhard Marcks.
- 3. Design and Form: The Basic Course at the Bauhaus and Later, rev. ed. (New York: Van Nostrand-Reinhold, 1975).
- 4. Kandinsky was the crossover figure, living in Moscow, Munich, at the Bauhaus, and in Paris, teaching at the Bauhaus in 1922–33, overlapping with Schlemmer, Klee, and Itten. A spiritual figure, he remained Russian Orthodox throughout his life and wrote *The Spiritual in Art*, expressing his mysticism.
- Alexander Lavrentiev, Varvara Stepanova: The Complete Work (Cambridge: MIT Press, 1988).



How We Teach. How We Learn What Is Taught

Hank Richardson

The Bauhaus philosophy and, particularly, the ideas of the school's founder, Walter Gropius, have always most inspired my own beliefs. The aim of education at the Bauhaus was "to find out all the things that are based upon the psychology and biology of human life which are objective," and it was about an objective process where both faculty and students were equally involved. According to Gropius, the function of education was "to inform the student... and bring him into the position of finding his own way."

Gropius also advocated a holistic and organic flexibility, allowing education to evolve with the times. When he was eighty-one, he was asked if he would mind if others changed or adapted his philosophy. "No," he responded. "Everything is alive, and it has to be changed. The conditions are different every day. We have to be flexible. . . . As long as it's an open process, it's alive."

The best curriculum needs constant observation, and it must change to respect the future. Often we look, but we just don't see; we listen, but we just don't hear. It is imperative that we pay attention when the education of young minds is at stake. Exemplary schools today might seek that same goal as the Bauhaus, where the very meaning of the word *Bauer*, "building [a house]," is offered in a broader sense of building, with a very expansive outlook that can prepare students for life—and not a life that is parochial, but open—where exploration and the bravery to be an explorer are the most important qualities.

An ideal curriculum, the expression of a philosophy and not simply a course of instruction, might come from constructing a paragon where the artistry of clear conceptual thinking is taught, and this means introducing reasoning—both deductive and inductive—so that truth becomes the mechanism for expansion and growth. Equally as important as defining truths is the pragmatism to convince students of their leadership and to support the spirit of that leadership as students make some commitment, join an association, or apply it in practice.

Leadership is a symbiosis of four things: fantasy, fascination, imagination, and information, and it takes all those qualities to comprise that "spirit" I refer to. Usually, in a beginning- to mid-level student, "information" is the driver you see first. Students always want to invent and create, but initially are reluctant, even

averse, to do so. A good curriculum provides space for the student to seek and explore and reason what truths might be, and a good school provides them a platform on which to contribute their findings in an unrestricted way.

"The dream begins, most of the time, with a teacher who believes in you, who tugs and pushes and leads you on to the next plateau, sometimes poking you with a sharp stick called truth," said Dan Rather. I am fortunate that my school is small, following the Bauhaus archetype, wherein you truly get to know the students. The policy in my office is pretty much open door. Students hover around for hours, working on their laptops, waiting their turn. A student calls an instructor with a question about a project, and, next thing you know, the two are discussing Jean Baudrillard at Starbucks.

Larger schools might benefit from assuming a more "boutique" mentality. This is a challenge for big colleges and universities, but it can be done. If we mean to push students, if we expect them to visit those places in their psyches they've yet to go, then we must provide a safe environment and a structure—a well-mapped curriculum enforced through a sound course of instruction—to ensure their ultimate success.

Such a curriculum must be comprehensive and might begin with a foundation of design aesthetics and language, where basic skill sets are learned; then, move into intermediate processes, where theory, history, and an understanding of cultural interface are prominent, this juxtaposed with a primary understanding of design paradigms and systems about identity and culture. Next, proceed into advanced processes, where students begin to find their voices through interpretative applications that might frame their reasoning. And finally, introduce media studies, such as interactive or multimedia systems. There's a lot to cover, and it requires enormous dedication and energy from students, teachers, and administrators.

With all of that in place, the biggest challenge I face as an educator is nudging each student to his or her personal threshold, that existential edge where his best work is conceived. For the edge always defines. This involves asking students to draw from private experience, requiring them to handle subject matter outside their comfort zone, and expecting them to learn about subjects absolutely foreign to them. It also involves mandatory attendance at my 5 a.m. classes, which frequently last until noon or later. Sometimes those classes take place on Sundays. Sometimes, students are asked to stand on a table in the middle of the group and "recite" annual reports, in order to understand the relevance of type and "voice," and why voice is important.

These conditions create conflict, and conflict gives birth to creativity. Situations that threaten us or, more precisely, threaten our sense of order, also make us feel more alive. If a student feels destabilized, the ordering response of the imagination will kick in full force. The teacher's job is to put the students off-balance, test their sense of reality, help them realize the effects of their perceptions on their sense of reality, and then, ultimately, change their reality altogether, proving, once again, Marshall McLuhan's premise that "We become what we behold."

Leading not through a sense of obedience but, rather, through a sense of imagination, good teachers facilitate the lonely process of moving inward for answers. As Lou Dorfsman, former design director of CBS, once said, "Creativity

is . . . the ability to reach inside yourself and drag forth from your very soul an idea." By the time my students get to me, they've had plenty of experience modeling—learning about and drawing from the creations of others. There comes a time, though, when they cannot look outside themselves for answers; the answers must come from within.

Mixed Messages, one of my early-morning classes, is a good example of how this works. Projects vary from quarter to quarter, but my most recent group was charged with redefining an established acoustical/visual language through their own interpretation of the formula: dj/mixology + culture = vernacular. Their deliverables had to showcase how mass cultures and subcultures share space and how such exchanges can be fostered in this era of hyper-reality.

First, I had them gather information on the visual and audio samplings that proliferate in our environment via signage, television, movies, music, the Internet, print publications, art, and the like. Next, I made them explore the mundane things/events that disturb them—the little things in life that get under their skin and drive them nuts—and choose one. Then I assigned them to juxtapose the two, to form a personal, critical evaluation of the contrasting issues and find a relationship between them.

While this sounds like fun, initially—listening to DJ Spooky and reading Charles Bukowski, kvetching about automated customer service or people who pee on the toilet seat, it quickly turned dead serious. Final projects ranged from a Web site promoting healthy body image and self-esteem for teenagers to a provocative, poignant book about abortion.

One of our staff advised that I should hang a giant Kleenex dispenser over my desk. We're always running out of tissue. Tears being the eloquence of passion, I can usually gauge the quality of the student show every quarter by how many have been shed in my office. Because anything, from a logo to a complete branding campaign, can be imbued with—and will benefit from—a story, and the best fiction is always personal, which can be intense and, yes, destabilizing. If students draw from their own stories, values, and ethics, though, they'll produce work that is distinctive, that has a unique, particular voice. This is no easy task.

Often, I hear people say of design, "It's not brain surgery!" Well, as comforting as that thought might be to anyone trying to solve a frustrating design problem—for it conveniently diminishes both the problem and the importance of the designer—I say design is every bit as crucial. Designers interpret and shape sociological trends; they directly influence the mood and landscape of our culture. Indeed, as McLuhan suggested, design is culture. Design changes the way we live. So it's extremely important that designers recognize and realize their power. Hence, I consider each student an opportunity to change the world.



Graphic Design Curricula: Visualizing Design Processes and Skills

Thomas Briggs

Wouldn't it be useful to have a chart, something like a medical chart in a hospital, that displays information throughout a process in time, allowing teachers and students a means to determine objectives and measure attainments in postsecondary education? A matrix of progressive competencies is already a common component used to build effectiveness in a design curriculum. Identifying the constituent skills (and areas of knowledge) needed by students for the practice of design while visualizing these interactions as they occur during the process of making design would be an additional boon to teaching. Viewing intellectual and representational resources, in concrete form, related to the process of designing as experienced in the studio or classroom, and measuring the student's abilities as demonstrated by specific assigned tasks would be another way to observe student progress. Developing better visualization of these interactions provides a way to more effectively support student learning while identifying the most relevant educational components for graphic design study. Using this method to revisit longstanding assumptions about teaching graphic design also fosters curriculum development, which embodies evolving concepts of design theory while representing the expectations of practice.

How do we determine what to teach designers? There are many likely resources to start with. Graphic design resembles other image art in so many ways that we could probably assume that designers need to know the same basic visual dynamics and principles of perception as painters, filmmakers, and many other visual artists. But good design solutions are also often closely related to knowledge of the practical circumstances of time and place, that is, to context. If, as Christopher Alexander asserts in his classic *Notes on the Synthesis of Form*, "Form is the part of the world over which we have control" and "Context is the part of the world which puts demands on this form," we should look to relevant contexts for sources of existing knowledge that would provide the most appropriate support for the process of designing.

A method for displaying the functional relationship between intellectual and representational resources of the designer and the process of designing is proposed in a model that details these linkages and embodies the premises that: (1) Design

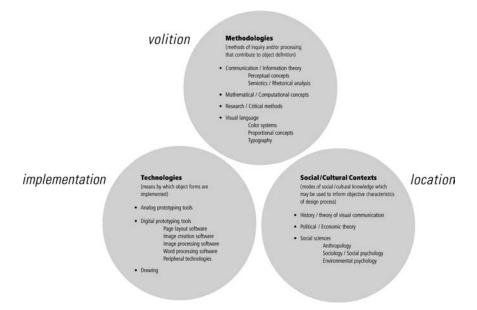


Figure 1. Graphic design: A triadic model of domains and resources

process can be described as a set of recursive cycles in which planning and refinement take place in distinct and identifiable stages, (2) specific skills and areas of contextual knowledge are instrumental to successful design development, and (3) those skills and resources can often be identified as knowledge resources and defined as "teachable" academic or "making" disciplines. The concept model proposed in figure 1 shows a triadic idea of design constituencies with an emphasis on three domains that characterize how/what/for whom aspects of a creative process context and are labeled as spheres of Volition/Implementation/Location. In figure 2, these domains (instead of the individually named resource components shown in figure 1) are used in temporal representations, showing an aggregate quantity of those constituents (e.g., Research Methods, Information Theory, Typography), represented as disks or spheres, moving through various stages of a generalized design development scenario.

Among other good reasons to recommend the use of new methods to visualize the skills and knowledge components that support ongoing graphic design education planning is the perspective that communication design can be really effective only if we are aware of and receptive to the beliefs and preferences of our readers, a context in constant flux. While design curricula at leading art schools have been substantially founded on the assumptions of earlier twentieth-century theories about how we perceive visual messages, a continuing reliance on those interpretations has fostered an attention to surface and form that decidedly no longer characterizes the direction that more recent trends toward an increased interest in design authorship and reader interpretation suggest. As an observer of

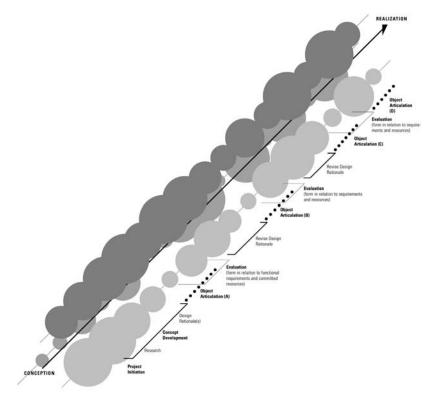


Figure 2. The interaction of resource domains and design process

"things" in their social context, Mihaly Csikszentmihalyi contends in his essay, "Design and Order in Everyday Life," "Visual values are created by social consensus, not by perceptual stimulation . . . like other values, visual values can be unanimous or contested, elite or popular, strong or vulnerable, depending on the [integration of the] culture." Inclusion of concepts and theories of various branches of social sciences and information/communication studies in design curricula would support a more humanistic orientation for (particularly young, undergraduate) student designers, while knowledge of the domains of methodology and technology would make established design-making scenarios as well as more current means for prototyping and implementation increasingly usable.

Visualizing design process in terms of knowledge and skills that demonstrate a clear and observable role in given stages of development provides a means of making a more visible, and therefore, causal and empirical evaluation of content choices in design education curricula. While this model illustrates prescriptive uses in developing curricula, similar tools would be equally useful in demonstrating both educational constituents of individual courses and finely articulated student assessments. Modeling the interaction of design processes and resources, shown with a simple 3D illustration in figure 2, is also done here with the

assumption that an interactive display, computationally animating a variety of points of view and finer-grained details, is an indispensable development.

To meet the educational requirements of an evolving profession, where graphic designers are increasingly responsible for authorship as well as fluency in specialized areas of knowledge, creative visualizing concepts will need to play a continuing and important role in curriculum planning for design educators. The relational process described in this model informs graphic design curricula while providing support for inclusion of more relevant knowledge, skill, and methodology through the evolving pedagogy of design education programs.

NOTES

- 1. Christopher Alexander, *Notes on the Synthesis of Form* (Cambridge, Mass.: Harvard University Press, 1964).
- Mihaly Csikszentmihalyi, "Design and Order in Everyday Life," in *The Idea of Design*, Richard Buchanan and Victor Margolin, eds. (Cambridge, Mass.: The MIT Press, 1995).



Visual Literacy: The College Course

Richard Wilde and Judith Wilde

Visual Literacy, the college course, has as its goal the creation of work that deals with the understanding of signs, symbols, iconography, typography, photography, illustration—in short, the world of visual imagery created to communicate ideas and information to an intended audience. It evolved out of a frustration with not having students reach their creative potential, which in turn was the impetus for the challenge of developing experimental design projects in an effort to teach this complex and elusive subject.

What adds to this conundrum is that effective visual communication of today often becomes tomorrow's cliché and what must be factored into this equation is an in-depth knowledge of pop culture that adds context. Quality work is determined by how the designer articulates the synthesis of form (visual) and content (intended message) into a unified whole. This is the goal.

It became clear that in order to move students from the world of cliché into the realm of the unknown, which would prompt questioning, it was necessary to invent assignments to accomplish this. For all projects, a series of assignment sheets are prepared in advance for students to work on. The following are two of many assignments that move you along the path.

In the Sound Problem, students are asked to depict a series of twelve sounds. Requiring multiple solutions ensures greater possibility for success. Each solution is executed in a $4" \times 4"$ area. Titled beneath each area are sounds, such as the sound of thunder, popcorn popping, making love on a creaky bed, a busy diner, and the like.

For this problem, students cannot rely on timeworn cliché solutions because they simply don't exist. Students, perhaps for the first time, are thrown back on their heels and have to invent formal equivalents. Doodling and playing around are encouraged. Solving the twelve given problems offers students an opportunity to discover solutions ranging from literal to symbolic to abstract. One's visual vocabulary expands through these discoveries.

Another project is the Notebook Page, in which students are given twentyone rectangles in the configuration of a grade school classroom. They are asked to create twenty-one images representing either psychological aspects or physical characteristics of children in a grade school classroom using only a palette of blue and red lines, with the added requirement of maintaining the integrity of the notebook page. In solving this problem, students are given the liberty of altering the thickness of the line, changing its direction, altering the space between lines, and so on. Students title each solution—for example, nervous, shy, smartest, nearsighted—to help clarify the message and aid in the understanding of the interaction between words and images.

The best solutions suggest or imply the intended message. Given the interplay between the title and the image, the audience is, in effect, asked to complete the intended message.

Also, the intent of the assignment is to move students away from a literal approach, which is a habitual way of problem solving, into working metaphorically.

For these types of assignments, it must be understood that the best an educator can do is create conditions where discovery is possible. Results are never a guarantee, yet it should be kept in mind that one can learn from continual failure. The journey of failure becomes the ever-changing blueprint of success, where one develops sensitivity to what is not working. Examples of failure may include being too literal, too abstract, too convoluted a message, too stylized, too clichéd, poorly composed, dated, overstated, understated, conceptually weak, difficult to read, politically incorrect, not solving the problem, lacking impact, inappropriate use of color, borrowed interest, incorrect use of appropriated images, and the like.

Eventually one comes to realize that formulas don't exist, and one moves into the realm of not knowing, which represents an opening to new possibilities. This leads to questioning, which now becomes the definitive tool for the graphic designer.

So, one must remember to struggle in a rightful way (where acceptance of one's shortcomings is recognized), whereby failure, in turn, is used as a building block. This is the classic journey of a design apprentice. Through questioning, one moves into an area that one previously didn't have access to. What doesn't work no longer becomes a roadblock, because it's where questions arise, and where frustration once lived now becomes a world of inquiry. Using failure constructively becomes an asset and a virtue. This subtle shift marks the designer's turning point in the creation of visually literate work.



Brian Lucid

Current writings on design pedagogy go so far as to state that typography be considered the "language" or raison d'etre of design. To a design educator teaching both traditional and dynamic media, this idea causes concern, as it limits the future of our craft. Strong typographic skills are an essential skill set for every designer. But if we wish to consider the role of the modern designer as a "visual communication problem solver," we must realize that many design problems are better served by considering objects and experiences that are primarily nontextual.

Our culture continues to become more image-focused, our communications more sensory and experiential. New media encapsulate the old, carrying forward previous modes of communication while adding new creative possibilities for visual expression. Design applications must be evaluated by how creatively and effectively they approach and solve a problem, regardless of whether the resultant form is a book, a poster, a sequence, a sound, a movie, space, an algorithm, an interaction, or an experience (to name just a few).

As design educators, how do we prepare our students to sensitively communicate within this wider palette of media to an increasingly media-literate audience? The challenge is twofold. First, we must widen the scope of traditional design curricula to include the theories, products, and processes of disciplines once held traditionally separate from "graphic design." Second, we must address the fact that students in typographically focused programs often find themselves limited in their "new media" experiments by their reliance on the written word. They require a language that is worth more than a thousand words.

When written language resides at the center of the designer's mind-set, it affects the way images are considered and applied—not unlike someone who thinks in one language and speaks in another. Students rely on headlines and captions to get their designs to mean what they intend. Often, images function only to describe or illustrate a textual concept. Rarely are images used to their full potential, embodying the concepts themselves. When confronted by an assignment challenging them to communicate without captions, explanations, or instructions, students struggle at the loss of the verbs, nouns, and related grammar they fall back on to

communicate with precision. They are at a loss to construct and imbue their projects with visual meaning for their audience to decipher.

Textual and visual literacy must be brought into harmony within the creative process. The first challenge for any student struggling with nontextual communication is to awaken a knowledge that is implicit and embodied. The second challenge is to transform that knowledge into a visual vocabulary that can be used to communicate with intent. Most of us living in a postindustrialized culture are expert consumers of images. We have little difficulty decoding the signs and symbols placed before us. But the process is often unconscious—we are blind to the subtle manipulative forces that are working on us. We often feel at a loss when we try to put those same forces into service for our own communicative ends.

Becoming articulate in this way is not so much about learning how to look at images, but understanding why things mean what they mean within our culture. Students must explore encoding and decoding of images via practical hands-on experimentation and discussion with classmates. Purposeful methods of image connotation (as cataloged by Roland Barthes, for example) and the communicative properties of photogenia are approachable through image-making assignments. Exploration of syntax and the consideration of how juxtaposition—image to image, image to text, image to sound—in sequence (via montage, for example) allow students to build visual statements that can communicate complex ideas through their relationships over time.

Certainly, the examples noted above are not the only methods of exploring nontextual communication. Their intent is to simply illustrate methods of allowing students to come to their own personal understanding of these elements and interactions. The sensitivity students develop instills confidence in their use of imagery while challenging them to reconsider how they make meaning in all of their design.

The end result is visual communicators who are more balanced in their consideration of text and image. They share a growing awareness of how different media (including the written word) "massage" the messages sent through them. This awareness serves as a foundation upon which continued exploration into the synthesis of text, image, sound, motion, interaction, and user experience can begin.

As design educators, our goal is to help students develop a diverse set of skills that will enable them to work within a design economy increasingly driven by information, interaction, and experience, regardless of medium. In so doing, we have a responsibility to reevaluate the way our pedagogy presents image and text and reconsider the value of bringing typographic study and visual literacy into a more holistic balance. The "language" or raison d'etre of graphic design can no longer be considered purely typographic, but instead should reflect the ways in which meaning is produced through the skillful manipulation and synthesis of our written, spoken, and visual codes.

Thanks to Joe Quackenbush for his thoughtful edits.



Beliving Is Seeing

Elizabeth Resnick

Twenty years after teaching my first evening course at a local art college, while balancing a successful design consultancy with part-time teaching, I awoke one morning realizing what I truly wanted to become—a full-time design educator. Yet the door to this goal was blocked until I earned an MFA. The notion of returning to college in my mid-forties—given that I had a successful business, a part-time teaching job, a mortgage, and a husband and two kids under twelve—was daunting. But I made the decision, and immediately found that becoming a student in a graduate program, no matter how much professional experience you bring to it, is a very humbling experience because you are no longer in control.

With this as a backdrop, I recall one professor's pedagogical methodology, which was effective in developing my critical understanding of a moment in art history.

Mary Anne Staniszewski teaches the "Topics in the International Avant-Garde" seminar at the Rhode Island School of Design in Providence.¹ Her first lecture begins: "What would you think if I told you that this is not art?" She points to a slide of Michelangelo's fresco, the "Creation of Adam," in the Sistine Chapel. The next slide is the "Venus of Willendorf." "What would you think if I told you that this also is not art?" Now she refers to a small sculptural object that dates approximately 25,000–20,000 B.C. and is best known as beginning the introductory narrative in most art history books. "And what would you think if I told you that this is not art either?" as many slides flash before my eyes in rapid succession. This time I am looking at aerial views of the Palace of Versailles and the pyramids at Giza, Egypt. More slides appear; one shows the Nike of Samothrace (wait just a minute here; I think I saw this in the Louvre!). "Nor was this, nor was this . . ." more slides representing ancient oriental cultures begin to appear, ". . . nor this" and finally projected on the screen is the familiar comforting smile of the Mona Lisa by Leonardo da Vinci! Now I am totally confused. What is she talking about? I wait for the hook.

To the right of da Vinci's masterpiece another slide appears, and she confidently states, "Now, this is art!" Everyone, including myself, is totally caught off-guard as our attention snaps to the slide of Marcel Duchamp's "LHOOQ,"

otherwise known as the Mona Lisa with a mustache. I get it, I muse to myself. She is separating commissioned objects from those created without a patron, church, or state dictating the terms. She must be separating the fine art from applied arts, but I guess wrong. "Art is an invention of the modern era, that is to say, the past two hundred years," she states. "The magnificent objects and fragments and buildings created by premodern peoples were appropriated by our culture and transformed into art." I settle back into my chair with a knowing sigh, comforted by the knowledge that I understand what she is talking about.

For six intensive weeks this past summer, I wrapped myself in a blanket of modern European history. I discovered that the age of modernity dates from the time of the American Revolution, but crystallized during the French Revolution. The unique concept of the inalienable rights of the citizen was first introduced in the American Bill of Rights, and again, a decade later, in the French Declaration of the Rights of Man, a document inspired by its American counterpart. Both documents outline a citizen's right not to be subject to a monarch or monarchy. To have free will to rise above one's specific rank within the social hierarchy, to own property, to be part of a collectivity that is sovereign. In the twentieth century we came to know and embrace these conditions, but, in fact, these conditions have only been in practice for the past 200 years. Of course, this condition was mainly reserved for white men during the first 120 of its 200 years. Nonetheless, this modernity established a citizen's sense of self as master of his or her own destiny.

Professor Staniszewski continues to focus our attention to her thesis on the institutions of art and art history: "In a certain sense, history, as we understand it, was invented in modernity. In the nineteenth century it was modern to see civilizations as having linear growth that progresses and declines and is connected through time." She shows slides of paintings by Monet, Cézanne, and Mondrian to illustrate the gradual development from realistic to the more abstract, ideal, spiritual, or utopian images we have come to associate with the historical avantgarde. Ah, the magic words, *avant-garde*, the reason why I have taken this seminar, my need to understand the true nature of the avant-garde.

She continues to explain, "Many artists began to think that the best way to revitalize culture and modern society was to creatively integrate art into everyday life. As these artists moved closer to abstraction in their search for a new universal language, they began to question the institutional framework, namely the academy, the museum, the salon, and the maintenance of the existing order. Many of these artists believed the criteria and practices of this existing older order needed to change. They saw their work as an instrument of social change, of the integration into everyday life. Although their work continued to take the traditional forms of painting and sculpture, they also expanded their vocabulary into objects of everyday life: These artists organized their own exhibitions, published their own books, journals, and manifestos, often utilizing new typographic and image-making forms. They shot films, exploring new ways of seeing made available with new cinematic camera technology. They envisioned new kinds of buildings for new ways of living, creating new products and clothing appropriate for the new society."

As she continues to leap through the decades of twentieth century art, culture, and history on her illustrated path to postmodernism, I find myself totally absorbed in thought about the issues and implications of art in modernity. I understand now the "why" of graduate school, and the richness of the intellectual growth that comes of it.

NOTES

- 1. Mary Anne Staniszewski, "Topics in the International Avant-Garde" seminar, Rhode Island School of Design, Providence, Rhode Island, Fall 1995.
- 2. ——. Seeing Is Believing: Creating the Culture of Art. New York: Penguin Books, 1995.



When my buddy Manny called me, there seemed to be a strange urgency in his voice. He wouldn't tell me what was going on, so I caught the IRT over to his shop. I climbed the stairs to his third-floor studio and poked my head in the door. His Mac's flying-toaster screen saver provided the only light in the room. Manny sat at his drawing table, hunched over a pile of green goo. The stuff trickled from his fingers, and he seemed to be deep in meditation as he repeatedly tightened his grip, allowing the jellylike substance to drool between his fingers, dripping on the table.

"What's up, Manny?"

"Just waitin'."

"Sarah ain't gonna be callin' ya, man. She's been seeing Tito."

"Waitin' for Agatha. And for Bob to tell me what more he wants me to do with this stuff." He raised a slick, green hand.

"Hey, you're the boss of this place . . . who's Bob?"

Without lifting his head, Manny gestured across the room.

Filling the space between floor and twelve-foot ceiling stood a black plinth. Its surface was smooth, but not reflective. A low humming sound emanated from somewhere in or around it; I couldn't be sure which. If I listened attentively, I could hear the twittering of thousands of birds, voices of people, wind—I blinked and then realized that, no, it had shifted into a song. "Material Girl," Madonna, 1982, I thought. I'd always been good with songs.

"Umm, Manny?"

Manny still didn't look up. "That's Bob. Been here since last night. Says we're waiting for Agatha." The gel was dripping from his fingers onto his keyboard.

I knew Manny to be an industrious guy, someone who'd always worked in the trenches, you might say, yet justifiably the proud owner of Manny Sepulveda Designs. He was not someone who sat idle.

Then I heard distinctly another song. It was an old Bruce Cockburn number: "How come the future has to take such a long, long time when you're waiting for a miracle?"

Manny had heard it too, which was a relief. "You can hear it in your head even over here," he said.

Then, a voice, "Agatha will be here soon."

I backed away from the plinth. "Manny, do you think you could fill me in on what's going on here?"

There was a pause. Manny's lips curled into a tight smile. "Uh, well... Bob's a muse." Manny looked up to register my take, which remained dumbfounded, so he continued. "The deadline for that calendar project was on top of me. I was totally blocked out on what to do. By last night, I'd gone through every single issue of *Graphis* from the past five years, ripped off maybe twelve different looks, knocked out a Greiman thing, a Carson thing, a Manwaring thing. But nothing seemed right. I didn't know where to go."

I nodded my head, so he continued.

"About nine o'clock, I heard something that sounded like a long sigh. At first, I thought it was me 'cause I'd been doin' my share of exhalations. But this was like the mother of all sighs, man—long, and like a chorus of many voices trailing into the deepening night. When I looked up, there was Bob. Introducing himself, he began to mess with my head. I mean, I began to hear the thoughts just like you're doin' now, but he's idlin' now—last night he was running like a hundred. Ideas like never before. And here in my hands was this goo. Watch this."

He shook the handful of material in the manner of someone extinguishing a match. The green gel morphed into a white sheet, which rattled crisply in the air. He began to crumple the page. As he did so, it changed back into green gel. He rolled the glob between his two flattened hands, then tossed it onto his desktop. Striking the surface, it bounced—a multicolored rubber ball. Catching the ball, he began to stretch the spheroid into a chrome disk. It reminded me of watching someone forming pizza dough, except I could see my open-mawed reflection on its surface. Picking up a pen from his desk, he rapped it against the desk, making a metallic clang.

"Between this stuff and the ideas Bob started pumping into me, I could have gone on all night without running out of steam. Well, see for yourself, there's the calendar." Manny gestured to a structure standing beside his desk.

I saw what could have been a coil of plumbing snake, except that it was big: the girth of the coils was as large as a beach ball and the entire coiled structure stood some eight feet tall. Looking closer, I noticed that the coils were made of smaller coils. It reminded me of the way rope is made of strands of smaller cords that are themselves made of strands of yet smaller threads.

Manny explained. "Bob suggested that the pace of the workweek sets up this kind of—uh, how did he put it—a fundamental rhythm. Conventional calendars stack all the Mondays, Tuesdays, and other days of the week because they are days of the same category. Making a Monday-to-Sunday strip, I circled it around so that a succeeding Monday falls just above the first Monday. Bob pointed out that this maintains a consistent direction for time—no jumps backward, just a continuous flow forward. He called this the 'arrow of time.'

"I saw it making a spiral shape that could continue onward forever, making

a kind of tube. I colored the months so that they related to the seasons. By the time I completed fifty-two of these spirals, I'd moved from January through December and it looked like a large spring. I stepped back to look at the entire spiraling cylinder and then Bob provided me with the insight that this path could coil also, so that January I, 2001, lay atop January I, 2000. And that's just like a year—you know, the whole spring thing goes around in its own circle. The seasonal colors clearly define the solstices and the equinoxes. You can imagine the sun in the center. Well, that yearly course made a larger spiral, which can be continued for as many years as you want. I decided to do a century version: one hundred years laid out so that 2100 is placed just over 2000. Of course, this meant yet another coil. So that's what you're looking at there. If you look real close, you can see that the one large spiral is made of one hundred coils, which are comprised of fifty-two coils each, and these fifty-two coils are divided into little seven-segment coils. You could carry the concept down to the level of hours and up to the level of millennia, but I stopped here for lack of space.

"You know, man, with these ideas and this morphing material, I'm going to be bigger than Glaser."

I was pondering the disquieting consequences of my buddy Manny becoming the next Milton Glaser when we heard Bob.

"Agatha is here."

We heard a low rumbling sound, felt a vibration. Soon, a second plinth materialized, standing shoulder-to-shoulder with Bob. Agatha was identical in size and just as featureless as Bob, but pearl white, and she droned with a hum that was a fifth of an octave higher in pitch. Together they made a pleasant harmony.

Bob's voice tended to be deep and resonant; Agatha's was cool liquid that rolled over its sibilants like a brook over weathered pebbles.

"Hello, my name is Agatha. I'm the muse traffic manager. Some of us call folks like Manny constipators, but let's just call him idea-needy, and we understand that everyone gets that way from time to time. We try to provide assistance in such dire cases by sending an available muse, such as Bob. One of my jobs is to answer any questions you might have concerning the nature of our visit. There are usually a few."

Manny sat still, his creative euphoria somewhat interrupted by the term "constipator." He seemed to be pondering its implications and not coming around to asking a question, so I seized the moment. "Look, Manny Sepulveda is a good friend and an excellent production artist, but now he's thinking he's going to be the next Milton Glaser. What in the heck has happened to give him that kind of creative leverage?"

Agatha's reply began as a humming sound that reminded me, for the briefest instant, of the air rushing toward an old attic ceiling fan. I could sense a soft breeze as her voice settled into her mellifluous speaking tone. "You ask about the seven ingredients," she started. "You see, what you think of as graphic design has seven distinct parts. These parts are really quite different in nature. A person who has strengths in one or two may be weak in others. It is not always easy to find one individual who possesses all seven."

"You mean by 'ingredients' the process of meeting the client, making the image, getting it mass-produced—that sort of thing?"

"Well, these are certainly part of the process of design, but there is an even more fundamental level to design. It is really so basic that it is easy to overlook.

"The thing that you are making, the thing you sometimes call a 'design,' is just one of these seven parts. And they are all intermingled. In fact, the designed thing is really dependent on the six other factors. For instance, do you think you could produce a successful design product if you had no objective—no problem—toward which to work?"

"I see what you mean, you certainly need to know what it is you're trying to do: a problem to be solved."

"Precisely. So, the designed product is always made in response to some objective. You can say that the objective helps to shape the design."

"Yeah, that makes sense. Right, Manny?"

Manny was beginning to look concerned. "What difference does it make what the parts are and how they come together? The ingredients I care about are to get the project completed on time, make the client happy, and, if I'm lucky, show other designers that I am hip to what's happening in the design world."

You could hear two or three seconds of humming as Agatha booted up for another statement. She revved up softly like the purring of an electric cat before she spoke. "Manny, your statement has raised many questions. But I am addressing the issue of how it is that we work as muses—what we have that is so rare among you humans. And that story begins with the seven ingredients. I've mentioned two of them, the design product and the project objective. A third is very basic, but is extremely important: the material from which the design product will be made. Bob will help us demonstrate."

The green morph ball levitated off Manny's desk and hovered in the air in the middle of the room. "There's some material," we heard Agatha's voice say. "And here's your objective."

At that moment, I had a sense of being aware of the concept of "calendar," but it was not clearly focused, was neither visual nor verbal; it was just a sensation of the idea of calendar. At the same time, Manny and I became aware of a glowing, hazy light some seven or eight feet from the hovering green morph ball. It was as if the hazy glow was a representation of my thoughts. Between them stood the calendar sculpture that Manny had made with Bob's help.

We heard Agatha continue, "See, Manny's calendar sculpture is a pleasant fit between the objectives and the material from which it is fashioned. One can say that the designed product is crafted not only from the material but also from the objective. A different material or a different objective would cause a different product to be made."

This sounded simple enough, though I'd never thought about it in exactly that way, especially that the design could be thought of as "crafted from" the project objective. But, at the moment, what I wanted to know was how my thoughts were projected into the room and how the morph ball levitated.

"There are two more pairs of ingredients," she continued, "and they are perhaps more important than the three ingredients we have mentioned so far. The material must be shaped with tools. Your fingers are tools, a computer is a tool, knives, pencils, markers, and erasers are tools. You must understand the tools if they are to have any value."

I thought of the time I'd first encountered a computer. Promising the art director that I knew how to use a Mac, he hired me to help on a rush project and directed me to a Mac II in a back cubicle. I guessed I'd be able to figure it out pretty quick. But there I was, unsure how to turn it on. There was no on-off switch. Who ever heard of a machine with no on-off switch. I pressed every button I could find: still, the screen stayed dark. Eventually, it occurred to me that perhaps the machine turns on through pressure on the screen itself. The art director happened by at that moment, finding me caressing the dark screen with my fingertips! It seemed a self-evident thing, but Agatha was certainly right in saying that understanding how to use a tool was vital.

Agatha seemed to pause while I reflected on the embarrassing memory, then continued. "But the tool does not work in a completely independent way. Something else also influences the journey from material to product. Form. In theory, every possible form is equally likely to be employed, but form cannot 'take shape' until it is created with a tool. And each tool, when used on a material, is able to execute only a small percentage of all possible forms."

Manny spoke up. "Yeah," he said, "remember the time I tried to make that thin ring out of wood? The pine wood kept splitting, and the carpenter said that the grain of the wood was preventing a ring of that size from being possible."

"That's right. Every combination of material and tool has a certain set of forms that are possible and others that are set aside once that tool is picked up. From a limitless reservoir of potential forms, the selection of material and tools constrains the designer to a smaller subset. Which is lucky because the possibility of using an infinite number of forms would take a limitless amount of time to decide. Of course, a tiny fraction of infinity is still large; indeed, it's still infinite—as a philosopher named Zeno once realized long ago. It is amazing that any deadlines are ever met." There was a strange segmented humming and buzzing that I suddenly realized to be the laughter of a muse.

Manny's eyes were starting to glaze. Fortunately, Agatha brought the discussion back to something more concrete. "Look, when you have to do something, thank goodness for constraints of material and tools, because it allows the sampling of a few forms, and when you understand the tools and materials, those forms will be, once again, a nice, comfortable fit.

"But beware. The understanding of a tool must be more than an intellectual exercise; it must be an intuitive understanding. That requires a lot of time playing with the tools, in combination with various materials, to gain an instinctive sense of how to handle them."

Manny asked, "Can you muses really visualize all possible forms?"

"That's what Bob gets paid, so to speak, to do. He dreams forms: all the forms

that can be dreamt, and more, because muses are not limited to the dreams of humans.

"But there are two more ingredients, and they are also, in a sense, varieties of tools and forms. Just as tools and forms are needed to shape material, so are conceptual tools and conceptual forms needed to move from the project objective to the designed product. The conceptual tools are language, metaphor, similarities, codes, rhetoric—in short, all the devices of communication. The conceptual forms are all things that can be thought. Bob and I will spare you that vision.

"It will come as no surprise to you that the adept handling of the conceptual tools and forms can come only after a great deal of play. Ideas and concepts must be juggled awhile before the juggler gets a sense for their balance and spin. Designers are concept jugglers."

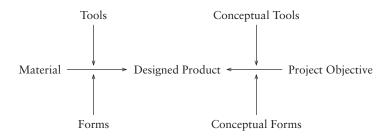
It had begun to rain. Rivulets of water dribbled hurky-jerky down the windowpanes behind Manny's desk. A red car veered rather carelessly through the street.

"That 1968 Pontiac GTO was designed by Bill Porter's GM styling studio. Porter understood the nature of metaphor. The open grill is an athlete's mouth sucking in more air. The wheel-well flarings become biceps and quadriceps. Enter the muscle car. The car sets up a certain kind of attitude. It speaks of power, sex, masculinity, pure testosterone. Today, it also carries a wistful nostalgia to people who were young in 1968. In 1968, nostalgia wasn't a part of the picture. And to people in some parts of the world, the car stood then, and stands now, for Western excess. So, the message of the car is dependent on many conditions of time and space. The concept juggler understands this dependency."

Manny looked concerned. "I don't care what the car means to whom, it's going to wreck if that guy keeps driving it like that on these slick streets."

Agatha started her meditative boot-it-up purr before speaking, "You're right, Manny. The utility of the car as a conveyance is not affected by its style. That's why designers must keep in mind the distinction between utility function, the car as conveyance, and meaning function, its ability to be a message.

The morph ball and glowing light had disappeared. Manny's hundred-year calendar still sat in place. On the floor was a piece of paper with a diagram on it showing the relationship of the seven ingredients to each other:



"Bob and I hope that you have enjoyed our visit. We leave this diagram as a souvenir."

"Hey," Manny blurted out, "how will I be able to do this creative stuff without you?"

I followed up, "Yeah, can he develop some of this ability without needing to call on you guys?"

Agatha hummed awhile before replying. "Your institutions are aimed at one side of the equation or the other. Your industry and some of your technical schools concentrate on the movement of material to designed product. Your universities that offer challenging humanities and liberal arts educations provide a fine insight into culture and the conceptual tools required to move from project objective to designed product. Even allowing that some of these institutions are more successful than others in doing either of these tasks, Bob and I have made clear that both sides are crucial in graphic design. Not many of your institutions excel at both.

"It is very difficult to become fluent in both material and conceptual sides," she continued. "The task is all the more difficult when young people try to manage this in four years of formal education. Even if they attend the most competent schools and work with the best equipment, they have two things going against them. The first is that they are young, the second is that skill in both material and conceptual tools requires time and patience.

"Being young means that they have not had much experience absorbing the culture around them, and even less experience with cultures that are, in time or space, distant from their own. Simply living can lead you to such an understanding, at least at the intuitive level. That was the beauty of the old way of design—the vernacular way. People simply worked for the local subculture to which they already belonged. They absorbed that single isolated scheme and continuously rolled its own symbolset back into the mix. Commercial artists could concentrate on picking up technique, because by simply existing in the environment for which they produced, they were bound to become skillful with the limited array of conceptual tools that were needed.

"The situation has changed, and don't think for a moment that what Chuck Anderson and those guys do is vernacular. They roll the symbol-set of an extinguished past back into the present: a Jurassic Park of cloned extinct symbol creatures roaming about a postmodern landscape. It is not an unself-conscious vernacular, but a highly studied and self-conscious appurtenance of style. Chuck Anderson has the breadth to step outside his culture and borrow from another one next door. If he can go to more than one neighbor, he may keep himself from becoming bored.

"Today's designer needs that kind of breadth. To get it without a formal education, you have to live very long or very hard. Unfortunately, no one manages to live very hard for very long."

The muses began to vibrate. They were growing dim. Manny was staring at his calendar.

Agatha's voice was further away, "We have another call. We must go."

"Any last suggestions before you leave?" I pleaded.

"Only this: have your institutions, educational and professional, look at ways of working together more actively. Find a way to base graphic design upon a full

liberal arts and humanities foundation. Increase cooperative education programs with private industry. Allow a longer gestation period for both technical training and conceptual growth. Look at going to a minimum of five or six years for a degree. Call the degree anything you wish, but remember: it must be an alternative for a long and hard life or it is worthless."

As they began to dematerialize, I caught the merest essence of a remark between the two of them. Bob asked for the address of the next constipator. Agatha answered 232 East Thirty-second Street. The last thing I could make out was Bob's droning response: "Milton again, huh?"



Maud Lavin

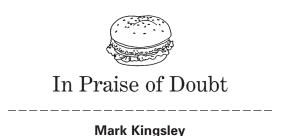
Whether my students are graduates or undergraduates, I encourage them to be selfish. They're building their own practices, however they may define them, and these are practices that in most cases have already started and then get juiced in art school and evolve according to individual will and outside pressures throughout the years. They may be design practices or design and writing practices or writing practices or other kinds of art practices. I want my students to be selfish and think about how what we're reading and doing—no matter how far afield it may be—could intersect with their practices in any way. And to think self-consciously about building their practices and their own motivations for what they want to accomplish and are accomplishing.

Encouraging that intense focus is my contribution as their teacher and it also gets them off my case and onto their own. It's a way of getting them to take responsibility for what they're learning and to follow the threads of their own interests through the terrain that I've mapped out on their syllabi and in class. It is healthy, in other words. Or that, in any case, is the goal.

So this "be selfish" thing is a way to get them to focus. At the same time, just to really get them spinning—and to keep myself stimulated, I try to get them to focus outward, too-to open their eyes and minds to all of visual culture. I teach in the visual and critical studies program at the School of the Art Institute of Chicago, but many of my courses are also cross-listed with art history and/or visual communication; for example, Corporate Culture and Alternative Visions (an undergraduate course I team-teach with designers Sol Sender and Jennifer Moody), Women and Design (an undergrad course I team-teach with designer Ann Tyler), and Lust and Aggression in Contemporary Art and Visual Culture (a graduate seminar I teach). Whether my students are designers or critics or some combination of the two, I encourage them to think broadly about culture and its potential impact. So even in my design-oriented courses, we read Roland Marchand's Creating the Corporate Soul on the history of corporate PR as well as design-specific texts. And, in her book The Alchemy of Race and Rights, we read of lawyer and cultural critic Patricia Williams's experience of wheat-pasting a poster on a Benetton store's window after being denied access due to her race. We read broadly.

I also enjoy team-teaching—connecting reading, discussion, and studio. Learning and doing.

Learning and doing applies to my role as a teacher too. The most extreme case so far has been a three-year collaboration with twenty-six of my graduate students in visual communications and art history to produce The Business of Holidays (New York: Monacelli Press, 2004), which I edited and co-authored. Full color, 288 pages, juicy enough to eat, dripping with images like mashed potatoes in the margins and a swimsuit made of Peeps, the book is about the commercial and visual culture around contemporary American celebrations of holidays. All of the students contributed research and short holiday essays, which went through many drafts. Five of them—Melanie Archer, Alyson Priestap-Beaton, Amy Fidler, Jason Warriner, and Ben Finch—co-designed the book as well as taking on other writing and production jobs; Melanie served as the book's associate editor and senior writer, Alyson as photography editor and senior photographer, and Amy as production manager. And since the book took three years and grad school takes only two, most continued to work on the book well after they graduated and went on to jobs. While I maintained a firm grip as editor, I didn't interfere with the meat of what, say, Alyson did as photo editor. They learned by doing, they built their practices in a very concrete way. And so did I. I learned a lot about working in intimate and intricate ways with the mesh of words and images. So I say, for myself and for my students, be selfish, be generous, learn by doing, and be selfish some more. And while you're at it—produce.



"designer" is more of a calling than a profession. To the more experienced—or jaded—it is definitely a difficult way to make a living. Not only are we constantly called upon to generate fabulous solutions; we have to shepherd them through the diplomatic and psychoanalytic needs of the client, and the transformation from idea to final work. At each step, different skills are required: verbal, visual, kinesthetic, emotional, motivational, mercantile, and so on—all conceived in high abstraction but expressed directly.

Given those demands, the process of educating a designer is certainly complex, but also perversely reflexive because learning is akin to designing: observing ideas and objects then "rearranging" to understand essence and context. As each designer is unique, so are students. There can never be pedagogical consensus; and beyond learning basic skills, every student has to find his or her own path. For the creation of an academic curriculum, I defer to various accreditation boards. For the larger curriculum, I suggest a friend who is often thought of as an enemy: doubt.

Hopefully, the motivation for pursuing a design career is not the mythic allure of berets and paintbrushes, but the desire to be in the world and exposed to novelty. At its best, design is a vehicle for personal exploration. It is the skill that gets us into hard-to-visit offices, gives us a firsthand peek into the interior lives of other people, and enables us to live a thoughtful life. Design then becomes an active philosophy; that is, an investigation of knowledge.

In an entry to the *Encyclopaedia Britannica*, Bertrand Russell wrote: "Knowledge is a product of doubt. When we have asked ourselves seriously whether we really know anything at all, we are naturally led into an examination of knowing, in the hope of being able to distinguish trustworthy beliefs from such as are untrustworthy."

Doubt is the designer's constant companion. Doubt is with us as we write estimates, flip through design annuals, or sit down at the computer. Our minds are suspended between opposing positions (solutions, sketches, etc.), and only through observation and exploration do we reach resolution and knowledge.

Depending on one's mood, designers are either doomed or blessed to lead lives of doubt and inquiry. The design profession can be an ideal breeding ground for what Mary Belenky and her co-authors (*Women's Ways of Knowing: The Development of Self, Voice and Mind* [New York: Basic Books, 1986]) called *constructed knowledge*. In such a fabrication, one integrates one's personal and emotional experience with learned external knowledge into a greater whole. This existence tolerates ambiguity, contradiction, and doubt: The perception of opposing positions is the first step toward critical thinking.

Now the ability to think critically is a fine goal, but there is certainly more to the world. Beyond seeing and beyond thinking, there is knowing. I am of a certain mind-set that sees designers as potential modern-day Gnostics: communing with the mysteries of creativity, developing their powers of observation, and constantly in search of new and unique experiences. These design-gnostics go forth to gain knowledge of the world through its manipulation. The world becomes their text, their profession their pedagogy, their portfolio their Nag Hammadi.

In this iteration one designs for the purpose of learning. If properly motivated and with constant personal reflection, learning how to design—a constant autodidactic process beyond the acquisition of basic professional techniques—takes care of itself.



Learning through a Collaborative Project: A Case Study in Visual Communications

Heather Corcoran

In 2000, a report was released by the National Assessment of Educational Progress indicating that 47 percent of twelfth graders are below basic achievement levels in science. In addition, 39 percent of eighth graders and 34 percent of fourth graders are below basic levels.¹

University City High School, located just west of the city of St. Louis in the vicinity of Washington University, is no stranger to the challenges of science education. Chemistry teacher Daniel Lane reports, "While almost all students take four years of science at University City High School, many do so without a clear understanding of the role of science in an increasingly technological society." Dan finds the students more difficult to engage each year.

THE PARTNERSHIP

In the fall of 2004, Dan Lane and I developed a joint classroom project with two educational goals: First, we wanted to see if visual studies, specifically in communication, could provide high school chemistry students with a legitimate way to learn chemistry. Second, we wanted to explore the potential of undergraduates to teach, mentor, and motivate high school students.

THE ASSIGNMENT

The assignment was to create a series of posters about individual elements of the periodic table, their role in daily life, and their economic and social impact on the globe. Posters were to include at least one image and two levels of text.

University City High School

All three sections of Dan's chemistry course—approximately fifty students—participated in this project. Their role was to develop poster content, gather imagery, and make schematic sketches for the design of their posters.

Washington University

I recruited three teams of undergraduate seniors from my own visual communications program. These seniors would mentor the high school students on research and the development of visual ideas; then they would work as designers to build and refine the posters visually.

THE PROCESS

The high school and college students worked together during three class periods. Most of the chemistry students had no formal experience in design or visual communications. The undergraduates were challenged to translate their own visual training into themes that the chemistry students would find relevant for the project and could apply to their own learning in chemistry and beyond. Among these was the idea of hierarchy—what was the most important thing about the element that each poster should communicate? That lead can kill? That tantalum is mined in the Congo to make cell phones?

Another teaching theme was the power of a piece of text or an image. Does a fruit-filled letter *K* say potassium? A red, upside down fish say that mercury is toxic?

The chemistry students submitted their texts, images, and sketches to the undergraduate seniors, who then built and refined the posters digitally in two open lab sessions. Each senior designed approximately four posters under my supervision. I challenged the seniors to think compositionally, and consider how the posters could relate to each visually. This was unlike most of their work as design students because there were elements and content that they could not control or eliminate. I was surprised to find that this limitation allowed many of the students to work more quickly and freely, an approach that I wish they would incorporate into the early stages of many more of their projects.

THE LEARNING

The resulting co-designed and co-authored posters were reviewed by both groups of students, as well as Dan and myself. For purposes of grading and assessment, we considered the quality and delivery of their concepts and the clarity of the visual form.

But, of course, the posters are simply artifacts. In the end, the chemistry and design learning that led to their construction is more significant, and, unfortunately, more difficult to assess. However, in qualitative terms, Dan and I observed the following:

University City High School

Dan saw an increased level of engagement from his students on this project, compared to other projects in his course. The students were able to make connections between chemistry and the objects and experiences in their own lives

(krypton and Superman; silicon and computer chips). They got to work in a visual context, which was new for many of them. And they got to work with students who were just a few years older than they are, and represent their next developmental step. For a high school student, an undergraduate may feel like a more relevant teacher than someone who is older and more experienced.

Washington University

The undergraduates had to step outside themselves and the bubble of their campus life. At the same time, it was easy for them to relate to the high school students; after all, they had been high schoolers themselves a mere four years before.

The undergraduates also learned about design from this project. In the sessions they spent with the high school students, they were challenged to explain what design and communication are and to evaluate sketches. These are issues that the undergraduates grapple with on a daily basis; by teaching others, they affirmed their own visual knowledge, as well as their verbal communication skills. The principle of learning by teaching is not uncommon, of course; I believe that many design educators, myself included, teach partially to become better designers. We learn about composition and content and color and narrative by talking about it day after day to our students.

The act of teaching is like the process of design in many ways. Educators fashion experiences for targeted audiences. Undergraduates who participated in this project learned about functional communication to a particular demographic in a way that was new for them.

And, finally, each undergraduate designed four posters. This part of the project was an important study in composition, contrast, image, and typography, with pre-imposed limitations. The students were less concerned about designing the perfect poster than they were about melding the various predetermined elements together in the best way that they could. This freed the seniors to take more risks, try things quickly, and move on. It is a principle that I hope that they will now be able to apply to their own work with more regularity.

WHAT'S NEXT?

This model of collaboration between high school and college education proved effective in many ways. If high school education is about gathering, processing, analyzing, and communicating information, then this project introduced visual communications as a complement to writing a paper, crunching numbers for a lab report, or making a presentation. It was offered not as a topic in and of itself, but to enhance a previously defined subject area and educational priority. The project had the added benefit of providing the high school students with mentors.

For the university, this project gave undergraduates a rare teaching experience in a high school classroom, as well as an opportunity do visual design as part of a partnership.

This model can be applied to other academic subjects in the future (history, literature, math) through partnerships between design educators and high school teachers. However, given public education's current emphasis on learning assessment, it will be necessary to develop an appropriate quantitative assessment tool for subject-specific learning on visual communications projects like the chemistry posters. In the spirit of Meredith Davis and others focused on K–12 design, positive quantitative learning results would reinforce the real value of visual problem solving in secondary education and fuel the creation of new design partnerships between universities and high schools.

NOTE

 Basic achievement is defined as the level that "denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade" in the National Center for Education Statistics' Nation's Report Card, Science Highlights 2000.



Thomas Wedell and Nancy Skolos

he creative act of collage can provide endless inspiration for graphic design students. Everything in a graphic designer's bag of tricks—words, ephemera, materials, colors, and contexts—can be recombined to create truly new visual/verbal phenomena. These visual configurations engage both our minds and our eyes, and challenge our preconceptions.

Collage is at once a process and a result. It has been employed for at least a century and its potential as a creative force shows no sign of being exhausted. Milestones include the introduction of found objects onto the surface of "real" art by the cubists; the awakening of spiritual and tactile sensations through unusual combinations of elements by Kurt Schwitters; the posing of complex psychological conflicts by the Berlin dadaists; the exposure of political evil through John Heartfield's mastery of photographic juxtapositions; and the compositional innovations and diagrammatic structures in László Moholy-Nagy's photo/graphic experiments that dissolved the boundaries between photography and design.

As a process, collage is invaluable. Once a project is under way in our studio, more often than not, the tossed-aside pile of scraps at the edge of the desktop is far more provocative than the project being "designed." The unexpected accidents that exist behind the scenes, in drawers layered with cut-up colored paper from earlier creative activities, have sparked and sustained our creative energy for decades.

In teaching, we have also employed collage to make intuition a more tangible, teachable experience. One of our favorite assignments uses thousands of pieces of chopped-up magazines as the catalyst for a liberating exercise in how content and form can be developed simultaneously. The fluidity of mixing and stirring up pieces and the resulting happy accidents—contrast, scale shifts, and collisions—releases an uninhibited sense of play.

IN-CLASS EXERCISE

We take large-format magazines (mostly vintage *Domus*) to one of our friendly offset printers. Each cover is inscribed with a template of shapes drawn with a Sharpie and a straightedge. Some are strips, some rectangles, some triangles, and

some random. Average size is about two or three inches. The printer then cuts the magazines on the guillotine and puts them in a box. Architectural magazines work well because of the richness of color, texture, and three-dimensional space, but if you have a particular topic in mind, you can stack the deck with images appropriate to the subject.

Using the chance operations of collage, students recombine, recontextualize, and reconfigure form to reveal meaning. There are two critical requirements. One is to have a lot of pieces equal to a heap in front of each small group of students. The second is to insist that the students use cropping tools—a pair of black construction paper, L-shaped framing pieces approximately eight to ten inches long in each direction. The students will also need scotch tape, scissors, a glue stick, a pen or pencil, and some letter-size white paper. It is best to encourage students to begin intuitively, sorting through the pile with the framers to see if anything interesting seems to be happening. The Ls can be focused on a small area or a larger field. Random compositions are framed by the croppers, taped in place, outlined with a pen, and trimmed, and then glued onto a white sheet of paper. Initially, these should be generated as quickly as possible and with as little thought as possible. Gradually, a little more consciousness can be awakened and a composition may be aligned more intentionally. Students can work off a central piece that suggests a structure and invent their own parameters, choosing pieces with certain colors, or only typographic pieces.

Cropping is extremely critical to the process. If students have cropping anxiety, they can make photocopies to try various ways of framing the collage. Photocopying is also a valuable way to observe the difference in the collage as the color is removed and the surface becomes more homogeneous. Sometimes it is even helpful to position the collage inside a larger white field to add space on one side or another. Two collages can also be combined to further extend the possibilities. In the spirit of chance operations, it is also fun to look at the unplanned backsides of the collages because they are sometimes more interesting than the fronts. The students are asked to keep their favorite compositions in a sketchbook for future reference. Even if the overall composition is weak, there may be a provocative detail—perhaps the way a letter is cropped off or how a piece of an image meets a piece of type—that can be a starting point for a future project.

THE ASSIGNMENT

Students select three favorite collages and enlarge them to roughly tabloid size. They then use tracing paper overlays with sketches and notations to try various directions for expressing a selected subject. The collages are to be considered a framework, a complex grid, and students should both utilize and break out of the fixed compartments, soften edges, and substitute meaningful content for formal shapes in order to direct the meaning.

Uniting forms with content can prove to be the most challenging because students are more acquainted with working in the reverse—beginning with content

and struggling to provide form. It is useful to go back and forth between the two methods of approaching the process: One is direct narrative (representational) in which the content assembled yields a comprehensible scenario. The second is an assembly of abstract forms (nonobjective), which generate a platform from which the designer can draw out the content. It is easy to see how formal relationships such as scale changes and spatial illusions suggest meaning and automatically challenge conventional hierarchy because relationships no longer fit expectations. (For example, a human thumb can be larger than an automobile.) This conflict of scale can be used to project a strong point of view.

The potential for typographic experimentation is one of the most fruitful results of the exercise. A sentence turned sideways becomes the vertical stroke of a letterform—one idea nested into another or dominated by another. A word contains some letters that are no longer oriented on the baseline but float sideways. Type is sliced mid-x-height and then collides with another slice of another typeface. All of these configurations suggest potential meaningful relationships.

It gets even more exciting when type meets image. A small piece of a building abuts the bottom of the letter *B* forming a typo/photo graphic ligature silhouetted against a bright blue sky. A row of human figures in black pants become letterforms from the waist up. There is seamlessness to the space. Some elements are flat color, some texture, some are photographic, and some are typographic. You can at once be looking at an elevation, a plan view, and a worm's-eye view. The process of collage creates a synthesis that relates many unexpected ideas and objects. Photographic images can converge with shared vanishing points or diverge with multiple vanishing points to suggest multifaceted meaning. Some compartments have deeper space and recede, suggesting the passing of time.

The medium of collage allows the students to efficiently and intuitively pose new solutions that were beyond their imagination. By leaving the form/content relationship more malleable, they are better able to engage with the creative act. Removed from the pressure of having to produce an immediate solution, they can allow themselves to be immersed in a realm where one decision leads seamlessly to the next. Hunches and conscious choices sustain them throughout and lead them to an inner space where they can experience the wonderful give and take of a true creative process.



What Can Students Learn from Studying Misinformation?

Colin Berry

Propaganda—the willful spreading of ideas, information, or rumors with the intent to help or hurt some person or cause—takes a variety of forms: radio and TV broadcasts, loudspeaker announcements, Web sites, or printed materials such as leaflets, stickers, periodicals, or posters. Much has been written about propaganda as graphic design, from the brilliant works by Mayakovsky and Rodchenko in post—World War I Russia, to recruitment posters, whether the Nazis' or James Montgomery Flagg's two decades later. In the twenty-first century, propaganda is used by all sides in the war on terror, from Al Qaeda's gritty videotapes to the *America: Open for Business* posters that sprang up in shop windows after 9/11. But what about its inverse? What can we learn from graphic design as propaganda? Can studying age-old intimidation and misinformation tactics instruct the modern graphic artist?

Absolutely. First, consider how both designer and propagandist necessitate the creation of titles and subheadings and utilize type, text, and layout; both incorporate drawings and photographs that illustrate and clarify their ideas; both ponder paper weight, font size, screen resolution, and methods of distribution when considering their final product. Second, from a tactical perspective, both work under strict deadlines for a client who can be unpredictable, unreliable, and challenging; and both seek the clearest and most direct methods of communication—sometimes in the form of a bold-faced lie.

Recognizing these methods and teaching these fundamentals under the rubric of "propaganda" (as opposed to "design") can afford the instructor the chance to study their psychological intention—that is, their intent entirely outside the graphic aesthetic. It removes the caveat that something *look good* and replaces it with the requirement that it *deliver a message*—an essential distinction many designers often forget.

Consider, for example, a flier created by the Army's 4th Psychological Operations Group (PSYOP) and dropped by the United States on North Korean civilians in 1953. It shows a fleet of bombers with the inscription "WARNING!" and graphically and textually details the fate of anyone who stays in their path. The piece, like all U.S. PSYOP pieces, was designed, created, and delivered in a few days,

and evidently succeeded in saving lives—enemy civilians and American military personnel alike.

Clearly, most graphic designers aren't hired to protect the nation's armed forces, nor create works that routinely make the difference between life and death. One's client isn't usually the enemy. Yet a course of instruction that elucidates such direct methods of visual communication may prove as essential to budding designers as one on typeface or Photoshop. Propaganda is the extreme sport of graphic design: a medium of pure, unadulterated message.

Yet it can be more nuanced. Rather than a direct warning, propaganda can be merely demoralizing, a difference that requires the designer to understand more keenly the complex cracks in an enemy's psychological armor. In Vietnam, a leaflet designed by the North Vietnamese and targeted for African-American soldiers implored them not to "fight for racist USA." In World War II, a German flier lampooning President Roosevelt bore the saying "Rich man's war—poor man's fight," while Japanese leaflets suggested American GIs look to their unfaithful wives. More recently, an American flier dropped on Baghdad during the second Iraqi war carried the slogan: "We wish only to liberate the people of Iraq from Saddam's tyranny."

A design student's understanding of the basest human motives—our desires for food, freedom, sex, money, dignity, or seeing our families and our fears of infidelity, injury, or dying—is key to creating effective visuals. Learning how to appeal to these root human motivations affords a foundation, a boundary against which the young designer can push.

This is not to endorse the spread of global conflict; there are other ways of integrating misinformation's tactics. Recently a new generation of designers and artists has begun to tinker with propaganda's tools, creating fresh works that speak to social or cultural issues. Conceptual artist Packard Jennings distributes eight-page textless instructional booklets at his local mall, pamphlets that advocate overthrowing institutions of consumerism—in a playful, cartoony style. Painter Sandow Birk includes American flags and other familiar symbols into his work to comment upon what he perceives as the country's tendency toward xenophobia.

As a method of direct communication, propaganda predates graphic design by hundreds of years. In the thirteenth century, insurgents flew message-bearing kites into a Chinese prison to incite riots; British soldiers at Bunker Hill were given fliers offering them freedom and land if they surrendered. Often intended for an audience with an entirely different visual aesthetic, it is designed to mimic the targeted culture's native style. As they study its techniques and technologies, students of propaganda will be forced to consider the good of the cause first and the quality of the design second. Recognizing this distinction will afford them a divining rod, a tool, an essential means of understanding human nature for the rest of their professional careers.



Have Sign, Will Travel: Cultural Issues in Design Education

Ellen McMahon and Karen White

f you watched American television in the late afternoons in the early 1960s, you might associate the first part of the above title with a man named Paladin. His calling card inscribed with the motto "Have Gun, Will Travel" expressed his position (armed) relative to his changing surroundings. This essay is about a project intended to disarm design students by making them more conscious of their assumptions and more aware of the instability of signs as they travel between maker and receiver. This project, called "Exchanges: Culture, Place, Identity, Memory," was designed to reveal how graphic design functions as a transmitter of cultural information, personal biases, and social values and to bring students face to face with the complex issues surrounding representation and interpretation.

"Exchanges" is a postcard exchange project that originally took place between our senior design classes at the University of Arizona and the University of Hawaii. Students researched their own histories and selected events that were significant in laying the groundwork for their sense of personal and/or group identities. They then collected (from memory, family interviews, and a variety of readings) verbal and visual material relating to those events. We encouraged them to work with a visual language based on metaphors, icons, symbols, indexes, and signs, and discouraged them from relying on direct literal narratives. The resulting materials were used to create postcards that were sent to exchange partners from the other class. The postcards were discussed with the entire class, and interpretations were mailed back to the designers of the cards. These were followed by e-mail responses and, in some cases, extended conversations between the exchange partners.

The exchanges covered a wide range of subjects from day-to-day concerns to the long-term ramifications of sociopolitical phenomenon, adopted identities, and cultural assimilations. Through extended conversations, students discussed the differences in their design educations, the pros and cons of computers, the relationship between style and meaning, the commodification of images, and sexual stereotyping. Through the family stories of their peers, they learned about forced immigration, political exile, internment camps, and the Holocaust.

Students compared modes of communication used in the cards, from literal

descriptions that did not invite receiver participation, to messages that offered some information but left room for interpretation, to those that were too obscure to hold interest. The compelling content of many of the postcards stimulated an urgency to understand the message in full. Suddenly, many students found themselves firmly on the side of legibility in the ubiquitous form-versus-function debate. Others enjoyed the more open cards that triggered a variety of interpretations and speculation. When the designers of these cards responded by e-mail, it became obvious how the meanings of a particular sign shifted because of individual and cultural experience. The following interpretation illustrates this point:

We first noted the symbols: a background of blue sky, some incense sticks, a wood frame, and a black-and-white photocopy of a bald figure. We noticed these symbols and the absence of any type, and concluded that this piece seems to be about the senses: the smells of incense, the peaceful freedom of an open sky, and the claustrophobic positioning of the figure. All I can think of is that this piece is about some sort of Buddhism. The incense, the bald Buddhist-like figure, and the sky create an image of what a Zen experience is like.

There are some questions that I'd like answered. First of all, is our interpretation correct? Also, what is the figure and why is it crafted in such a manner? The numbers of the incense sticks vary. Is that in any way meaningful? We've noticed the intertwining of the sticks with the sky, but the numbers create some confusion. Finally, the wood frame: it cramps an otherwise open-feeling piece, and we are not sure why.

This was an interesting postcard. It's good that it was not too straightforward because it forced us to look into it more deeply and really search for your story. I cannot wait for a response from you, complete with a story or an explanation about your card.

The eagerly awaited e-mail response from the designer read:

I find your interpretation of my postcard quite interesting. I guess I should start by explaining to you the story behind my postcard. My mom is a traditional Chinese who believed in ancestral worship. My postcard is about my grandfather, who passed away when I was two. We had an altar at home where my mom put my grandfather's picture along with a plaque with ancestors' names, incense, flowers, and fruits. The figure in the card is my grandfather. I only showed the top part of his head because that is what I saw when I looked up at the altar as a child. The incense represents my grandfather in heaven. You commented that the frame cramps an otherwise open feeling. The frame is about the portrait of my grandfather as it serves as a way to save his memories. By putting a frame around the card, I am also trying to preserve the memories of my grandfather because it is like another portrait of my grandfather. I thought a lot about putting text on the card, but I thought the "to:" was enough because it signifies my grandfather's journey from one world to the next....

Two of the Japanese Americans from the class in Hawaii devoted their cards to very different aspects of their cultural pasts. One student raised in Hawaii focused on her Issei (first-generation) grandmother who was a picture bride from Okinawa. A map of the Pacific, a photograph of her grandmother in a traditional Japanese wedding gown, and a lock of her long black hair depicted the common practice of Hawaiian Japanese plantation workers arranging marriages with Japanese women through photographs.

Another Japanese-American Sansei (third-generation) student explored her mother's internment during World War II. On this postcard, the war is depicted through images of soldiers and the proclamation number that forced Americans of Japanese descent into internment camps. Through the visual juxtaposition of American icons and imprisonment, she expressed the personal and cultural tragedy of this historic moment. The following interpretation from the student in Arizona reveals his perspective:

It appears you are someone of Japanese descent whose parents or grandparents spent some time in an American reeducation camp. It seems that innocent Japanese people were sent to these camps to get educated about American politics and so forth. Many of the Japanese people probably felt as though they were being locked up (which the chain link represents on the postcard). I felt that the use of black and white to represent the whole issue was very effective. Black and white can say many different things, and I believe that what you are saying with your piece is that Americans saw it one way and the Japanese being locked up saw it completely differently.

I also noticed on the back of the card that there was no return address or anything. It just had the word "to" printed on it. I don't know if this was intentional, but if I was going into one of these camps I wouldn't know if I was coming back, where I was, or even how to get mail. So, I think that not putting a return address is equally effective at carrying out the whole idea of being stuck somewhere. . . .

The e-mail response from the designer clarifies the original message and provides a different perspective based on her family's history:

For the most part, you knew exactly what I wanted to say. The camp that the Japanese Americans were sent to was not an American reeducation camp, it was a relocation camp that these Americans were sent to because the government was afraid they might leak out secret information to Japan about the U.S. military. They were innocent people who were herded into these camps because they were easily recognized as being different looking. . . . What's funny to me (not really) is that my mom was there too. She doesn't even speak Japanese. . . . Right now, I work part time in a Japanese restaurant, and most of our customers are tourists from Japan. They don't even consider American Japanese as Japanese. They consider us Americans.

In the process of creating representations of personal and cultural experience, many students developed insights into their relationships to one or more cultures. A student raised in Phoenix, Arizona, the son of Czech political exiles, constructed his card out of rusted metal grating smeared with dark red paint—a reference to his parents' suffering. The backside of the card spoke of his visit to Czechoslovakia where he found a cherry tree his mother had described to him as a child. The simple act of picking a cherry himself helped him understand his parents' difficult past and reconcile his own position caught between two cultures.

Two other cards from the class in Arizona addressed the immediate influences of commodity culture. One student who felt his main influences were television and product advertising identified himself with a Universal Product Code and created a postcard that was an elaborate and seductive package containing nothing but a relatively small photograph of himself. Another student presented a dismal picture of his roots in "technoburbia," with rows of identical little gray houses, and the only distinctive symbol a looming McDonald's sign. The former celebrated his freedom to create himself as a commodity, the latter lamented his isolation and separation from his ethnic history.

One student from the class in Arizona received a card made of woven vellum strips covered with gritty crescent-shaped black-and-white imagery and Chinese characters. Since no one in the class read Chinese, another student took the card home to his Chinese paternal grandmother for a translation of the writing. It turned out to be a recipe for (very) American macaroni salad (lots of mayonnaise). This new information allowed us to see the forms as elbow macaroni. The interpretation of the card dramatized the investigative aspects of the project, turning the reading of signs into the solving of a mystery and also pointed out the unintentional effect that the method of production can have on the message. The designer's name was Carmen, which inspired the opening line, a reference to the children's show on PBS, Carmen Sandiego:

So, Carmen—if that is your real name—thought you could throw a smart guy like me for a loop using incongruous formats, illegible hieroglyphs, and cloaked subject matter, huh? Well, it didn't work. I see through your pseudotechnical presentation in diffusion dither and right to the heart of your fetish for macaroni salad. Never mind all your efforts to sidetrack me into thinking this is a piece about scanning electron microscopy or germs or viruses or any other creepy-crawly things unnoticed by the naked eye. . . . It was so simple, a lesser-trained eye may have missed it. Your computer is a Macintosh SE, SE/30, Classic, Classic II, or PowerBook running a Chinese Language Kit, with no color capabilities.

Many issues were raised about culture and design as these diverse student bodies participated in "Exchanges." Throughout the research phase of the project, students discovered the roots of their own perspectives; through the design phase, they enriched their own visual vocabularies by translating this information into form; and in the exchange phase, they learned about diverse cultures on a one-to-one basis. As design educators, our role is not to censor or ban our students from using any particular kind of imagery, but rather to foster an understanding of the ways that images carry meaning. The bonds that formed between students in the process of "Exchanges" created a personal interest in some of the important issues presently facing professional design practice, like stereotyping, appropriation, and the commodification of ethnic images. Through direct interaction, students got a sense of what they don't know about the experience of others. Our hope is that the humility gained will make our students more responsible visual communicators, and more responsive to the complexities of representation and interpretation.

Special thanks to Stacie Widdefield for her thoughtful suggestions about this essay.



Searching for a Black Aesthetic in American Graphic Design Education

Cubrio Hauria

Sylvia Harris

What influence have African Americans had on contemporary graphic design? Is there such a thing as an African-American design aesthetic? These are questions that I have been asking designers and art historians for the last ten years. The answer I am usually given is, "I don't know." The relationship of ethnic minorities to the development of American graphic design is rarely discussed or documented by our profession because of the historic lack of racial diversity in the field. However, increasing numbers of African Americans entering the profession are calling for a fresh look at graphic design history in order to discover the aesthetic contributions of their people.

In 1971, when I entered design school, there was only one other black student in attendance. Twenty-five years later, this situation has improved slightly. Today, I teach graphic design at the university level and have one or two black students in my department each year. Those students often exhibit insecurities that negatively affect their performance. In fact, they experience a problem common to many black design professionals: the feeling that they are not completely welcome in the profession. Lack of exposure to the prevailing aesthetic traditions also puts them at a disadvantage. This outsider posture leads many black designers to compulsively imitate and assimilate mainstream aesthetic traditions in order to feel accepted and be successful. More often than not, black designers and students are trapped in a strategy of imitation rather than innovation.

The graphic design profession is driven by visual innovation. The most visible and celebrated designers are those who are continuously innovating within, or in opposition to, the prevailing schools of design thought. Black designers are working at a disadvantage when they do not feel a kinship with existing design traditions and also have no evidence of an alternative African or African-American design tradition upon which to base their work. In 1995, Claude Steele completed groundbreaking research on the links between performance and self-esteem, which indicated that self-confidence may be the single most important influence in the lives of successful African Americans. For instance, the spectacular success of black musicians demonstrates the relationship between confidence, leadership, and success. Black musicians have been successful because they feel confident and secure about their

work. They are secure because they are working within intimately known traditions built by others like themselves, and they are motivated by the thrill of adding to that successful body of work.

Is there a potential design tradition that can fuel black designers in the same way that black music traditions fuel black musicians? By "black tradition" I do not mean black subject matter or imagery, but the styling and expressions common to people of African descent. I believe this tradition does exist, but black contributions to America's rich graphic design history have been overlooked, so far, by design historians who have focused either on European influences or on the current phenomenon of cultural hybridity. Buried in libraries and design journals is evidence of black graphic styles and influences stretching from the New Negro movement of the 1920s through the hip-hop aesthetics of the latest generation of designers. I believe that this material, if uncovered, has the potential to nurture a new generation of designers.

How do we construct and document a black design tradition? There is already a small body of research on the lives of America's first black designers. Chronicling the work of these pioneers is an important first step, but most of these brave people were so concerned with surviving within a hostile profession that their work expresses little that is uniquely African American. I believe that the building blocks of a black design aesthetic are scattered across many disciplines and will be found in unlikely places. For instance, some of the best examples of the potential for a black design vocabulary are found in the work of white designers who have been inspired by black culture and take advantage of the market for black expressive styles.

We must also look outside the design disciplines to the performing arts and to fine arts movements, such as the Afri-Cobra, which have based visual explorations on African and jazz rhythms. We can study these disciplines for characteristic black expression (improvisation, distortion, polyrhythms, exaggeration, call and response) that can be translated into graphic form. Black design traditions must be pieced together from a variety of sources to make a complete canon of black expression.

In discussion with design educators (both black and white), many argue that to focus too much attention on black aesthetics will limit the full creative expression of black designers. They argue that black designers have spent the last twenty years working to erase race and class bias in the profession; to them a focus on blackness invites discrimination. I disagree. Black designers have access, training, and opportunity; what they lack is the drive that comes from innovation. And in order to thrive, innovation requires a tradition to either build on or oppose. It is up to us as historians and educators to research and teach in a way that addresses the unique cultural experience of all our students. Right now, black design students would benefit greatly from a study of their design traditions. Otherwise, they may be doomed to a future of bad imitations.

The notes below are excerpts from my ongoing search for black influences in American design.

1920s: THE NEW NEGRO MOVEMENT

In his first design history book, A History of Graphic Design, Philip Meggs stated that "a collision between cubist painting and futurist poetry spawned twentieth-century graphic design." Early twentieth-century cubist artists were obsessed with visualizing modern technological and social freedom. The style of the non-Western people of the world, particularly those who had perfected forms of abstraction and symbolism, were quickly drawn into the stylistic vortex created by this modernist revolution. In this way, black graphic expressions made their debut in the Western world indirectly, through the works of cubist artists such as Georges Braque, Pablo Picasso, and Fernand Léger. All these artists later acknowledged the significant impact of African art on their work; however, most scholarly writing about cubism has obscured its African roots. Postmodern art scholarship, starting with William Rubin's book "Primitivism" in Twentieth-Century Art: Affinity of the Tribal and the Modern, has begun to record and study the role of African art in the invention of cubism and the success of the modernist movement.

By the 1920s, "jazz" became not only a musical term, but a stylistic one. European designers, who were influenced by the pioneering work of cubist painters, struggled to capture the spirit of modernism through the expression of jazz rhythms and motifs. The expression of jazz style in the design of popular communications in the 1920s represents the first appearance of what can clearly be considered a blackinspired graphic design style. The jazz-era climate of relative freedom in the North created an environment for blacks to publish and design their own publications. During this "renaissance," Alain Locke cited the emergence of the "New Negro" and declared that black culture was the appropriate source of inspiration and content for African-American artists. He argued that the art of black people was a powerful inspiration to successful white artists, so why shouldn't black artists also work with this powerful force? One of the first designers to give graphic expression to this call was a European modernist, Winold Reiss, who created African-inspired logotypes and titles for the book The New Negro. Young black artists, most notably Aaron Douglas, were encouraged by Reiss and Locke to expand the emerging modernist trends and lead the emerging New Negro art and design movement.

The line between artist and designer was still blurred in the 1920s. Many artists were illustrators, and illustrators were often typographers. The best examples of the African aesthetic in the designs of the 1920s are seen in black-owned journals. The designers of these publications were often black artists, influenced by European cubist painters, who were, in turn, influenced by African art. Artists such as Aaron Douglas, one of the best of these artists/designers of the time, learned to recognize and resonate with the African in cubism. Douglas and other black designers had a unique opportunity to express black style in a world that was starved for fresh, anti-Victorian imagery. Douglas's covers for the quarterly magazine *Fire!!* show the emergence of a unique graphic design expression that combines the syntax of cubism with the forms of African art.

1930s: REVIVAL OF BLACK FOLK TRADITIONS AND THE ICONOGRAPHY OF BLACK LABOR

The prolific jazz-age production of black art and design was cut short by the Depression of the 1930s. However, during the 1930s and early 1940s, a revival of black folk traditions occurred, prompted by the direct observations of anthropologists and folklorists such as Zora Neale Hurston, Southern white writers such as DuBose Heyward, and interviewers for the WPA oral history project on slavery. Artists supported by federal arts programs and socialist groups interpreted black folk and labor themes in programs, posters, fliers, and other printed materials. It is not clear how much of this material was designed by blacks; examples buried in archives await inspection, interpretation, and inclusion in the design history texts.

1940s TO 1950s: COMMERCIAL ART

Printing and publishing before and during World War II were significantly segregated. Unlike the fine arts professions, publishing institutions were restricted by racism and classism. Most printed publications and commercial art that circulated in black communities was generated by white-owned presses and designers. However, we do know that some black printers and photographers worked successfully in black communities; their products, including letterpress posters for popular music performances, were based on vernacular traditions and contributed directly to a continuing black graphic aesthetic.

1970s: THE AESTHETICS OF BLACK POWER

It is interesting to note that the bursts of black graphic production in the twentieth century occurred during eras in which young people were preoccupied with concepts of freedom. It is no surprise that the 1960s saw a renewed interest in African-American visual expression fueled by black cultural nationalism. Some of the work of this period combined socialist protest-art forms with black in-your-face bodaciousness to create a graphic design product that was uniquely African American. This decade of black graphics reflects the aesthetics of resistance and black power.

1980s TO 1990s: TRIBAL CHIC

Popular designers and illustrators such as Keith Haring and David Carson benefited from the lack of black participation in the design profession during the late 1980s surge of interest in rebellious urban style. They shaped new styles and lucrative careers based on bold public vernacular expression such as graffiti and rap, class rebellions and black rhythms, and tribal symbolism. At the first Organization of Black Designers conference, filmmaker Arthur Jaffa cited David Carson's *Ray Gun* magazine as offering the best example of a visual jazz aesthetic.

1990s: THE NEW NEW NEGRO MOVEMENT

There are a handful of black designers who are designing for black audiences and, in doing so, are continuing black visual traditions into the next century. For instance, designers for new black media, including the magazine *YSB*, give graphic form to contemporary black culture. Like the artists of the original New Negro movement of the twenties, these designers use black vernacular stylings and African expression to inform their aesthetic decisions. The designers of this new generation are not isolated. They are working within a long tradition that, though they may not be aware of it, stretches across the century.

These notes are presented as snapshots and pointers to the research waiting to be undertaken. It is my hope that American designers and scholars will contribute to this body of knowledge and support a generation of designers hungry to see their people and experience reflected in the mirror of our profession.



For the Sake of Humanity: Teaching Cross-Cultural Design with Empirical Inquiry

Audrey Bennett

Today, teaching graphic design students how to communicate visually requires teaching them how culture affects the audience's interpretation of visual language. With the onset of globalization spawning multicultural awareness, the graphic designer's audience is more culturally diverse today than ever. The question then is this: Can there be clear communication when the graphic designer is from a different culture than the target audience? According to David Berlo's theoretical model of communication, clear transmittance of information occurs when the encoder (e.g., the designer) shares the same culture as the decoder (e.g., the audience).1 One can infer from Berlo's model that a successful communication transaction cannot occur if the designer does not share the same culture as the audience. For instance, in Type and Image Philip Meggs recounts a conversation he had with Sylvia Harris, in which she describes the following miscommunication:

A group of American students tried to encourage inhabitants of a village in Nepal to take certain sanitation precautions. They presented the inhabitants with a three-foot-tall graphic of a fly contaminating food with infectious bacteria. It was the intent of the American students to persuade the inhabitants to take the recommended precautions. Instead, the inhabitants of the village only laughed because they felt they had nothing to worry about. After all, the flies in their village were minuscule compared to the giant ones in the graphic.²

The Nepalese audience did not understand the visual language due to cultural differences between themselves and the student designers. The students failed in their cross-cultural communication effort because they assumed that they had the cultural knowledge and/or experience necessary to speak for and to their audience. The question then becomes: How could a more successful cross-cultural communication transaction have been facilitated between the American students and the Nepalese audience? In response to this question, I posit that if the Nepalese people had played a more active role in the design process, the American students might have created a more successful graphic.

Within the broad discipline of design, the act of designing with the audience has been branded collaborative,³ participatory,⁴ inclusive,⁵ contextual⁶ under the umbrella terms: user-centered design⁷ and more recently human-centered design.⁸ The fundamental premise of human-centered design is that members of the audience are far more knowledgeable about the cultural codes, symbolism, narrative strategies, and other visual rhetoric than a designer from outside that culture. But the very idea of inside/outside a culture is now more complex. Locally, within the United States, the minority population comprises 31 percent of the population and will grow to 50 percent by 2050.⁹ The present and future audience is both multicultural and intercultural. It comprises individuals from different cultures determined not just by ethnicity but also by geographic location, religious beliefs, profession, age, and even gender.

In 1997 Katherine McCoy observed that practitioners were designing for heterogeneous subcultures instead of the typical mass homogeneous audience, due to the multicultural renaissance of that period. ¹⁰ Today, multiculturalism is still an issue within graphic design practice and consequently its pedagogy. In 2002, Designing across Cultures provided practitioners with market research-driven heuristics for designing to culture-specific audiences as well as to multicultural ones.¹¹ However, instead of relaying techniques used by other designers, we can teach students to make their own discoveries about the culture-based needs and wants of audiences with empirical research methods. In 2003, Design Research by Brenda Laurel provided the discipline with qualitative and/or quantitative research methods to collect data from the audience, analyze it for meaning, and reach conclusions that inform one's creative hunches.¹² Laurel's book, among other readings, 13 is required for my graphics students. The theme of my course is crosscultural design for the sake of humanity. In it, students use empirical inquiry to design awareness campaigns about life-threatening social issues like HIV/AIDS. In order to determine how to use visual rhetoric to effect attitude and behavior changes in people, students adopt a Frascaran perspective and start creative problem solving as an anthropologist might.¹⁴ They collect information directly from individual people about their cultural background, values, and belief systems that affect their attitudes and behavior and their interpretation of visual language. Systematically, the students progress through a human-centered design research process in which they follow the steps below:

- Define the problem
- Research and analyze the audience
- Choose an appropriate research method to generate ideas with the audience
- Develop a prototype
- Choose an appropriate research method to test the prototype on the audience
- Design the final object
- Use an appropriate research method to measure the positive/negative effect(s) upon the audience

In a design lab book, ¹⁵ students record and store the data that they gather during each phase of their design research process. Using this empirical method to design brings about efficiency in the design process ¹⁶ and replicability to future projects—especially when the process is documented. But does empirical inquiry resonate with graphic design students? Over five years, I've observed the following student experiences with empirical inquiry.

STUDENT A

The first type of student wants to be an artist. Student A prefers full control over the creative development of his ideas because he feels he has knowledge to impart to the audience. He considers the process of empirical inquiry to be tedious. However, at times he finds audience input helpful to the development of his personal style of artistic expression—especially when it is in accordance with his own creative sensibilities. He tends to create cross-cultural communication graphics that visually dazzle some members of the audience but baffle others.

STUDENT B

The second type of student is the nondesign student who wants to be a technical writer. Student B has a strong foundation in theory, research, and writing. She sees the final object as a communication tool that needs to convey information clearly to its audience. Thus, she embraces the approach as a reliable way to design more culturally appropriate graphics for the audience. She acquires extensive feedback from the audience, and works closely with the audience on the development of the text and image-based graphics for her project. Student B tends to create effective cross-cultural communication graphics that resonate with the audience but sometimes lack visual appeal.

STUDENT C

The third type of student wants to be a graphic design practitioner. Student C has a fine arts background but understands the communication requirements of a design object. He is at first dubious about empirical inquiry. Yet, he diligently records and carefully considers his audience's feedback. He feels enlightened when the audience doesn't concede to his creative choices. Seldom does he follow his own intuition. From his data he gains insight as to how he should visually translate information for his audience. Student C tends to create effective cross-cultural communication graphics that are usually visually enticing.

My observations thus far reveal that empirical inquiry empowers the graphic design student with the option to inform his or her creative hunches with reasoning based on the analysis of audience feedback. But on the seesaw of creativity, there needs to be a balance between reasoning and intuition. Too much reasoning leads

to uninteresting cross-cultural graphics. Too much intuition leads to culturally inappropriate and uncommunicative graphics. Once a type A student decided to follow his intuition after acquiring minimal audience feedback in phase one of his design process. He wrote a poem called "New Places. New People. New Risk." for his campaign poster warning of the danger of contracting the HIV virus by being a newcomer in a big city and picking up new sex partners at new bars. He visualized his poem as a stunning triptych with silhouettes of a cityscape, multicultural city folk ages fourteen to thirty-five, and a typographic landscape made up of the letters H, I, and V. While a visually arresting piece, its artistic style was not rhetorical to his peers because it did not offer preventive tips. It also inappropriately suggested that bar hopping was an at-risk habit of city people across all cultures. Further audience feedback and reasoning could have prevented these oversights.

Yet, once a type C student was forced to rely solely on her intuition when members of her African-American audience would not talk to her about the topic of HIV/AIDS out of fear. But countless other type C students have acquired and followed suggestions from their audience only to arrive at bad-looking work that do not make it to their portfolios. I've discovered, though, that there are times when empirical inquiry challenges my own notion of rhetorical and aesthetic worth in graphic design. For instance, in phase three of the design process, a student B persuaded a real-life organization to place his HIV/AIDS awareness posters on its Web page for feedback from its homosexual members. When I gave him a thumbs down on the rhetorical and aesthetic worth of his cross-cultural graphics, he gave me hundreds of thumbs up from members of his audience.

I conclude that empirical inquiry is a powerful and viable tool to use when teaching cross-cultural design in the classroom. With it we can beget "muscular designers" with social consciences.

I thank the editor, Steve Heller, for his useful comments on the first draft of my essay. I also thank Dr. Ron Eglash for being a sounding board for the development of my research perspective. Finally, I thank Jorge Frascara for paving the path in design research for graphic designers to pursue truth.

NOTES

- 1. David Berlo, *The Process of Communication: An Introduction to Theory and Practice* (New York: Holt, Rinehart and Winston, 1960).
- 2. Paraphrased from Philip B. Meggs, *Type and Image: The Language of Graphic Design* (New York: John Wiley & Sons, Inc., 1992).
- 3. Stephen A. R. Scrivener, et al, eds. *Collaborative Design: Proceedings of CoDesigning* 2000 (London: Springer-Verlag, 2000).
- 4. Doug Schuler and Aki Namioka, *Participatory Design: Principles and Practice* (Hillsdale, NJ: L. Erlbaum Associates, 1993).
- 5. John Clarkson, et al., *Inclusive Design: Design for the Whole Population* (London: Springer-Verlag, 2003).

- 6. Hugh Beyer and Karen Holtzblatt, Contextual Design: A Customer-Centered Approach to Systems Design (San Francisco: Morgan Kaufmann Publishers, 1997).
- 7. Jorge Frascara, User-Centered Graphic Design: Mass Communications and Social Change (Bristol, U.K.: Taylor & Francis Group, 1997).
- 8. Richard Buchanan, "Human Dignity and Human Rights: Thoughts on the Principles of Human-Centered Design," *Design Issues* 17, no. 3 (2001).
- 9. Genaro C. Armas, "By 2050, Racial Gap a Thin Line," *Times Union* (18 March 2004).
- Katherine McCoy, "Graphic Design in a Multicultural World," HOW (April 1995): 145–151.
- 11. Ronnie Lipton, Designing across Cultures: How to Create Effective Graphics for Diverse Ethnic Groups (Cincinnati: How Design Books, 2002).
- Brenda Laurel, ed., Design Research: Methods and Perspectives (Boston: The MIT Press, 2003).
- Other reading on design methods: Nigel Cross and Robin Roy, Design Methods Manual (Milton Keynes, U.K.: The Open University, 1975).
- 14. Jorge Frascara writes about the integration of social science methods in the design process in *Design and the Social Sciences* (London: Taylor & Francis Group, 2002).
- 15. See www.rpi.edu/~bennett/design.lab.book.pdf
- 16. Jorge Frascara, Communication Design: Principles, Methods, and Practice (New York: Allworth Press, 2004).
- 17. See Note 13.



Maximize the Message: Tailoring Designs for Your Audience in a Multicultural Era

Katherine McCoy

echnology and social changes make this the era of the audience. These two major forces challenge communications designers to expand our design methods. In design school, we are trained to conceptualize and organize clear interpretations of our client's messages. As we mature, most designers cultivate a unique way of expressing themselves, a personal design style. But these key design skills—the *sender*'s eloquent expression and clear *message*-making—cover only the first two components of the basic design equation of *sender-message-receiver*. The third component—the *receiver*, or audience—is more important now than at any time in our profession's history.

To paraphrase a recent political campaign slogan, "It's the audience, stupid." But throughout the twentieth century, designers designed for an undifferentiated audience. The Bauhaus envisioned universal design solutions for universal crosscultural audiences. The Museum of Modern Art named Bauhaus modernism the "International Style" in 1932, and Herbert Bayer hoped his "Universal" typeface would satisfy all our typographic needs.

Is there a universal audience out there that decodes and responds to all messages in a uniform manner? Does "one size fit all"? Major social and technological changes make the answer a resounding no.

Since the late 1960s, a new social context has evolved, breaking up the global society that defined the world after World War II. A renewed celebration of ethnic diversity counterbalances the long American tradition of assimilation. Combined with new waves of immigration, this means the United States now has many richly multicultural audiences. Added to this is the rise of subcultures and special interest communities knit together by shared values across geographic boundaries.

New technologies enable this social trend, countering the constraints of mass communications that dictated one (universal) message for everyone. The economics of technology in the 1950s gave us three television networks. Now we have vast choices of TV channels and programming. The Internet opens up immeasurable interactive media experiences tuned closely to each individual's preferences. Narrow-casting is rapidly replacing broadcasting: Special interest programming and publishing allow finely tailored communications channels and distribution.

"One size fits all" is rarely the best communication strategy in a multicultural world where technology gives our audiences choice. For effective communications, our design messages, expressions, and channels must be shaped in response to each project's audience and its special attributes.

We must know our audience to create successful design solutions. Each member of a message's audience operates on two levels. Each interprets a message as a member of a *community* and each audience member also responds as an *individual*. These parallel identities suggest two design strategies: *tailored* communications, in which a message is *targeted* compatibly to a community's characteristics; and *tailorable* communications, in which a message can be *customized* by individuals to fit their unique needs and preferences.

TAILORED COMMUNICATIONS

Traditional targeting has been practiced by advertising and marketing for years, sometimes well but often superficially. Demographics have described audiences by geographical location, age, and income. However, audience communities are changing, and we often identify more with distant and dispersed subcultures than with our neighbors.

We all are members of at least one, and often several, interpretive communities, formed by shared characteristics. These characteristics color how we receive and interpret messages, and act as filters for all communication. An audience community shares similar values and beliefs; similar goals and commitments; a similar sense of identity and belonging; and shared symbols. And each community typically has shared communication styles, habits of processing communication, and preferred media and distribution channels. For example, ergonomic characteristics can be important factors in age-related communities.

These shared values and experiences promote a shared set of symbols that audience members decode similarly. Words are symbols that carry meaning only for those within that language's community. The same applies to visual symbols. For instance, a simple drawing of a fish symbolizes a food source to many, while it has come to be a unifying religious symbol for Christian fundamentalists. Since World War II, a swastika has evoked horrific associations of genocide to the Western world, but has been a powerful spiritual symbol for a wide number of indigenous cultures for centuries. Individuals learn the meaning of verbal and visual symbols through participation in their interpretive communities and reach a cultural agreement on their meaning. The meaning each of us attaches to a symbol—how we decode it—is dependent on the lens of our community reference point.

Interpretive communities also share communication styles. An understanding of our audience's communication style for each design project is key to designing communications that connect. Here are some components that shape an interpretive community's ability to interpret a message successfully and sympathetically.

Each community has a verbal language of fluency, or a mother tongue. It is obvious that one should not design a communication in Spanish when the target

audience speaks and reads only German. But there are nuances and subsets of language beyond this.

The "voice" of a language can differ widely between audience communities, shaped by accents, pronunciations, speed, and volume. Think of the cockney accent versus the "Queen's English" or a Texan drawl. The body is also part of language, including variances in proximity, stance, and hand gestures—Italian expressiveness, "in your face" aggressiveness, or British reserve.

Sometimes language varies in vocabulary and syntax due to region, class, age, or gender, such as the special version of Japanese spoken by women or children. Slang varies from subculture to subculture—think of the different vocabularies of Americans and Britons or Valley girls and Brooklynites. Professional jargon among knowledge workers and MBAs can also be a distinct style of communication.

Conceptual approaches differ between language groups, including indirect references and contextual inference (frequently preferred by the Japanese or British), getting straight to the point (American corporate style), and incredibly precise vocabulary (German).

Different subcultures often prefer different rhetorical styles, such as quantifiable versus qualitative information, appeals to emotion versus logic, poetry versus prose, and metaphor versus fact.

Finally, the literacy characteristics of an audience community affects the ability to decode written language, including educational levels, breadth of vocabulary, and reading skills and habits. Another form of literacy is crucial as well—technological expertise, including the ability to negotiate the Internet and to confidently operate a computer or DVD player. This form of literacy impacts the audience's ability to receive communications in many media channels.

Every audience community has preferred media and distribution channels; some watch television very little, but read newspapers avidly; others surf the Web but never read a magazine; some rarely see a billboard but read subway boards or bus cards daily. Designers must ask through what media and in what environment does a target audience receive its information? What communication technologies are readily available, accessible, and affordable?

Important ergonomic characteristics can include diminished eyesight and hearing, and attention span and memory limitations in both the young and old.

All this adds up to shared communication "attitude," style, and habits. Although many of these have to do with spoken language, most have written language parallels, and visual parallels as well. An amazingly wide and fertile territory awaits exploration by designers, in which we can identify interpretive communities' familiar and preferred visual communications styles as well as their verbal styles. Local vernacular and visual communications frequently employ rich visual languages. Cultural anthropologists and sociologists offer useful techniques and potential collaboration for design teams.

TAILORABLE COMMUNICATIONS

All these considerations affect how a designer might tailor a visual communication message to a group—a target audience or an interpretive community. These audience characteristics can also inform how we design with the second strategy—tailorable communications designed to allow each individual audience member to accommodate his special needs and characteristics.

This strategy creates flexible, customizable communications that can be tailored by the receiver for his individual characteristics, needs, skills, and contexts, all of which may change over time and even from moment to moment, as their needs change and their skills develop. The whole new world of electronic interactive media, including the Internet, CD-ROMS, and customizable software, provide this opportunity. For instance, an individual audience member can choose the depth of reading and a nonlinear navigation path through content, based on her interest level and information needs. She can choose the language in which the message is delivered, and potentially how information is shaped—for example, by visual chart, numerical table, or verbal list. Educational packages can be customized for learning style and skill level. In software, one can choose short or long menus, and add and delete whole modules. The individual audience member can customize an interactive news source for his personal interests. Internet chat rooms offer user-to-user communication and encourage user content creation. All these forms of interactivity can enable the individual audience member to customize a communication to his special needs, making the message more personally accessible, useful, and meaningful.

It is not just electronic media that is interactive and tailorable to individual needs—in fact, many traditional print media also offer a degree of customization of experience. Our student workshop at the Illinois Institute of Technology's Institute of Design evaluated a range of "traditional" media for their interactive potential. We found that many media include some interactive opportunities, including nonlinear navigation; variable depths of reading, browsing, and scanning; flexible pacing; parallel formats; tracking of user characteristics; audience feedback; user-touser communication; audience content creation; and flexible output. For instance, a novel—perhaps the most fixed communication medium—does not allow nonlinear navigation or browsing, but it is often available in alternate forms of output, including hardbound, paperback, large print, Braille, foreign languages, and bookson-tape. The ubiquitous Time magazine accommodates a number of user customizations, including nonlinear navigation, scanning, browsing, and flexible pacing; its Letters to the Editor section accommodates some user-to-user communication and user creation of content, and advertising reply cards allow a form of feedback. A play in a theater may be linear, with set pacing, but may allow for audience feedback and user-to-user communication in the form of applause or restlessness, and actors respond to user feedback.

In a communications workshop at the Illinois Institute of Technology's Institute of Design, we focused on user-centered design, exploring strategies to

enhance the audience's experience. I challenged a group of undergraduates to design tailored and tailorable messages—alternatives to "one size fits all" visual communications. The first assignment was to select an audience interpretive community and tailor a public health message to their special characteristics. The second step of the assignment called on them to take the same message and tailor it to a different audience group. The final step of the assignment asked them to design a tailorable version of the message that individuals of a wider audience could customize to their individual interests and needs.

Most communications projects require a subtle hybrid of tailored and tailorable strategies. Each project's audience's values, symbolic codes, communication styles, and preferred media and distribution channels must inform how we shape the written message, how we translate it into the visual/verbal forms of communications design and into what medium it will materialize. In today's complex multicultural world, designers must balance the three components of the sender-message-receiver equation to achieve resonant audience-friendly design solutions.



Who's Afraid of the Big Brand Wolf?

Marty Neumeier

here was Milton Glaser, onstage at the 2004 AIGA Gain Conference, saying how he *despised* the term *branding*. We all laughed, partly because of the mock dramatic way he said it, but also because there's something in all of us that despises the term *branding*. Then he added, with lip curled, that *branding* reminded him of burning things into animals.

And why shouldn't it? The roots of the word *brand* go back to the old Norse *brandr*, meaning "to burn," and its meaning hasn't migrated much. Even today, the thought of a white-hot poker searing living flesh can make any number of body parts curl.

Rewind to the 2003 AIGA National Conference, to a Brand Experience breakout session. More of a breakdown session, really. Instead of being a dialogue about the ways designers might harness the power of brand, it turned into an argument over its moral right to exist. It looked like branding might be tarred and feathered and run out of town on a rail. Like a fool, I stood up and said, "There's no way branding can be used for evil!" Shouts were hurled back and forth across the aisle, and within minutes the authorities arrived to close the meeting.

As the ruckus moved into the hallway, one of the combatants pointed at me and said, "It's that word *brand*. I'm sick of this marketing jargon. We should just use a normal word and be rid of *brand* once and for all."

Okay. Maybe.

So a group of us stood there and made a list of alternatives—name, reputation, promise, trademark, perception, story, community, identity—all jargon-free words, but none that encompassed the fullness of the concept. Well, we could try to mint a new word. Something with no prior meaning, like blurfel or noitapitsnoc. Or we could construct a classy neologism from Greek or Latin morphemes, like signetics. But we all agreed that language doesn't work that way. What we needed was not a new word, but a new definition of the word we already had.

The brouhaha over *brand*, it seems to me, may well be based on a series of irrational fears. I'd like to take a moment to bring them into the light and examine them more closely.

Fear #1: Brands are erected by evil companies to disguise their bad behavior. We immediately think of the executives at Enron, who hired Paul Rand to design a handsome trademark for the front of the building, while in the backroom they conspired to bilk their shareholders out of millions.

Question: Are brands created by companies—or by customers? The most current thinking on brands is that customers create them out of the raw materials issued by companies. The company doesn't own the brand, but it can help build the brand by keeping its promises. The "brand" that customers have of Enron is that of a lying, cheating sonovabitch who used a respectable corporate image to trick people into investing large sums in a fraudulent enterprise. Is this an example of branding—or *un*branding?

Fear #2: Branding is commercializing our lives. It seems as if we can't go anywhere these days without fighting off billboards, slogans, commercials, logos, and other examples of selling, selling, and more selling.

Question: Is this branding—or advertising? Branding is about building long-term value by setting and exceeding customer expectations. Advertising, on the other hand, has been about driving short-term sales with attractive promises. One of the reasons the advertising industry is under pressure right now is that customers are demanding accountability in addition to salesmanship. So isn't branding, by virtue of its built-in accountability, a welcome counterbalance to advertising?

Fear #3: Global brands are the Trojan horses of creeping cultural imperialism. Here we might think of Disney or McDonald's, contaminating other cultures with lowest-common-denominator American values, their influence spreading like a virus through children whose parents are nearly helpless to resist.

Question: Isn't the term *global brand* a misnomer? If a brand resides in the mind of a customer, then Disney or McDonald's is a significantly different brand in each culture. In the long term, the competitive forces of branding will sensitize companies to individual cultures or else risk abandonment, as people begin to reclaim their cultural authenticity.

Fear #4: Brands will become more powerful than countries. As corporations use branding to merge and grow rich, their power will become more centralized until they can manipulate entire governments. Soon we may be living in the United States of Sephora.

Question: Are brands about centralized power—or decentralized power? The modern view of brands is that they emerge from the interactions among customers, employees, and media—not growing from the top down, but from the bottom up in a distributed social network. If brands become more powerful than countries under these circumstances, I'll eat my hat.

These irrational fears remind me of another time when the design community resisted change. It was around 1985, when many designers thought computers

would put all the best practitioners out of business. It took about ten years for the industry to adapt to this "threat." We not only survived but thrived.

Now, twenty years later, we've reached a similar point. This time the perceived danger is the professionalization of design, a change that seems to threaten our individuality. Yet we now realize that to play a meaningful role in any significant project, we'll need a seat at the table. That table, in my opinion, is labeled *brand*. My only fear at this point is a coldly rational one—that the seats may be taken by the time we get there.

Think: What's to stop other brand-building specialists such as marketing executives, business consultants, positioning strategists, advertising agencies, and research firms from taking over the design industry? Didn't we do precisely that to the typographic industry twenty years ago? Will we soon reach a point where design is perceived as too important to leave to designers?

In 2003, after the "breakdown" session, I was convinced that what we needed was not only a better definition of brand, but a complete dictionary of brand. I rashly appointed myself its editor, gathered a council of leading brand builders from ten related disciplines, and together with fellow board members from the AIGA Center for Brand Experience compiled 211 interrelated definitions and published them in a little book called *The Dictionary of Brand*. Ann Willoughby and her excellent staff volunteered to do the design, Smart donated the paper, Metropolitan Printers produced the book, and AIGA funded the first edition.

The Big Idea of the dictionary is simply this: to establish a level playing field by agreeing on a common language, so that brand builders from every discipline can collaborate as equals. Does the dictionary include jargon? Yep. Will many of the terms be obsolete in five years? Absolutely. Will the language of brand buy you a seat at the business table? That depends on what you're afraid of most—branding or going the way of typographers.

Note: If you went to the Gain conference, you received a free copy of *The Dictionary* of *Brand*. If you didn't, you can visit Amazon.com and buy a copy for under \$10. Proceeds will go toward future printings.



Design Studies for a New Doctorate

Victor Margolin

doday, visual communication design and the design of industrial products are undergoing a profound transformation as new technologies continually challenge the way images and things are produced. The results of this transformation are both salutary and alarming. Regarding visual communication, we can recognize as salutary a widening of the project field in which visual communicators work. Graphic designers now routinely design websites, arrange exhibitions, contribute to interactive software design, and engage in the production of moving-image sequences that include sound. The boundaries between graphic design and other media such as film, video, and product design have begun to blur, and many crossovers are occurring. On the alarming side, one notes that all these changes are happening with insufficient reflection concerning which past ideas and methods of practice might be preserved as sites of resistance to a powerful technological determinism.

Not only is the actual practice of design becoming more complex, but there is also a recognition that design does not occur in a neutral space; it is an activity that produces messages and objects in a social sphere that is highly charged with differing values. To better understand the implications of their work, designers therefore need to know more about this sphere and how it determines the conditions for their work.

Given the profundity of the changes that confront design, is it any wonder that the traditional foundations of design education are now being severely questioned and in many cases being found inadequate? My own engagement with this situation has been one of reflection on design rather than the practice of it. I teach design history to future designers, conduct seminars on issues in contemporary design, and participate as an author and editor in the production of design writing. I have long been interested in the prospects of a doctoral program to study design as a cultural activity, but have yet to find an institution to undertake such a program. But at this stage of design's development, it is better to talk about new doctoral programs, regardless of the immediate opportunity to make them happen, than to defer such discussion to a more propitious time.

Until a few years ago, most educators, whether in visual communication or product design, would have been skeptical of the idea that a doctorate in design could

be of any relevance to the design professions or that a doctorate in a design-related field could open up a new space for research not already covered by existing disciplines such as art history or sociology. Today, things are different. In the United States, the Institute of Design in Chicago and the University of Minnesota have doctorates in design, and one is being planned at North Carolina State University, while the Bard Graduate Center in New York City is planning a PhD in the history of the decorative arts, design, and culture. In Germany, there are doctoral programs at the University of Wuppertal and in Hanover; in Italy there is one at the Milan Politecnico; in England, a doctoral program exists at the University of Reading; and in Finland there is one at Helsinki's University of Art and Design, where students are working primarily on issues related to theory, philosophy, and management. There are PhD programs in design at Istanbul Technical University and Bilkent University in Turkey, a new design doctorate, combining studies in design history and practice, is on the drawing board at the Higher Institute of Industrial Design (ESDI) at the University of Revice in Mexico City.

Interest in design doctorates is particularly strong in the United Kingdom where the recent transformation of the polytechnics into universities has generated a need to justify this new status by upgrading study courses so that faculty can compete in national competitions for research funds. This has produced an intense exploration of different models of doctoral study, such as practice-led degrees in which the documentation of art or design production, rather than scholarly writing, is at the core of the program.¹

Design studies, the research area about which I want to speak here, is the study of design in and as culture. Just as cultural research, in the broadest sense, is neither the exclusive purview of the social sciences nor the humanities, so ought the case be similar for the more narrowly focused study of design. Therefore, my definition of design studies includes but goes beyond the traditional history, theory, and criticism approaches to art, architecture, and design in order to incorporate the social sciences as well.²

To distinguish my approach to a design studies doctorate from the various doctoral programs in design already in existence and in preparation, I want to relate it to three models of research described by Christopher Frayling, rector of the Royal College of Art (RCA).³ They are research *into* art and design, research *through* art and design, and research *for* art and design. Frayling's research *into* art and design comes closest to my own ideas about design studies. In this category he includes the traditional history, theory, criticism triumvirate, but also incorporates aesthetic or perceptual research and research into technical, material, and structural perspectives on art and design.

Research *through* art and design, Frayling's second category, is centered on the studio project and relates to what is being called, elsewhere in the United Kingdom, practice-led research. As examples, Frayling cites research into the behavior of materials, customizing a piece of technology to accomplish new tasks, or documenting a practical studio experiment. In this type of research, documentation of what is done is an essential component.

According to Frayling, the third category, research *for* art and design, is the most difficult to characterize. It is an area where the primary conveyor of research accomplishment is an art or design object or a body of such objects. At the RCA, says Frayling, research *for* design is not currently an option, although higher or honorary doctorates are given as honors to individuals for distinguished bodies of exhibited or published work.

The scope of design studies, considered within Frayling's first category of research *into* art and design, is quite broad. At a conference entitled "Discovering Design" that Richard Buchanan and I organized at the University of Illinois–Chicago in November 1990, a small group of scholars and practitioners presented and discussed papers on design with the aim of creating a space for productive conversation. The conference was successful because the participants, who included historians, sociologists, psychologists, political scientists, cultural studies theorists, philosophers, designers, and marketing experts, had a stake in exploring common themes rather than defending disciplinary boundaries. They heard and responded to each other in an atmosphere of mutual respect and shared inquiry. This is the spirit in which I see design studies developing at the doctoral level.⁴

Although design history is a central practice for design studies, I have argued for its inclusion within a wider field of research because I believe that history, if brought into relation with other disciplines, can contribute much to the study of design in contemporary culture as well as to its role in the culture of the past. While I don't wish to subsume historical or theoretical research under research for practice, I do believe that it can both inform and be informed by practice if the two are considered more closely. When this is not so, as has sometimes been the case in the United Kingdom, where design history has a strong relation to cultural studies, the emphasis on practice can be diminished and replaced by a focus on consumption or use.

A good example of how history and theory can productively inform each other is to be found in sociology, where the history of sociological thought, though a study in its own right, remains a strong force in the formation of practicing sociologists. Sociology has developed in such a way that some scholars do their primary research in the field of history while others make theory or fieldwork their central focus. Yet, the sociologist R. Stephen Warner notes the potential relation of these different interests when he states:

The skills of the historian, while requiring practice, are not wholly esoteric, and the nearer in time the object of our explanations the more nearly those skills approximate those of the anthropologist or sociological field researcher.⁶

To facilitate the relation of reflection to practice, I believe design studies would be strongest as a field organized by topics rather than by methods. This would encourage more interdisciplinary study than if methodological training were foregrounded. Within a university setting, design studies might therefore be housed in a flexible interdisciplinary center rather than a department, although such a center should be able to grant its own degrees.

To avoid characterizing "design" too precisely, I have been working with a definition that includes the entire artificial world.⁷ While this may seem too comprehensive to some, I find it useful because it emphasizes the open horizon of design activity in addition to the existing artifacts that already represent that activity. Design is a practice that continues to redefine itself. Designers invent new subject matter as they take on unprecedented projects. Once considered to be primarily about images and things, design is now also concerned with projects that are about processes and organization.8 It therefore makes sense for design studies scholars to remain open when considering their field's subject matter. In Design Issues, the academic journal that I coedit, my fellow editors and I are consistently pushing the subject matter boundaries to include such topics as the design of aquariums, software, artists' books, typefaces, and even entire organizations. We choose our articles carefully and use their inclusion in the journal polemically, to broaden the idea of the artificial world with which the journal is concerned. A similar strategy could work in design studies where the field's subject matter would be grounded in a core curriculum, but continually defined by the completion of research projects that push the field's boundaries.

As a prelude to my discussion of topics within design studies, I want to note that "design" refers to both an activity and a product; hence, design studies has relations to disciplines that study human action such as sociology and those that study objects such as art history or material culture. The product itself, whatever its form, is bracketed by its conception, planning, and making, on one side, and by its reception, on the other. A design studies scholar may emphasize the conception and planning of objects, which could involve research into invention, production, or design policy. Or research could be done on product reception, using reception theory or rhetoric.

I propose four core topics, or *topoi*, for design studies: design practice, design products, design discourse, and one more that is different from the other three—metadiscourse, which is the reflexive investigation of the field itself. I intend these four topics to embrace the complexity of design culture and the roles that its different actors—designers, managers, theorists, critics, policymakers, curators, and users—play in it. The topics arise from a recognition that design is a dynamic activity whose methods, products, and discourse are interactive and constantly changing.

The study of *design practice* includes those activities related to the conception, planning, and making of a product, and here I define a product as a Web page or a book as well as a lawn mower or a chair. Design practice refers to the people, processes, and organizations that are involved in product planning and production as well as those organizations involved with design policies. Design practice belongs to the realm of social action, which has traditionally been studied by sociologists, anthropologists, psychologists, and other social scientists. Here I would include books such as Donald Schon's *The Reflective Practitioner*, Lucy Suchman's *Plans and Situated Actions*, and Donald Norman's *The Psychology of Everyday Things*.

The study of *design products* emphasizes the identity and interpretation of products and their role in culture. Methods germane to this area are first of all theories of interpretation such as semiotics and rhetoric, but also aesthetics and interpretive

methods that may be drawn from structuralism, poststructuralism, or psychoanalysis. The study of products includes the ways that people give meaning to them as objects of contemplation as well as function. Links in this area would be made with scholars in art and design history, philosophy, cultural studies, material culture, technology studies, and related fields. Representative books include *The Meaning of Things* by Mihaly Csikszentmihalyi and Eugene Rochberg-Halton, *The System of Objects* by Jean Baudrillard, *Doing Cultural Studies: The Story of the Sony Walkman* by a group of colleagues at the Open University and the University of Leicester, and Steve Baker's *Picturing the Beast: Animals, Identity, and Representation*.

The study of *design discourse* is concerned with the different arguments about what design is and might be, as these are embodied in the literature of design. This area is the locus for design philosophy and theory as well as criticism. The literature of design is the record of how judgments about design practice and products have developed historically. It includes works by John Ruskin and William Morris, Sigfried Giedion, Jan Tschichold, Herbert Read, and Reyner Banham, as well as Tomás Maldonado, Gillo Dorfles, and Paul Rand, to name some of the more prominent writers. There has been all too little study of design literature, and more work in this field would help to set standards for future authors. Links to this area might be made with literary theorists, philosophers, and critics of art and architecture. I consider this topic to be particularly important as it is the one that should provide the frame for contemporary discourse. All too often, designers make pronouncements about their practice without a knowledge of how their concerns form part of arguments that have a long historical tradition.

The last topic is the *metadiscourse* of design studies. It is the place for reflection on the field itself and the location of the field's self-awareness. It embraces historiography as well as other writings about the study of design. Examples would include Clive Dilnot's seminal two-part article on design history in *Design Issues* and Cheryl Buckley's critique of design history's patriarchal underpinnings in the same journal.¹⁰

Besides outlining a range of topics, it is also important to address the questions of who might be attracted to a design studies doctorate and what someone might do with it. First, it would be a degree that provides a reflective framework for design practice. Design studies can certainly contribute to the formation of an informed and critical practitioner and might point the way, depending on a student's research, to the development of new forms of practice. Second, a doctorate in design studies would be a useful degree for a design educator who could then bring the relation of reflection and practice into the classroom. This model has been well developed in architecture where it is common for architects or planners to seek doctorates in the history, theory, and criticism of their field. Third, individuals such as design managers, museum curators, or policymakers could use such a degree to explore and refine their understanding of design and culture in order to deepen their own practices. And fourth, as a field, design studies could be a place where historians, anthropologists, sociologists, or political scientists might work on design's place in culture as they earn their doctorates in established disciplines. It

could serve as a site to explore and develop research projects and location where this research could be shared and disseminated. I don't imagine that design studies doctoral programs will be pervasive in academia, but certainly a few such programs would provide centers where new knowledge about design in culture could be developed. This knowledge would gradually make its way into design classrooms, studios, publications, and exhibitions and would have the function of raising issues and provoking questions. Such knowledge is badly needed at this critical moment in design's history when designers are faced with eroding divisions of practice as well as the challenge of new social tasks.¹¹

The time is right to organize design studies as an academic field. This is a moment when the traditional boundaries in the humanities and social sciences that were established in the nineteenth century are collapsing. As a recent book entitled Open the Social Sciences: Report of the Gulbenkian Commission on the Restructuring of the Social Sciences notes: "We are at a moment when the existing disciplinary structure has broken down. We are at a point when it has been questioned and when competing structures are trying to come into existence." 12

The report makes four recommendations that support the type of academic arrangement I propose for design studies. The authors urge the following changes in the structure of doctoral and postdoctoral research: the expansion of institutions that can bring scholars together for short periods of time to explore specific themes, the establishment of integrated research programs within universities that cut across traditional lines and have funding for limited periods of time; the appointment of professors in more than one department, and the same recommendation for graduate students. Regarding these students, the authors ask:

Why not make it mandatory for students seeking a doctorate in a given discipline to take a certain number of courses, or do a certain amount of research, that is defined as being within the purview of a second department? This too would result in an incredible variety of combinations. Administered in a liberal but serious fashion, it would transform the present and the future.¹³

Therefore, I do not advocate separate tracks for design historians or critics at the advanced degree level. Instead, I prefer to see scholars develop who can bring different methods of inquiry to bear on a single problem related to design.

Although the focus of design studies is research *into* design rather than *through* or *for* design, the field, nonetheless, has the potential to contribute to the improvement of design practice as part of its purpose to explain how design and designing operate in contemporary culture. This capacity gives design studies a broad mission. Until now, the richness and complexity of design culture have been all too invisible to scholars, practitioners, and the public alike. Design studies, more than any intellectual strategy we have devised thus far, has the potential to remedy this situation.

NOTES

- 1. A good example of a practice-led doctoral degree in art and design exists at the Robert Gordon University in Aberdeen, Scotland.
- 2. Art history, once a discipline practiced exclusively by historians, is now being transformed into a discipline of history, theory, and criticism that includes doctoral degree holders who are being asked in some cases to teach theory *rather than* history. In architecture, history, theory, and criticism, doctoral degrees are well established. Among the leading programs are those at MIT and Princeton.
- 3. Christopher Frayling, "Research in Art and Design," *Royal College of Art Research Papers* 1, no. 1 (1993/94). Frayling derives his distinction of three kinds of research from Sir Herbert Read. On the development of pedagogical methods for advanced research degrees at the RCA, see Alex Seago, "Research Methods for M.Phil. and Ph.D. Students in Art and Design: Contrasts and Conflicts," *Royal College of Art Research Papers* 1, no. 3 (1994/95).
- 4. The "Discovering Design" conference grew out of several prior meetings in Chicago organized by Victor Margolin and Marco Diani, and sponsored by the Center for Interdisciplinary Research in the Arts (CIRA) at Northwestern University. The first meeting, held in February 1988, was entitled "Design, Technology, and the Future of Postindustrial Society." The second, "Design at the Crossroads," took place in January 1989. Both events included participants from a number of disciplines and practices. The proceedings of the second meeting were published as *Design at the Crossroads* (Evanston: CIRA Monograph Series, 1989). A French translation appeared in a design journal published at the University of Montreal, *Informel* 3, no. 1 (Winter 1989).
- 5. I first discussed the relation of design history to design studies in my article "Design History or Design Studies: Subject Matter and Methods," which was initially published in the British journal *Design Studies*. It was subsequently reprinted in a special History number of *Design Issues* as an argument to which a group of scholars were invited to respond. See *Design Issues* 11, no. 1 (Spring 1995).
- 6. R. Stephen Warner, "Sociological Theory and History of Sociology: Autonomy and Interdependence," Sociological Theory: A Semi-Annual Journal of the American Sociological Association 3, no. 1 (Spring 1985): 22.
- 7. My conception of the artificial follows the extremely broad definition introduced by Herbert Simon in his MIT Compton Lectures of 1968, *The Sciences of the Artificial* (Cambridge: MIT Press, 1969). In those lectures, Simon defined the artificial as everything that is human-made. However, unlike Simon, I don't consider design to be a science, nor do I see design studies as a discipline that emulates scientific practice.
- 8. The argument for an expanded design practice has been cogently made by Richard Buchanan in two articles, "Wicked Problems in Design Thinking," in *The Idea of Design*, ed. Victor Margolin and Richard Buchanan, (Cambridge: MIT Press, 1995), 3–20, and "Branzi's Dilemma: Design in Contemporary Culture," in *Design—Pleasure or Responsibility?* ed. Paivi Tahkokallio and Susan Vihma (Helsinki: University of Art and Design, 1995), 10–29.

- 9. The number of books and articles that might be listed here is vast. It should be noted, however, that, unlike architecture, there has been no history of design thinking, something that is badly needed. For a listing of sources, see my bibliographic essay "Postwar Design Literature: A Preliminary Mapping," in *Design Discourse: History Theory Criticism*, ed. Victor Margolin (Chicago: University of Chicago Press, 1989), 265–88.
- 10. Clive Dilnot, "The State of Design History, Part I: Mapping the Field," and "The State of Design History, Part II: Problems and Possibilities," in *Design Discourse: History Theory Criticism*, 213–50, and Cheryl Buckley, "Made in Patriarchy: Toward a Feminist Analysis of Women and Design," in the same volume, 251–64. See also John Walker, *Design History and the History of Design* (London: Pluto Press; New York: Unwin Hyman, 1989).
- 11. The questioning of existing boundaries of architectural and design practice was central to a symposium on architectural education, organized by Archeworks and the Graham Foundation for Advanced Studies in the Fine Arts in Chicago, March 14, 1997.
- 12. Open the Social Sciences: Report of the Gulbenkian Commission on the Restructuring of the Social Sciences (Stanford: Stanford University Press, 1996), 103. The Commission was chaired by Immanuel Wallerstein and included Calestous Juma, Evelyn Fox Keller, Jürgen Kocka, Dominique Lecourt, V. Y. Mudimbe, Kinhide Mushakoji, Ilya Prigogine, Peter J. Taylor, and Michel-Rolph Trouillot.
- 13. Open the Social Sciences, 105.

2. How We Teach What We Teach





Graphic Design as Cognitive Artifact

Meredith Davis

INTRODUCTION

- Introduction to course content and expectations.
- Introduction to communication models and discussion of the degree to which models acknowledge information perception and processing: Shannon and Weaver (1948), Berlo (1972), Emmert and Donaghy (1981). READING: Chapter 2, "Human Communication Perspectives," in Philip Emmert and William Donaghy, *Human Communication: Elements and Contexts* (Reading, Mass.: Addison-Wesley Publishing, 1981).
- Introduction to framing design-research projects based on readings from outside the field (problem finding). READING: Chapter 2, "Goodness of Fit," in Christopher Alexander, *Notes on the Synthesis of Form* (Cambridge: Harvard University Press, 1964).

WHAT IS A COGNITIVE ARTIFACT?

A discussion of the power of representation and experiential versus reflective cognition.

READINGS: Chapters 2 and 3 in Donald Norman, *Things That Make Us Smart* (New York: Addison-Wesley Publishing, 1993). Chapters 1–3 in Donald Norman, *The Design of Everyday Things* (formerly *The Psychology of Everyday Things*) (New York: Doubleday, 1988).

ASSIGNMENT: Bring to class examples of graphic design artifacts that engage their audiences experientially and/or reflectively. Be prepared to discuss the cognitive consonance or dissonance of such engagement with the learning/interpretation expected of the audience (example: the dissonance of a dialogue box that intrudes reflectively during the expert use of computer software or the expert behavior in response to corporate identities and branding). Also, be prepared to analyze the relevance of particular organizational or visual strategies to these examples of experiential or reflective engagement.

DEFINING AUDIENCES BY COGNITIVE STYLE

A discussion of differences in how individuals perceive and process information (including research on brain dominance and learning types) and how historic perspectives have limited our assumptions about human cognitive behavior. Implications of defining audiences by something other than demographics for the design of information.

READINGS: Chapter 3, "The Four-Quadrant Brain Model of Thinking Preferences" (based on the work of Ned Herrmann, David Kolb, and Bernice McCarthy) in Edward and Monika Lumsdaine, *Creative Problem Solving* (New York: McGraw-Hill, 1995). Chapter 2, "A Rounded Version," in Howard Gardner, *Multiple Intelligences: The Theory in Practice* (New York: Basic Books, 1993). Part I, "Learning Styles," in Bernice McCarthy, *The 4MAT System: Teaching to Learning Styles with Right/Left Mode Techniques* (Barington, Ill.: Excel, Inc., 1987). Chapter 1, "A Taxonomy of Critical Thinking Dispositions and Abilities," Robert Ennis, in *Teaching Thinking Skills: Theory and Practice*, ed. Robert J. Sternberg (New York: W. H. Freeman and Co., 1987). Chapter 9, "An Integrative Framework for Understanding Mind in Context," Robert J. Sternberg, in *Mind in Context*, ed. Robert J. Sternberg and Richard K. Wagner (New York: Cambridge University Press, 1994).

ASSIGNMENT: In-class work on articulating potential research projects within this broad category of cognitive style. Bring to class five design-research questions related to one or more of these readings. Write each question on a separate piece of paper, large enough to be read from across the room. Be sure to consider the characteristics of researchable problems discussed in our first class. Questions may be variations on the same core design-research problem. Pay close attention to the phrasing of the problem in relation to our list of characteristics of what is researchable.

CATEGORIZATION AND SCHEMAS

Survey of research into how people group concepts and attach meaning based on those groupings. Included in the discussion are "prototypes" (best examples) that represent concept categories within certain contexts, social schemas, and representations that trigger meaning among seemingly unrelated objects, places, or concepts. Greater elaboration on the cognitive basis of stereotyping and identity. Exploration of the mental structuring power of metaphors.

READINGS: Chapter 2, "Social Schemas," in Martha Augoustinos and Iain Walker, Social Cognition: An Integrated Introduction (London: Sage Publications, 1995). Pages to be assigned from various chapters in George Lakoff, Women, Fire, and Dangerous Things: What Categories Reveal about the Mind (Chicago: University of Chicago Press, 1987). Pages to be assigned from various chapters in George Lakoff and Mark Johnson, Metaphors We Live By (Chicago: University of Chicago Press, 1980). Chapters 7–10, "Social Schemas and Social Representations," "Attributions and Social Representations," "Stereotypes, Prejudice, and Intergroup Attributions," and "Postmodern Challenges to Social Cognition," in Martha Augoustinos and Iain Walker,

Social Cognition: An Integrated Introduction (London: Sage Publications, 1995). Mark Johnson, "The Imaginative Basis of Meaning and Cognition" in *Images of Memory:* On Remembering and Representation, ed. Suzanne Kochler and Walter Melion (Washington, D.C.: Smithsonian Institution Press, 1991).

ASSIGNMENT: Through a series of images, illustrate the centrality and representation of prototypes for a category. Also explore examples that reside on the periphery of a concept. Through composition and rendering style, demonstrate how visual variables reinforce the prototypical nature of the example. In class, we will discuss how far we can depart from prototypes and still maintain communication value in the selected example.

ASSIGNMENT: Explore how diagrams representing physical schemas referring to the human body and movement may be used to enhance audience understanding of metaphorical references to the same concept.

COGNITIVE MAPS

Extension of the categorization discussion within the context of cognitive maps and memory. Focus on spatial and wayfinding examples from architecture. Discussion of the cultural origin of various cognitive maps.

READINGS: Chapter 1, "Image of the Environment," in Kevin Lynch, *Image of the City* (Boston: MIT Press, 1960). Assigned pages in Christopher Alexander, *The Timeless Way of Building* and *Pattern Language* (New York: Oxford University Press, 1975, 1977).

ASSIGNMENT: Develop a navigation system (example: computer interface, wayfinding signage, printed map, etc.) that uses orientational or ontological metaphors as the basis for visual organization. Examine the limits of the metaphor and the medium in which it is applied. Be prepared to defend the relationship between the metaphor and the cognitive/behavioral task.

NARRATIVE AND STORYTELLING

A discussion of cognitive predispositions to narrative as a way of explaining and understanding the world. Implications for the structuring of information.

READINGS: Chapter 2, "Folk Psychology as an Instrument of Culture," in Jerome Bruner, *Acts of Meaning* (Cambridge: Harvard University Press, 1990). Chapter 5, "Design Principles for Human-Computer Activity," in Brenda Laurel, *Computer as Theatre* (New York: Addison-Wesley Publishing Company, 1991). Abbe Don, "Narrative and the Interface," in *The Art of Human-Computer Interface Design*, ed. Brenda Laurel (New York: Addison-Wesley Publishing, 1990).

INTRINSIC MOTIVATION

The role of intrinsic motivation in learning and the successful completion of cognitive tasks.

READINGS: Thomas W. Malone and Mark R. Lepper, "Making Learning Fun: A Taxonomy of Intrinsic Motivation for Learning," in *Aptitude, Learning, and Instruction*, ed. Richard E. Snow, vol. 3, (Lawrence Erlbaum Assoc., 1987). Edward Deci, *Why We Do What We Do* (New York: Putnam, 1995). R. M. Ryan, J. P. Connell, and E. L. Deci, "A Motivational Analysis of Self-Determination and Self-Regulation in Education," in *Research on Motivation in Education: The Classroom Milieu*, ed. Carole Ames and Russell Ames, vol. 2 (New York: Academic Press, Inc., 1985).

TECHNOLOGICAL AFFORDANCES AND COGNITION

READINGS: Selections from Donald Norman, *Things That Make Us Smart* (New York: Addison-Wesley Publishing, 1993). Selections from Derrick de Kerchhove, *Connected Intelligence* (Toronto: Somerville House Publishing, 1997). Lauralee Alben, "Quality of Experience: Defining Criteria for Effective Interaction Design," *Iterations* III (1996) (may substitute criteria developed by Alben's team for *Communication Arts* magazine competition). Chapter 2, "Media Hot and Cold," in Marshall McLuhan, *Understanding Media* (Boston: MIT Press, 1964, 1994).

PICTURE PROCESSING

Brief survey of relevant research in picture processing, speed of recognition, and memory.

READINGS: Chapter 7, "Picture Processing and Memory," in Kathryn T. Spoehr and Stephen W. Lehmkuhle, *Visual Information Processing* (San Francisco: W. H. Freeman and Co., 1982). Chapter 7, "On Exploring Visual Knowledge," Allan Paivio, in *Visual Learning, Thinking, and Communication*, ed. Bikkar S. Randhawa and William E. Coffman (1978).

MIDTERM EXAM

Collect and analyze examples of visual communication that rely on prototypes and stereotypes for their interpretation. Using you class readings, describe how these communication examples work.

FINAL EXAM

Student presentations of design assignments during the last two class sessions.



History, Theory, and Undergraduate Education

Ellen Lupton and J. Abbott Miller

Design programs around the United States have come to recognize that history courses are crucial to the education of designers, grounding students in a critical discourse about the origins and future of their discipline. That said, it is a considerable feat to implement such courses, which often are taught as an internal affair of graphic design departments, rather than being offered by formal humanities divisions. As few art historians are equipped to lecture on graphic design, practicing designers are relied on to teach the history of their field, often working from zero, with no established models or visual resources. Meanwhile, many art history departments view design history courses as "service" classes aimed at a particular trade, and thus not worthy of teaching in a purely academic setting.

When we started teaching design history in the late 1980s, the biggest challenge was to create and maintain a slide collection. Over eight years, we shot, labeled, and organized over three thousand slides. This invaluable image bank has supported a range of courses developed for diverse contexts—undergraduate survey courses, lectures series for MFA students in design, seminars for MA students specializing in design history, and not-for-credit seminars for working designers. We believe that history and theory should confront students throughout their careers, from the undergraduate level right on into their lives as practicing designers.

The course outlined here aims to integrate history with theory. We view the course as an "intellectual survival kit" for graphic designers, which aims to make them literate about their own discipline as well as to help them understand the overlaps between design and a broader history of ideas. We expose students to landmark texts in modern thought, showing them how concepts from semiotics, politics, and critical theory reverberate through the visual arts. Graphic design is an act of cultural interpretation: it is a form of reading, writing, and editing using words, pictures, symbols, materials, and technologies. Our course reveals the ideological underpinnings and social implications of design practice by immersing students in a wide array of images as well as a broad range of reading materials, including primary texts by designers, major documents of critical theory, and recent essays in design history. Although several excellent surveys of design history are now available, we do

not make these required reading, preferring, instead, to draw written documents from various sources.

The following fifteen-week syllabus is aimed at undergraduates in graphic design. The course is divided into three main units: Reform and Revolution, focusing on the European avant-garde movements; Consumption and Mass Culture, looking at design in America and postwar Europe; and Media and Messages, introducing visual literacy through critical interpretations of recent advertising and design.

UNIT I: REFORM AND REVOLUTION

The first unit focuses on the avant-garde movements that form the aesthetic and philosophical basis of modern graphic design. This unit also introduces students to "semiotics," the study of signs. Semiotics provides a theoretical framework that loosely informs the historical lectures in the course.

1. The Critical Object: Arts and Crafts to Art Nouveau

The industrial revolution triggered passionate critiques of the commodity system. Karl Marx developed the theory of "commodity fetishism," arguing that, in a capitalist culture, an object's function or use value is eclipsed by its exchange value. The Arts and Crafts movement applied the socialist critique of factory production to objects, architecture, interiors, and typography. William Morris and others embraced hand techniques and the honest use of materials as a way to demystify objects of daily use. The Arts and Crafts movement, which was followed by the more aesthetically innovative movements of art nouveau and Jugendstil, marked the origins of design as a critical discourse, positioned in opposition to mainstream culture.

READINGS: Karl Marx, "Commodities" and "The Fetishism of Commodities and the Secret Thereof," 1867, in *Capital: Volume 1*; William Morris, "Art under Plutocracy," 1884, in *Political Writings of William Morris* (New York: International Publishers, 1973).

2. Semiotics: Language as Culture

Ferdinand de Saussure was the founder of structuralism, a current of thought that shaped art, philosophy, and anthropology across the twentieth century. Saussure argued that language is a system of differences, not a collection of autonomous, individual signs; thus, the meaning of any sign resides not in the isolated word or mark, but in its relation to other signs in the system. Saussure also argued that language is not a neutral reflection of reality, but a system that describes the world from a cultural point of view. This lecture discusses Saussure's ideas in relation to language, writing, and typography.

READING: Ferdinand de Saussure, Course in General Linguistics (excerpt), 1916.

3. Materialist Typography: Futurism and Dada

Futurism and dada were avant-garde movements that emerged in the 1910s. Although both began as literary movements, they had a profound impact on the visual arts. The poetry of F. T. Marinetti and Tristan Tzara challenged the conventions of literary presentation by borrowing techniques from advertising—from mixing styles and sizes of type to composing letters along conflicting axes. Futurism and dada celebrated the materiality of typography, recognizing it as a sign system with its own meanings and effects.

READINGS: Jan Tschichold, "The History of the New Typography," excerpt from *The New Typography*, 1928; Johanna Drucker, "Experimental Typography as a Modern Art Practice," excerpt from *The Visible Word*, 1994.

4. The Technological Eye: Constructivism and Montage

Constructivism built a bridge from the deliberately disruptive experiments of futurism and dada to an accessible public language. After the Russian Revolution, artists in the young Soviet Union sought to bring art into everyday life, creating posters, books, propaganda stands, theater designs, textiles, furniture, and other objects of communication and daily use. Fascinated by new technologies of representation, they mobilized the camera and the printing press as instruments of visual interpretation.

READINGS: El Lissitzky, "Topography of Typography," 1923, "Typographical Facts," 1925, and "Our Book," 1926, in *El Lissitzky: Life, Letters, Texts*; Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," 1936, in *Illuminations*.

5. Transcendental Grids: De Stijl and Dutch Modernism

The de Stijl movement was spearheaded by Theo van Doesburg, a Dutch painter, poet, and designer. Working with Piet Mondrian, Vilmos Huszar, Gerrit Reitveld, and other artists, he promoted a purified visual language consisting of perpendicular elements and primary colors. While immersed in this transcendental search, van Doesburg eagerly tapped the international network of the avant-garde, crossing wires with dada and constructivism. This lecture traces the origins and development of modernism in the Netherlands, ending with a look at recent Dutch design.

READING: Kees Broos, "From De Stijl to a New Typography," in *De Stijl*, 1917–1931: *Visions of Utopia*, Walker Art Center.

6. Language of Vision: The Bauhaus and the New Typography

The Bauhaus was founded in Germany in 1919 as a progressive school of art and design, seeking to build creative relationships among art, craft, and industry. Expressionist experiments dominated the early phase of the Bauhaus, while the later years were associated with functionalism and rationalism. Bauhaus graphic designers

embraced constructivist theories of design, participating in what came to be known as the New Typography, which assimilated avant-garde aesthetics into a critical commercial practice and helped consolidate the profession of graphic design.

READINGS: Walter Gropius, "The Theory and Organization of the Bauhaus," 1938, in Bayer, Gropius, and Gropius, *Bauhaus*, 1919–1928; and László Moholy-Nagy, "Typophoto," 1927, in *Painting Photography Film*.

UNIT II: CONSUMPTION AND MASS CULTURE

The second unit of the course moves from European modernism to the American context. We begin with Reyner Banham's brilliant critique of functionalism, launched in the late 1950s at the birth of the international pop art movement. The following lectures consider how modernism interacted with American consumer culture, and show how contradictions in modernist theory and practice resulted in the dilemmas of postmodernism.

7. Revising the Modern: Beyond the First Machine Age

The dramatic expansion of consumerism and mass culture after World War II was accompanied by a revision of modernist ideals of universality and permanence. The architectural historian Reyner Banham rejected the emphasis placed by his elders on the creation of rational, functional objects; instead, he embraced ideas of disposability, consumption, and speed that he saw in futurism.

READINGS: Reyner Banham, *Theory and Design in the First Machine Age*, 1960 (excerpt); Antonio Sant'Elia and F. T. Marinetti, "Futurist Architecture," 1914; and Le Corbusier, *Towards a New Architecture*, 1931 (excerpt).

8. The Aesthetics of Waste: Streamlining and Industrial Design

In the United States, industrial design emerged alongside advertising and packaging in the 1920s and 1930s as a technique of "consumer engineering" designed to hasten the movement of goods through a cycle of purchase and disposal. This lecture looks at how industrial designers transformed middle-class American life by creating a vibrant style and a commercial ideology suited to American consumer culture.

READINGS: Harold van Doren, *Industrial Design*, 1940 (excerpt); Henry Dreyfuss, *Designing for People*, 1955 (excerpt).

9. Graphic Design in America: From Popular Modernism to Corporate Modernism

European modernism moved across the Atlantic in the 1930s and 1940s, where it interacted with the commercial culture of the United States. Designers including Herbert Bayer, Walter Gropius, Ladislav Sutnar, and Will Burtin emigrated to the United States. American designers such as Alvin Lustig and Lester Beall were influenced by émigrés as well as by publications and exhibitions of European art and

design, while designers such as W. A. Dwiggins already had forged an American approach to modernism.

READINGS: T. H. Robsjohn-Gibbings, "Do You Know the Difference between Modern and Modernistic?" *House Beautiful*, October 1946; Herbert Bayer, "Design, Designer, and Industry," 1951, in *Herbert Bayer: The Complete Work*.

10. Swiss Design: From System to Subjectivity

Avant-garde typography was rationalized into a coherent design methodology in Switzerland after World War II by Armin Hofmann, Karl Gerstner, Josef Müller-Brockmann, and others who favored the use of rational grid systems, objective photography, carefully abstracted symbols, and sans serif letterforms. In the late 1960s, the young Swiss designer Wolfgang Weingart subverted this rational language, using it to construct complex, overtly subjective compositions. Swiss modernism had a profound impact on design education and practice in the United States, giving rise to the new New Typography in the 1970s and 1980s.

READING: Emil Ruder, *Typographie/Typography*, 1967 (excerpt).

11. Design as Sign: Pop and Postmodernism

An international pop art movement emerged in the 1950s that celebrated consumption, promoting image over structure, communication over function, and ephemerality over permanence. Working in New York, Herb Lubalin and the Push Pin Studios exerted a worldwide influence on design by using popular imagery, historical typefaces, and bold humor. Andy Warhol, who began his career as an illustrator, became notorious for appropriating commercial imagery. Pop movements also emerged in England, Italy, and Japan. In the 1970s, Robert Venturi and Denise Scott Brown turned to the electric lights and parking lots of Las Vegas as a source of architectural inspiration.

READINGS: Robert Venturi, Denise Scott Brown, and Steven Izenour, *Learning from Las Vegas*, 1972 (excerpt); Gillo Dorfles and Vittorio Gregotti, *Kitsch: The World of Bad Taste*, 1968 (excerpt).

UNIT III: MEDIA AND MESSAGES

The course ends with a series of lectures and discussions devoted to interpreting design and media. Returning to the theory of semiotics introduced at the beginning of the course, the readings include texts by Roland Barthes and Jacques Derrida, who carried Saussure's study of verbal language into the domain of visual communication. These lectures are based on essays from our book *Design Writing Research: Writing on Graphic Design* (New York: Kiosk, 1996).

12. Mythologies: Reading Visual Culture

Scholars and critics became increasingly interested in popular culture in the 1950s and 1960s. Roland Barthes used the structural linguistics of Saussure to analyze artifacts of popular culture, showing how signs feed on one another in ravenous chains of appropriation to create the "mythologies" of modern life. In this class meeting, we discuss Barthes's ideas in relation to advertisements and objects from recent culture.

READING: Roland Barthes, Mythologies, 1957 (excerpts).

13. White and Black on Gray: Race and Advertising

The Civil Rights movement of the 1960s compelled progressive art directors to introduce images of black men into mainstream "white" media. A common theme in advertising and editorial design was to impose white paint or makeup on the face of the black man. This lecture reviews the history of the New Advertising from the point of view of race relations, and shows how "separate but equal" advertising campaigns directed at black consumers remained the norm. Recent advertising issues also are discussed.

READING: Miller and Lupton, "White and Black on Gray," in *Design Writing Research: Writing on Graphic Design*, 1996.

14. Low and High: Design and the Vernacular

As graphic design asserted itself as a legitimate profession in the United States in the 1970s and 1980s, many designers reacted against the polished forms and corporate values that occupied the center of the field. Designers looked outside the aesthetic and cultural ideologies of the profession in search of more direct and innocent forms of expression. Charles Anderson produced a richly nostalgic style based on the commercial arts of the 1940s and 1950s; Tibor Kalman created a blunt, clever aesthetic of nondesign; and club kids appropriated logos from supermarket packages.

READING: Lupton and Miller, "Low and High: Design in Everyday Life," in Design Writing Research: Writing on Graphic Design, 1996.

15. Deconstruction: Examining the Structure of Style

The term "deconstruction" was coined by the philosopher Jacques Derrida in the 1960s, referring to the critique of such culturally entrenched oppositions as nature/culture, inside/outside, and speech/writing. After sweeping literary studies in the United States in the 1970s and 1980s, the term "deconstruction" entered design culture as a stylistic category applied to architecture, products, and graphics. This final lecture in the course looks at deconstruction both as a popular phenomenon and as a philosophical idea with profound links to design and typography.

READINGS: Ferdinand de Saussure, Course in General Linguistics, 1916,

(excerpt); Jacques Derrida, Of Grammatology, 1967 (excerpt); Lupton and Miller, "Graphic Design and Deconstruction," in Design Writing Research: Writing on Graphic Design, 1996.



Hyperarchitexture: Marked Typography and the Hypertextual Landscape

Katie Salen

BLUE SKY SYLLABUS: PREMISE

Communication lines are replacing transportation lines (roads, tracks, air links) to create an environment in which movement of information supplants the movement of bodies. As a result, simultaneous redefinitions of space, personal identity, and civic legibility are emerging as the network grows. How we interact with these new and constantly transforming definitions reflects the values that our society attaches to social structures such as race, sex, and class. With the change in the character of public space and the development and articulation of particular kinds of private space within sites of electronic orality, such as MUDs, MOOs, chatrooms, and e-mail, we can begin to question the identities that emerge from these interactions. Furthermore, as designers, we can hypothesize about the future role of typography in the (re)construction of these fragmented and complex identities.

HYPERARCHITEXTURE AS TYPOGRAPHIC LANDSCAPE

Typography on the Net enters the space of performance. Because it has no inherent physicality or integrity of form in the virtual textscape, typography has the potential to become "intelligent" or responsive to a variety of conditions present in the information structure it is representing. "Intelligent typography or behavioral graphics are endowed with their own inherent, but adjustable, physical attributes, such as gravity and bounce, for animation purposes—physical characteristics that the computer can model, but that cannot actually be produced in the 'real world'" (Muriel Cooper, MIT Media Lab). The flexibility of such an environment extends typography into the realms of architecture and composition. Such a consideration of typography as hyperarchitexture allows for an understanding of not only text, but the markers of that text (letterforms) as potential gateways for embedded structure. Furthermore, hyperarchitexts are multidimensional. Figurelike, they can carry on an argument at several levels simultaneously. As a result, it is proposed that in virtually constructed sites, typography can assume the "voice" of its author (or speaker/writer) so that as a form of communication it begins to move beyond syntactic form into the semantic realm of cultural and gendered identity.

OBJECTIVE

Part I of this course will examine the concept of typography as a culturally "marked" visible language system, exploring the potential for a typographically based representation of cultural identity. Part II will situate this work within sites of electronic orality and the hypertextual landscape, creating a relationship between oral gesture, or dialect, and typographic form as an expression of identity. A series of typographic and hypertextual prototypes and studies will be developed, and results may offer suggestions for possible applications within future telecommunication structures.

Conclusions will be drawn as to:

- The extent to which cultural identity can be "made visible" through typographic form
- The way in which bodies are being represented in sites of electronic orality
- The extent to which identity is being constructed through these representations
- The potential role of typographic form as visual agents of identity in sites of electronic orality
- The degree to which hypertextual typefaces can be constructed as gateways to personal visual/verbal vocabularies that are both expandable and self-authored

METHOD

The structure of this course will be based on the relationship between the exploratory (process), the experimental (prototype), and the speculative (theoretical). We will begin with a two-tiered set of questions and then move into the development of exploratory prototypes:

- 1. Marked typography: culture and identity
 - a. Can character or cultural identity be made visible through typographic form?
- 2. The hypertextual landscape: typography, gesture, and context
 - a. How is identity, on the level of ethnicity and gender, constructed and communicated within sites of electronic orality?
 - b. Can typographic form function as a potential gateway for embedded structures connotative of a unique social and cultural identity?
 - c. Can hypertextual typefaces be designed that reflect these structures of identity?

PROJECT MATRIX

We will be utilizing a matrix based upon a point, line, and plane structure. This matrix will allow for investigation of isolated concepts while maintaining a clearly identified set of relationships among constituent parts:

- Point (the level of the letterform)
- Line (the level of joinery)
- Plane (the level of reference)

Supplemental readings and assigned writings will support inquiry and discussion. We will be using Anna Deavere Smith's book *Fires in the Mirror* as a case study for course projects. Her work in the investigation of linguistic "character" and identity sets an excellent precedent for the goals of this course and will provide a richly textured context for the application of your work.

COURSE SEQUENCE

Part 1: Culture and Identity (weeks 1–4)

I. LEVEL OF THE LETTERFORM (*three weeks*) Question: Can letterforms be designed to be marked in terms of gender or ethnicity? What historical and contemporary precedents exist?

PROJECT I—POINT: SPOKEN WORD TRANSLATIONS (*the object*) Language reflects what is unseen in an individual. Can character or identity be made visible through typographic form, specifically at the level of letterforms? Select one character from the text *Fires in the Mirror*. Develop a "typographic portrait" for the character using Deavere Smith's interview with the individual as a source for content. Your objective is to develop a cultural voice for the individual through the design and application of a typographic syntax that visually expresses the identity of the individual within the context of the Crown Heights uprising.

Part 2: Electronic Orality and the Hypertextual Landscape (weeks 5–16)

II. LEVEL OF JOINERY (*five weeks*) Question: How can the issue of vocal gesture be addressed typographically to reference cultural identity through a material expression of dialect (dialect of the body, dialect of the voice)? This component focuses on the manipulation of the spacing between letters, words, and paragraphs to reference specific patterns and rhythms of speech and physical gesture.

PROJECT 2—LINE: TYPOGRAPHIC JOINERY AND GESTURE (the animated object) This investigation focuses on the relationship between writing and design found in electronic orality or telewriting. You will be making both visual and conceptual proposals for the design of "behavioral typefaces" that reflect the physical and vocal qualities of their user. Excerpts from Fires in the Mirror will again be used as points of departure for the design of these typefaces. Extend the letterform syntax developed in Project 1 into an investigation of the way these forms connect over time. Focus on the physical and vocal dialect of the individual, using typographic joinery as the basis for the study. You will also be asked to address the relationship between the user (speaker/ writer), the

keyboard (interface), and the representation of the electronically mediated speech act (typeface). Consider what kind of mediation occurs between the keyboard and the output of the letterforms—this mediation relates directly back to gestures (oral and physical) of the speaker.

Design the behavior of the typography as well as its visual form:

- Construct an appropriate representation of the alphabet (consider uppercase, lowercase, numerals, punctuation). Apply results of Project 1.
- Design a system for how the typeface "behaves" over time, using typographic joinery as the basis for the study (consider spacing, scale, color, consistency, baseline, etc.)
- Visualize the interaction between the user, interface, and representation in the format of a type specimen "page."
- III. LEVEL OF REFERENCE (*seven weeks*) Question: Can a hypertextual typeface be developed that uses letterforms as gateways to personal visual/verbal vocabularies that are both expandable and self-authored?

PROJECT 3—PLANE: HYPERTEXTUAL TYPEFACES (the situated object) This investigation into hypertextually based, architecturally based, body-based, databased constructions of typographic language and self seeks to visually explore the subtleties of links between patterns of identity, gesture, and context. Application of this research will result in the design of a typographic interface focusing on the intrusion and juxtaposition of alternate self-authored perspectives voiced from within the hypertextual link. Integrating the concept of culturally marked typographic structures with an investigation into situating narrative structures, this "typeface" will contain embedded structures or hypertextual links alluding to the cultural identity of the user.

Applying the research from Projects 1 and 2, investigate possible models for hypertextual typefaces that express the identity of the user through form, behavior, and navigation. These prototypes should be speculative and experimental, posing questions about the role of typographic form and meaning in the hypertextual landscape.

READING LIST

Project 1

Anna Deavere Smith, Fires in the Mirror (New York: Anchor Books, 1993).

Johanna Drucker, The Visible Word: Experimental Typography and Modern Art, 1909–1923 (Chicago: University of Chicago Press, 1994).

Andrew Blauvelt, "In and Around: Cultures of Design and the Design of Cultures," *Emigre* 33: 2–23.

Mark Skiles, "Margaret Crawford's Greatness Close to Home: My Daily Trip Down La Brea," Offramp 1, no. 6, SciArc (1996).

Project 2

- Jessica Helfand, Six Essays on Design and New Media (New York: William Drenttel, 1995).
- Phil Baines, "Clear Enough to Read," Emigre 18.
- Frances Butler, "Punctuation, or the Dream of Legibility: From Vision to Substance," *Emigre* 40: 56–64.
- Andrea Codrington, "Invasion of the Copy Snatchers," *Eye* 23, vol. 6 (Winter 1996): 66–69
- Ursula Held, "Read this Aloud," Eye 23, vol. 6 (Winter 1996): 36-46.
- Johanna Drucker, "The Future of Writing," Emigre 35.

Project 3

- Eduardo Kac, guest editor, "New Media Poetry: Poetic Innovation and New Technologies," *Visible Language* 30.2 (1996).
- J. Abbott Miller, Dimensional Typography: Case Studies on the Shape of Letters in Virtual Environments (Princeton: Princeton Architectural Press, 1996).
- William Owen, "Experiments in Hypertype," Eye 21, vol. 6 (Summer 1996): 6-7.
- Teal Triggs, ":-{ } She Wears Lipstick" in Katie Salen, ed., Zed.2 Real World Design: The Role of the Experimental, Center for Design Studies (1995): 39–48.
- Katie Salen and Sharyn O'Mara, "Dis[appearances]: Operational Strategies and Representational Needs in Codexspace and Cyberspace," in Dietmar Winkler, ed., *Visible Language* (1998): 260–85.



Richard Wilde and Judith Wilde

- Required class for all graphic design majors
- Weeks: 12
- Texts: Visual Literacy, Judith Wilde and Richard Wilde; Design Literacy, Second Edition, Steven Heller
- Method of teaching: Lectures, slides, and weekly critiques on all assignments

This course is designed to foster a personal approach to conceptual problem solving while investigating the classical principles of graphic design and developing a visual vocabulary through experimentation that sets the groundwork that reinforces one's critical, analytical, and perceptual skills.

Each assignment creates conditions where one discovers the language of graphic design and encourages conceptual thinking through exploration that results in original and personal imagery.

WEEK 1: BLACK SQUARE

By using four black squares of the same dimension, students are to create a graphic image in the eight rectangles indicated on a given assignment sheet to express the meaning of each of the following six words: "order," "increase," "bold," "congested," "tension," and "playful."

This problem serves as an introduction to the development of a geometric idiom through the discovery of various two-dimensional design principles needed to extend the limited graphic vocabulary where only four black squares are utilized in expressing the intended message. The principles to be explored include framal reference; touching; overlapping; intersecting; cropping; illusory space; contrast in terms of size, direction, position; and the dynamics of negative-positive relationships.

WEEK 2: ALTERED PAGE

Using the three mechanically drawn linear images that appear on the assignment sheet, which depict an interior wall with a socket, a brick wall, and a window,

"defamiliarize the familiar" by altering, changing, rearranging, and/or redesigning the given images.

The intention of this assignment is to develop a way of appropriating an image, yet transcending its original form by making it one's own through a personal approach to narrative storytelling. This provides an opportunity to play, which minimizes fear of failure. Playing, fooling around, and experimenting are the keys to this assignment.

WEEK 3: HOMAGE TO ANDRÉ BRETON

Using the gridlike dot patterns printed on the assignment sheet, students are asked to experiment with the phenomenon of automatic writing, in terms of image making and doodling as a spontaneous experimental exercise in discovering one's own voice.

The intention of this assignment is to first familiarize students with the work of the French surrealist poet André Breton and to expand the creative process to discover subconscious and intuitive problem-solving impulses.

WEEK 4: CIRCLE, SQUARE, TRIANGLE

Using the geometric shapes of circles, squares, and triangles that appear on the assignment sheet as focal points, students are to create identifiable images by adding other elements while maintaining the integrity of the original geometric shapes.

The intention of this assignment is to make use of the reductive nature of geometry as a basis for a visual language, which, in turn, sets the foundation for a formalistic approach to design that readily encompasses corporate identity, signage, trademark, logos, and pictograms.

WEEK 5: SOUND

Students are given an assignment sheet with nine blank four-by-four-inch square areas with titles printed beneath them, such as car crash, busy diner, jazz band, bumblebees making love, clock, striking a match, and conversation between a tuba and a flute. Students are asked to visually represent the sounds of these specific subjects. For each of the nine solutions required for this assignment, they are reminded to consider the character of the sound in terms of tempo, volume, duration, context, and color.

The intention of this assignment is to expand one's graphic vocabulary beyond the simple narrative voice by moving students beyond the literal problem-solving arena into the less familiar area of conceptual problem solving through the use of metaphor, symbolism, and abstraction.

WEEK 6: A LINE IS A DOT THAT WENT FOR A WALK

Students are given an assignment sheet printed with the following eighteen descriptive qualities that are often associated with human behavior: anxious, embarrassed, bizarre, exhausted, fragile, systematic, lyrical, turbulent, nonsensical, psychotic, ambiguous, distracted, slovenly, sensual, spontaneous, aggressive, awkward, and indecisive. In the given area next to each word, students are asked to graphically interpret the subjects by using line as a point of departure.

The intention of this assignment is to familiarize students with Paul Klee's famous expression, to develop sensitivity to the expressive quality of line, and to explore the descriptive nature of line as a multipurpose medium for the expression of emotional qualities. Students have an opportunity to discover the vast properties of line, ranging from thick, thin, rigid, blurred, broken, curved, soft, and angular, while experimenting with different media and color.

WEEK 7: GRAPHIC DESIGN 101

Students are given an assignment sheet with one hundred small rectangles and one larger rectangle printed on it. They are asked to choose one of the following subjects and visually interpret it one hundred different ways: paper bag, frog, sneaker, gumball machine, manhole cover, sun, ant, dandelion, or apple. Students are asked to consider various graphic design principles including cropping, touching, overlapping and intersecting of forms, negative and positive relationships, composition, texture, scale, and color. The combining of these principles gives rise to an enormous variety of solutions. Upon completion of the one hundred solutions, students are then asked to select their best solution and execute it in the larger rectangle on the assignment sheet.

The intention of this assignment is threefold. First, it challenges a student's endurance and resourcefulness by demanding such a multiproblem-solving task. Second, it encourages playing, risk taking, and experimentation while it reinforces previously taught graphic design principles. Lastly, it enforces the critical skill of editing, which is an important aspect of the design process that requires students to develop an inner sense or understanding—a barometer for assessing the impact of their work. The completion of this assignment is empowering.

WEEK 8: THE NOTEBOOK

Using the twenty-one rectangles on the assignment sheet, students are to depict the physical or emotional characteristics, or specific personalities, of twenty different grade-school pupils and one teacher by utilizing the basic elements that a notebook page is comprised of: many horizontal blue lines and two vertical red lines on a white background. In the redesigning of the notebook page, students may alter the space between lines, increase or decrease the thickness of the line, or change the direction of the lines. The only limitation is to maintain the basic identity of the notebook page.

The intention of this assignment is to offer students an abstract vehicle where successful solutions do not rely on drawing skills, but on a pure graphic design idiom and the employment of graphic design principles. Students are encouraged to develop a more conceptual approach to problem solving because of the constraints and parameters of the assignment.

WEEK 9: UPC

Using the eight rectangles on the assignment sheet, students are asked to alter the UPC (Universal Price Code) symbol by interpreting it in a personal, political, or social statement, then to select the best solution and execute it in the larger rectangle on the assignment sheet.

The intention of this assignment is to offer an opportunity for playful problem solving, which can produce satirical, comical, and witty solutions for a designer's graphic vocabulary. The inherent familiarity of the subject gives a certain tangibility to the problem, but the success of the solutions ultimately lie in the articulation of the graphic execution and formalistic concerns. The UPC mark is one of the most widely used symbols in the world, appearing on packaged goods, magazines, book jackets, and other mass-produced products. It is the nemesis of graphic designers because its placement often conflicts with one's design solution. Therefore, this opportunity for revenge is widely appreciated.

WEEK 10: ROAD SIGN

Students are given an assignment sheet printed with twelve blank yellow road signs. The following topics are listed beneath each of the signs: ant farm, red-light district, nuclear power plant, quicksand, running of the bulls, lovers' lane, fortune-teller, target range, paratrooper landing, shark crossing, alien sighting area, and hole in the ozone. Students are asked to depict the given subjects by keeping immediacy in mind, which is the primary function of a road sign.

This assignment encourages simplicity and personalization while keeping immediate communication in mind as the primary function of the road sign. Although the familiar context of a road sign encourages a traditional solution, the nonsensical topics allow for uninhibited experimentation and the opportunity to play.

WEEK 11: LIFE-AND-DEATH

Students are given an assignment sheet with six small and one large truck printed on it. They are asked to create a life-and-death image to be executed in two parts on the rear panels of each truck, with the left panel representing any subject, object, or situation, while the right panel must show its destruction or transformation. The solutions should be personal rather than functional (instructing motorists—e.g., trucks having "pass/do not pass" written on their back panels—is not the primary goal).

The intention of this assignment is for students to transcend their automatic responses to the concept of life and death, and to discover that the alteration of anything is its death. Personal responses allow for more meaningful participation in the problem-solving process and to accomplish this, at the onset, students are asked to write lists of ideas that help develop concepts. This process may be applied to a broad range of conceptual problem-solving situations.

WEEK 12: TYPOGRAPHIC PORTRAIT

A specific type of personality, characteristic, or subject is described in each of the twelve rectangles on the assignment sheet. They are as follows: chameleon, acrobat, amphibian, linebacker for the New York Giants, taxi driver, TV evangelist, allergy, Chernobyl, hiccups, accident prone, magician, and one's self. Students are asked to choose an appropriate typeface that best expresses the characteristics of each subject, then render their whole name, part of their name, or their nickname, considering the typeface style, letter spacing, and use of upper- and lowercase characters.

Learning to work expressively with typography is the intention of this assignment. Typography is the definitive tool of the graphic designer. Most problems can be solved within the confines of this expressive form. This assignment encourages the initial problem-solving impulse to be pushed beyond the literal toward a more conceptual approach. The use of one's own name adds a more personal element, which engages students to work expressively, giving a deeper meaning to the project.



Designing with Self-Authored Text

Paula J. Curran

COURSE OVERVIEW

How do writing and design implicate each other? What place does self-initiated, nonclient-driven design have in the life of a graphic designer? Historically, graphic designers have been mediators rather than creators of the text. To challenge this paradigm, this course examines the consequences of the student/designer inventing text, form, and audience. Through a series of creative writing exercises and typography problems, the student will investigate verbal and symbolic visual language and meaning from within a conceptual framework. In addition, this topic will be examined through readings, lectures, and analyzing artists' books.

CONTENT AREAS

The two major content areas for this course are writing and design, with each of the four projects involving both. The expectation is that knowledge and concepts will be abstracted and translated in the next project area. Lectures will clarify and expand the concepts and objectives of the problem statements. Each student is responsible for the completion of each assignment, which includes developmental and exploration work and a final solution to the verbal and visual communication problem.

WRITING PROCESS

The process of writing is similar to the design process in that writing involves research, creative thinking, writing drafts, and refinement. Like the design process, it is not reasonable to expect to write a successful piece by sitting down, putting fingers to keyboard, and finishing it in one sitting. To aid in the writing process, writing assignments will be workshopped in class. Workshopping allows for feedback and suggestions from the professor and classmates.

Most of the projects will begin by writing the content (words) followed by designing the form. In rare instances, form may precede design, but students will be required, unless specified, to concentrate on the written component first.

DESIGN PROCESS

The next step in the process is the design. Each student is expected to take each project to a creative and highly innovative solution. This can be achieved by understanding and following the guidelines of good design process and spending the necessary time on each assignment. It is not reasonable to expect successful solutions to complex problems with one or two quickly executed ideas. It is important to generate many ideas for each visual solution to the assignment. Each stage of a visual solution must be thoroughly investigated. The professor will provide guidelines for the appropriate quantity of sketches that should be completed.

Each assignment requires a well-organized notebook of both the writing and design processes that lead to the solution. These notebooks are usually in the form of a plastic folder with clear pages to insert the work. The brand name is ITOYA® and they are available at bookstores and commercial copy centers. Each assignment will require a different notebook.

WORKSHOPPING

Workshopping writing is similar to the critique process in graphic design. We will spend approximately two class periods for each project workshopping written work.

To ensure proper workshopping, students must have—at the beginning of class, on the date due—their completed written work and nineteen copies. No excuses, please. The student will then pass out a copy of their work to each student—two copies will go to the professor. Workshopping will take place during the next two classes. To prepare for the workshops, each student must read everyone's work and make critical comments, either in the margins or typed on a separate page.

During the workshop, each student will read his or her piece out loud (or have someone else read it). The class will then spend ten to twelve minutes discussing and commenting on the work. It is vital to the progress of each writer that he or she receives critical feedback from all students. At the end of the workshop, each writer will collect all comments. Sign your comments and avoid unkind or irresponsible comments. They serve no one.

TEXTS

Robin Williams, Beyond the Mac Is Not a Typewriter: More Typographic Insights and Secrets (Berkeley: Peachpit Press, 1996). Required.

Anne Lamott, Bird by Bird: Some Instructions on Writing and Life (New York: Pantheon Books, 1994). Required.

Carol Burke and Molly Best Tinsley, *The Creative Process* (New York: St. Martin's Press, 1993). Recommended.

Robin Behn and Chase Twichell, eds., *The Practice of Poetry: Writing Exercises from Poets Who Teach* (New York: Harper Perennial, 1992). Recommended.

- Anne Bernays and Pamela Painter. What If? Writing Exercises for Fiction Writers (New York: HarperCollins, 1995). Recommended.
- Rob Carter, Ben Day, and Philip Meggs, *Typographic Design: Form and Communication*, 2d ed. (New York: Van Nostrand Reinhold, 1993). Recommended.
- Wucius Wong, *Principles of Form and Design* (New York: Van Nostrand Reinhold, 1993). (Textbook used in ArtGR 270/271.) Recommended.
- Rob Carter and Philip Meggs, *Typographic Specimens: The Great Typefaces* (New York: Van Nostrand Reinhold, 1993). (Excellent reference. Used in ArtGR 270/271.) Recommended.
- Erik Spiekermann and E. M. Ginger, *Stop Stealing Sheep and Find Out How Type Works* (Mountain View, Calif.: Adobe Press, 1993). (Excellent type specimen reference. Brief, but informative examples of how typography is used. Useful, always. Used in ArtGR 270/271.) Recommended.

BIBLIOGRAPHY: DESIGN

- Philip Meggs, Type and Image: The Language of Graphic Design (New York: Van Nostrand Reinhold, 1992).
- Keith Smith, Text in the Book Format: Book NR. 120 (Rochester, N.Y.: Sigma Foundation, 1989).
- Keith Smith, The Structure of the Visual Book: Book 95 (Rochester, N.Y.: Keith Smith, 1984).
- Anne Burdick (guest editor) and Rudy VanderLans (publisher), "Mouthpiece 1," *Emigre 35* (1995); and "Mouthpiece 2," *Emigre 36* (1995).
- Rob Carter. *American Typography Today* (New York: Van Nostrand Reinhold, 1989). Kim Elam, *Expressive Typography: The Word as Image* (New York: Van Nostrand Reinhold, 1990).
- Jasia Reichert, "Joshua Reichert: Typography as Visual Poetry" in *The Liberated Page: A Typographica Anthology*, Herbert Spencer, ed. (San Francisco: Bedford Press, 1987).
- Christine Celano, "A Typographic Visualization of the Narrative Structure of On the Road," Design Issues IX, no. 1 (Fall 1992).
- Steven Heller, "The Shock Is Gone," I.D. 35, no. 2 (March-April 1988): 62.
- John Morgan and Peter Welton, See What I Mean (London: Edward Arnold, 1992).
- Kenneth J. Hiebert, *Graphic Design Processes: Universal to Unique* (New York: Van Nostrand Reinhold, 1992).

SOFTWARE

- Bill Parsons, *Graphic Design with PageMaker 6.0* (Delmar Publishers, 1996). Information on the Web: www.delmar.com/delmar.html; e-mail: info@delmar.com; phone: (800) 347-7707
- Robin Williams, The Mac Is Not a Typewriter (Berkeley: Peachpit Press, 1989).

EXAMPLES

Paula J. Curran, Me and Jackie O. (Ames, Iowa: self-published, 1995).

Warren Lehrer, Nicky D. from L.I.C.: The Portrait Series: A Narrative Portrait of Nicholas Detommaso (Seattle: Bay Press, 1995).

Warren Lehrer, *The Portrait Series: A Narrative Portrait of Charles Lang* (Seattle: Bay Press, 1995).

Art Spiegelman, Maus: A Survivor's Tale I: My Father Bleeds History (New York: Pantheon Books, 1986).

Art Spiegelman, Maus: A Survivor's Tale II: And Here My Troubles Began (New York: Pantheon Books, 1991).

Nick Bantock, Sabine's Notebook (San Francisco: Chronicle Books, 1992).

Nick Bantock, Griffin and Sabine (San Francisco: Chronicle Books, 1992).

WRITING

William Zinsser, Writing to Learn (New York: Harper & Row, 1988).

Robin Behn and Chase Twichell, eds., The Practice of Poetry: Writing Exercises from Poets Who Teach (New York: Harper Perennial, 1992).

GRADING

Each project will be evaluated and graded for both design and writing, based on the criteria established in the problem statement and problem objectives. Projects will be weighted in importance based on the complexity of the concepts and the solutions required. Each project will be given a letter grade based on a system of points for each assignment. You will receive both written and verbal evaluations for each assignment. The verbal evaluation will take place during the critiques that are scheduled for the assignment due dates. These critiques may last the entire class period or they may not. Be prepared to stay for the whole critique. Each project will be given a letter grade based on the + or – system. Projects will be graded and returned by the due date for the next project.

- A: Excellent This is usually work done by a highly motivated student meeting all or most of the performance criteria as set forth by the problem. In order to earn an A in the course, a student must earn an A consistently on every writing/design project.
- B: *Good* This work is above average but lacks the qualities that give it the stamp of excellence. It shows better-than-average design sensitivity.
- C: Satisfactory This work is merely average. Work is handed in on time and has fulfilled the requirements for the project, but it lacks strong writing and/or visual interest and thoughtful and imaginative resolution.
- D: *Poor* Below Average. This work is handed in on time, but lacks many or most areas that show any understanding of design or design print production.

• F: *Unacceptable* Work that is not handed in on time or is so despicable as to be an affront to design sensibilities. Makes printers moan in anguish.

GRAPHIC DESIGN AREA ARCHIVES

Each student will be required to submit a copy of one piece from this course (in both print and digital form) for the Graphic Design Area Archives. This piece will be selected by your course instructor, and must be turned in at the time of your final project submission for this semester. Your instructor will also ask for specific works to be photographed for the Graphic Design Area Archives, which may be more than one project.

DUE DATES AND PROJECT SUBMISSION

In the working world of design, deadlines must be met, period! All assignments will have due dates. Late projects will be marked down one letter grade (+ or –) for each day they are late. This includes nonclass days and weekends. Projects are due at the beginning of class. No excuses, please. Your client is interested in results, not excuses. As with any rule, there are exceptions. A written doctor's explanation is required if a due date is missed due to illness. Discuss problems with instructors in advance to anticipate a problem and offer solutions. Organize your time and plan ahead! Finally, a project may not be redone for a higher grade. Students are encouraged to try the assignment again if they did not do well—for the purpose of making their portfolio better. However, the project will not be regraded.

PROJECT DUE DATES

The following are the dates each project is due. Each project, including final print product, disk, and ITOYA® are due at the beginning of class. Critiques will be on the due date, unless otherwise specified.

- Tuesday, February 4: Project 1
- Tuesday, March 4: Project 2
- Tuesday, April 3: Project 3
- Thursday, April 24: Project 4



Off the Page and into the Streets: Communication and Activism

Sharyn O'Mara

Bill Newkirk writes:

Art and design: some definitions.... I can't see one without seeing the other. Take either the heart or the mind out of the body and what do you have left?

Design is external, in that its forms and applications extend basic human functions and needs. These pertain to three primary areas—messages, as in our need to communicate with each other; products, which enable us to extend the mechanical functions of the body; and environment, or control of conditions around us.

Art is internal, in that its forms affect the senses and thereby influence the psyche, the emotions, the spirit. The fine arts emanate from the area of human messages. They involve the individual, the one whose forming is a singular act. And they involve the individual who may or may not elect to correspond with the maker of that form. This does not rule out the human need on both sides.... The design profession is a problem-solving activity. The problem or task most often originates with someone other than the designer. This is the client.... Design is well done if it does its job. Design becomes an art when it elevates the task to touch the spirit as well. ("Art and/or Design," *Spirals* 91)

DESCRIPTION

"Off the Page and into the Streets" provides a forum for students from any discipline to consider and expand their roles as members of a community, residents of an urban environment, and participants in our culture. This course is an immersion in the social, political, historical, and economic issues that guide and divide our city and our country, and offers the opportunity for students to take a public stand on issues of importance ranging from the personal to the political. Students are required to read the *New York Times* daily.

There are three main components to the course.

I. PUBLIC ART AND/OR DESIGN: AN OVERVIEW

Looking at historical and contemporary examples of communication and activism, we will investigate the methods and materials for achieving a particular aim, and the impact/effectiveness of each work. This component takes place during the first nine weeks of the course and involves slide lectures, discussions, and assigned readings.

Context for Inquiry

In Linda Burnham's article "What Price Social Art?" (High Performance 35, 1986) she states that "the effectiveness of a social artwork is bound up in its context, framed in its time zone. Can any social spectacle be effective in 1986?" More than a decade later, the question looms large. As we navigate each day, we cannot help but be confronted by evidence of the vastness of societal ills—homelessness and poverty; war and famine; and issues in race, gender, sexuality, cultural identity, human rights, education, healthcare, and politics. Newspapers and city streets alike scream at us and the sound is overwhelming; inaction, however, is deafening. Artists and designers, as communicators, are uniquely positioned to act upon these issues within the realms of both the poetic and the pragmatic. But making issue-oriented work is not without challenges, and many of these arise from the efforts of those who have gone before. Burnham points out that issue-oriented works "must adopt a truly fresh approach. So many have tried so hard, and the problems are still with us. We are psychologically worn out with the effort to solve them, and perhaps this leads us to steel against ourselves. . . . Has this tool lost its cutting edge?"

Week One: Tours

TOUR ONE: Trolley tour with MTSI. We will see the city the way that tourists see it. Consider for discussion next week: What do we see/not see? Who is visible/invisible? What areas are deemed acceptable/unacceptable? Which cultures are represented/not represented? What is the percentage of retail to living space that we see, and how does that correspond to percentages for the entire city? Where are the homeless, the poor, the margins? Consulting the map of the city of Kansas City, Missouri, what percentage of the city is viewed in these tours? How accurate a view is this? Document this experience through visual and verbal notations; bring a camera and film, videocamera, sketchbook.

TOUR TWO: Car tour with class. We will take a driving tour of Kansas City, Missouri, using the city map to determine our route. Consider this in light of the earlier tour. Document this experience.

Week Two: Memorial and Place

• Krzysztof Wodijko: Projections

• Maya Lin: Vietnam Veterans' Memorial

- Jenny Holzer: Survival Series
- Biddy Mason and Experience of Place
- Sheila Levrant de Bretteville
- Susan King
- Betye Saar

PRECEDENTS

- Diego Rivera
- Picasso: Guernica
- Francisco Gova
- Kathe Kollwitz

DISCUSSION AND ANALYSIS: Discussion of tours and analysis of information gathered; discuss readings. Discuss assignment one: KCAI campus. Proposals and concept presentations due in week 6. Conversation with director of exhibitions (installation procedures, proposal preparation); campus tour (with maps) to identify potential sites; documenting campus for reference.

Week Three: Culture in Action

- Carrie Mae Weems
- Krzysztof Wodijko: Homeless Vehicle Project
- Trinh T. Minh-ha: Surname Viet, Given Name Nam
- Adrienne Piper: Business Card
- Sculpture Chicago: Daniel Martinez, Consequences of a Gesture
- Suzanne Lacy: Full Circle
- Kate Ericson and Mel Ziegler: Eminent Domain
- Robert Peters: Naming Others, Manufacturing Yourself
- Mark Dion: Chicago Urban Ecology Action Group
- Iñigo Manglano-Ovalle: *Tele-Vecindario* (a street-level video project)
- Haha Flood: A volunteer network for active participation in healthcare

Week Four: Activism through Ideology

• Dada

Situationist International

Constructivsim

Punk

Bauhaus

Fluxus

Week Five: Individual Visions

Jan van Toorn

Robbie Conal

• Spike Lee

• Ralph Nader

John Heartfield

PROTEST POSTERS

- Revolutionary Posters: Central and Eastern Europe
- Suffragettes: U.S. and Britain
- Keith Haring
- Grapus

Week Seven: Advocates for Change

• Greenpeace

- Habitat for Humanity
- Amnesty International
- Humanity magazine

COLLECTIVES AND COLLABORATIONS

- Guerilla Girls
- Act Up
- Bureau
- WAC
- Gran Fury
- Tim Rollings: KOS (Kids of Survival)
- Suzanne Lacy: The Dark Madonna, The Crystal Quilt
- AIDS Quilt

DESIGNERS TAKE ACTION

- Class Action
- WD+RU (Women's Design and Research Unit)
- Liberation Graphics
- Jerry Mander: The nation's first nonprofit ad agency

Week Nine: Methods of Dissemination

- Jenny Holzer
- Barbara Kruger
- Shepherd Ferry: Andre the Giant Has a Posse
- WWW Sites: political and social

PRIVATE FIRMS TAKE PUBLIC ACTION . . . FOR A PROFIT

• The Body Shop

• Espirit

• Ben and Jerry's

• Buddy Shapiro: Social Tees

TEXTS: CULTURAL MEMORY

"Introduction" in Marita Sturken, *Tangled Memories* (Berkeley and London: University of California Press, 1997).

TEXTS: PLACE

Martha Rosler, "City: Visions and Revisions" in *If You Lived Here: The City in Art, Theory and Social Activism, Brian Wallis, ed.* (Seattle: Bay Press, 1991).

Dolores Hayden, "Claiming Urban Landscapes as Public History" in *The Power of Place: Urban Landscapes as Public History* (Cambridge: MIT Press, 1995).

Tony Hiss, "Experiencing Cities" in *The Experience of Place* (New York: Vintage Books, 1990).

TEXTS: INTO THE STREETS

Arlene Raven, "Introduction" in *Art in Public Places*, Arlene Raven ed. (Ann Arbor and London: UMI Research Press, 1989).

Lis McQuiston, "Introduction" in *Graphic Agitation: Social and Political Graphics Since the Sixties* (London: Phaidon Press, 1993).

II. PUBLIC SERVICE

Individual

Each student is required to perform three hours of community service per week at a community organization of their choosing from the list provided; a variety of different issues are addressed by the organizations ranging from homelessness and poverty to literacy and arts education. (Community service will take place during the Thursday session from 2 to 5 P.M. for the first ten weeks of the semester.) I will assist with the arrangements for your volunteer work.

RATIONALE: As a part of learning about issues in our community, it is imperative that we invest ourselves in that community through active participation. This experience will provide valuable insight into the day-to-day realities—both triumph and failure—of organizations working to improve the human condition.

Group

During the last four weeks of the semester (with the exception of critique week) we will work as a group for a variety of causes (preparing meals for the homeless, painting houses for the elderly, teaching art to young children).

RATIONALE: The ability to work as a team member, collaborating toward a mutual goal, is critical to designers and artists in the expanding global market. In addition, since there is power in numbers, we can positively impact various elements of our community.

III. STUDIO

OBJECTIVE: The studio component allows students to synthesize their experience in the community, knowledge gained from lectures, and individual research to develop a point of view and then act upon it. Through critique and discussion we will consider content, audience, intended and perceived meaning, and we will ask how designers and artists position themselves in their communities: What is their responsibility within this arena? How can we challenge the status quo and provoke thought in a way that causes resonance and perhaps inspires action? What is the role of the commercial media in communication? When should we and how do we take a stand? What are the benefits of taking design off of the page, art off of the walls, and taking to the streets? You are required to keep a sketchbook as a part of the studio component. Use this for taking notes, working out ideas, sketching, and documenting your experience as a resident of this city.

Project 1: KCAI Campus

As you know, many students on campus do not take the time to stay connected to the community around them or make themselves aware of larger issues in our city and in society as a whole. Choose an issue that you feel is important to communicate and "install" or "act" it on campus. Proposals are due week five for review and approval by the director of exhibitions; all proposals must be approved before proceeding. Of course, you may not do anything illegal for any part of your project. You are required to document your event and submit ten to twenty slides and video clips.

Project 2: Kansas City

Choose an issue or issues of importance in relation to your research about and experience in Kansas City, and develop a work or works that address this issue in an active manner. Again, you may not do anything illegal as any part of your project. Appropriate permits must be obtained for certain types of actions; I will assist you with this process.



Green Graphic Design Seminar

Lisa Fontaine

The goal of this green design seminar is to develop informed decision makers, able to weigh conflicting data and set personal and professional priorities. This ability will be achieved through the three primary learning objectives outlined below. The interrelationship of these objectives will become evident as you progress through the course.

- 1. You will focus your attention on the ecological concerns of graphic designers. Through an examination of the destructive consequences of paper manufacturing, printing, and packaging on the environment, you will develop skills to consider ways to minimize this impact. You will also consider the many ways that designers can have a positive impact on the environment through their problem-solving and innovative thinking skills. In response to the interdisciplinary nature of green design, your study will include issues facing the design community as a whole.
- 2. In addition to studying published information, you will conduct original qualitative research on green design. The cross-disciplinary aspects of ecology and the contradictory nature of the information sources make this topic an ideal introduction to critical thinking. Your original research will provide you with experience in thinking and writing critically, preparing you for the eventual task of thesis development for your MFA degree. In preparation for this research, you will study the basic principles of logic, argument, and the scientific method.
- 3. You will use your expanding knowledge of green design to develop new ideas for integrating ecology into design education. These curricular prototypes will be included in the Green Design Curricular Initiative currently being organized through ICOGRADA Education.

Please note: It is not the intention of this course to create or enforce an ecocorrect doctrine. Your personal beliefs and questions are important and welcome in all discussions.

PRIMARY READING LIST

- Starting Research by Roy Preece
- The Research Paper Workbook by Ellen Strenski and Madge Manfred
- The Art of Creative Critical Thinking by John C. S. Kim
- The Designer's Guide to Eco-friendly Design by Poppy Evans
- Recycled Papers by Claudia Thompson
- The Green Imperative by Victor Papanek
- How Much Is Enough? by David Durning
- Green Design by Dorothy Mackenzie
- The Great Printers Project published by the Environmental Defense Fund
- The Graphic Designer's Greenbook by Anne Chick
- Packaging and the Environment by Susan E. M. Selke
- Design for Society by Nigel Whitely

ASSIGNMENT 1: PRESENTATION OF GREEN DESIGN ISSUES

OBJECTIVE: To incorporate assigned readings into a coherent presentation of green design issues.

PROCEDURE: You will be assigned a specific section of the readings to use in the development of a fifteen-minute presentation. Your objective will be to bring the readings to life by presenting additional material or participatory exercises that enhance the group's understanding and interest in the topic. Your objective is *not* to rehash the readings. Prepare your presentation with the assumption that everyone has done the reading; your task is to make it more memorable for them, or show them how it relates to comparable or broader issues.

An effective presentation will be innovative, coherent, and manageable within the fifteen-minute limitation.

ASSIGNMENT 2: LIFE-CYCLE ASSESSMENT

OBJECTIVE: To develop an understanding of the concept of extended producer responsibility through examination of the cradle-to-grave impact of printed materials.

PROCEDURE: Conduct a life-cycle analysis of an existing piece of printed graphic design. This entails examining all aspects of the product's life, including manufacturing of the paper, printing, distribution, disposal, recyclability, and deinking prospects. You will need to interview the designer of the piece to learn the specifics about the paper and printing process used. Present alternatives for each of the phases of the life cycle that you feel could be more eco-friendly. Be specific with your suggestions.

You will be graded on the thoroughness and accuracy of the information you gather, as well as the appropriateness of your suggested alternatives. Keep in mind that some special-interest groups have intentionally presented misinformation on the

topics of paper, ink, and printing; therefore, you will need to develop your investigative abilities—i.e., your ability to sift through the "green-washing" to find the most accurate and unbiased information.

ASSIGNMENT 3: HYPOTHESIS DEVELOPMENT EXERCISE

OBJECTIVE: To learn the principles of the scientific method of inquiry, the basic elements of logic, in preparation for developing original research in green design.

PROCEDURE: This exercise will allow you to test the basic research methods identified in your texts (*The Art of Creative Critical Thinking, Starting Research*, and *The Research Paper Workbook*). In this preliminary exercise, you will *not* be expected to develop each research idea in-depth, instead, your focus should be on developing hypotheses and outlining the processes that would be necessary to test them.

Begin with a topic about which you have both knowledge and opinions. Based on the combination of data and opinion, develop a hypothesis. Consider how you would need to test such a hypothesis, and what information or discovery would disprove it. Your opinions will help in developing ideas; however, they can also be problematic. Consider how your hypothesis and/or methodology might be biased or compromised by your current opinions.

Although your hypothesis proposals will never be carried through to a final paper, you will be required to present them as though they would actually be pursued. Structure your proposal according to the following categories:

- Title: Your title must be accurate and unambiguous. This is not as easy as it seems.
- Abstract: Synthesis of the problem definition and hypothesis that clarifies your intentions.
- Problem Definition: Background on the topic: existing literature, in what academic disciplines the topic is being studied; unexplored links, etc. Cite sources.
- Hypothesis: The new assertion you are making, based on your study of existing data and your opinions, which is worded in a way that is clearly testable.
- Investigation of the Hypothesis: Explain the intended methodology for testing the hypothesis.
- Potential Limitations of the Methodology: Describe limitations of time, funding, or other variables that will make it impossible to fully test the hypothesis or achieve conclusive results.

Your proposals should be a maximum of two to three pages. Brevity will force you to think and write with greater clarity.

ASSIGNMENT 4: GREEN DESIGN PEDAGOGY

OBJECTIVES: To develop new and innovative ways to present green design issues to design students and to contribute to the development of a prototype curriculum for the ICOGRADA Education Green Design Initiative.

PROCEDURE: You will develop a curricular proposal for design students that would increase their awareness and understanding of green design issues. Each student will be assigned a specific subtopic within green design that must be addressed by their prototype.

Within your assigned topic, develop one assignment or educational component that accomplishes the following:

- Clearly states its learning objective and pedagogical rationale
- Demonstrates its potential to meet this objective
- Clearly identifies the recommended process for students to follow
- Directs the students toward meaningful, in-depth research
- Assigns appropriate readings
- Is innovative in its approach to the topic
- Cannot be achieved through superficial solutions
- Could be supervised by an instructor with no expertise in green design

Prepare a draft proposal of the assignment. Structure your proposal as follows:

- Project Title
- Learning Objective: What students will learn, not what they will do
- Target Audience: Design discipline, education level, etc.
- Rationale: Why it's needed, why it's structured the way it is
- Methodology: Lecture content, discussion groups, research method, ideation process
- Anticipated Outcomes: What they have created or done by the end of the assignment

These proposals will be sent to graphic design educators at other schools for feedback and critique. Additionally, these proposals will be presented to an environmental education professor for interdisciplinary critique. Your final proposal should be revised in response to the feedback you receive from all reviewers.

ASSIGNMENT 5: RESEARCH PAPER

OBJECTIVES: To increase your knowledge of green design through in-depth research of a related subtopic and to further your understanding of the scientific method and learn to apply it toward the development and investigation of an original hypothesis.

PROCEDURE: This paper will be developed and evaluated in three phases. Each

phase will be presented for peer review in class. The topic for your research will be assigned from the following list:

- Environmental education
- Solid-waste reduction
- Papermaking
- Chlorine bleaching of paper
- Recycling
- Ecophilosophy
- Nontree papers
- Client education
- Life-cycle analysis
- Packaging design
- Printing and ink technology

Structure each phase of your research paper according to the categories used in Assignment 3. Note the following clarifications regarding expectations at each phase:

• Phase One

- Title: Consider how different wordings of the title help or hinder the clarity of your intentions.
- Abstract: This is extremely important at this phase, as it helps to clarify your approach.
- Problem Definition: This will be in its early stages in phase one. Describe the
 background of the problem in terms of both past and present situations.
 Also, clarify the need for your investigation. It is not expected that you have
 completed your literature review at this point, but sources should be
 identified.
- Hypothesis: This is also extremely important at this phase, as it determines the direction of both your literature review and your methodology.
- Investigation of the Hypothesis: Describe your intended methodology. How will new data be collected? How will Internet resources be used? Will there be surveys and interviews?
- Identify the known experts in this topic. What assumptions are you making?
 What results would nullify your hypothesis?
- Potential Limitations of the Methodology: Describe gaps in this methodology, or other limitations that will make it impossible to test the hypothesis.
- *Phase Two*. Review the critical responses to your phase-one submission. Rework the paper as follows:
 - Title: Clarify as necessary.
 - Abstract: Clarify ambiguous issues; correct errors in reasoning.
 - Problem Definition: Show evidence of continued progress. Document

sources here (and throughout the paper) with footnotes as you would a research paper.

- Hypothesis: Clarify as necessary.
- Investigation of the Hypothesis: Show evidence of continued progress. Document your research interactions, both passive and active. Prepare prototypes of any surveys or tests you will conduct. List the questions you are asking, and why you think they are pertinent questions. How was your survey audience selected? Identify your opinions, and follow up with a methodology for investigating the validity of those opinions. Identify assumptions you are making.
- Potential Limitations of the Methodology: Acknowledge any newly considered limitations that have been identified by you or your reviewers, along with possible solutions.
- *Phase Three*. This phase of the paper should have resolved all problems that were identified in phase-two feedback. The final paper should make a unique contribution to the body of knowledge in the area of green design, and should show evidence of an understanding and appreciation of the principles of argument (such as inductive and deductive reasoning) that you have been studying.

ASSIGNMENT 6: PEER REVIEW OF IN-PROGRESS RESEARCH

OBJECTIVES: To continue dissecting written arguments in order to evaluate their validity and clarity; to assist peers in their own research progress.

PROCEDURE: You will be given a draft of another student's research proposal (phase one). Study the proposal critically. Respond to each section with comments about clarity, validity, uniqueness, verifiability, sources, etc. Is faulty reasoning used? If so, describe. What assumptions are being made that were not identified by the author? Is the author making an assertion that has already been proven, or is already well documented in existing literature? What recommendations can you make about revisions in each section? Your evaluation and analysis should be two to three pages.



Introduction to Designing with Movement and Sound/Designing in Time and Space

Jay Chapman

INTRODUCTION

From numerous exercises and workshops I developed as a creative consultant to the interactive multimedia/motion graphics/digital design community, I adapted and organized a selection into a two-part new media foundation course designed to meet the needs of students who are trying to find, nourish, and enrich their own "voice" and sensibilities.

What emerged is a heightened-awareness, enhanced-stimuli, multidisciplined (and, I might add, extremely successful) approach to turning traditional (static-based) designers into new media (movement-based) designers.

DESIGNING WITH MOVEMENT AND SOUND

(The first part of a two-course foundation sequence for all new media)

A design class where you use the computer as a tool in a series of short dynamic divertissements emphasizing expressive movement and sound, combined at the end of the term into your own multimedia circus.

MAJOR/TERM: Open to students of all majors in any term (working on any platform).

PREREQUISITES: Fascination with movement and/or sound. Willingness to expand your perceptions and sensibility. Ability to generate movement in any computer program on any platform (no computer programs are taught in this class). Ability to record sound. Excitement at the thought of a circus. A sense of humor.

RAISON D'ÊTRE: Life is movement; movement is not necessarily life. Just as an eye can be developed to see more, a body's awareness of internal and external movement and sound can be expanded. Enriched awareness of movement and sound is the key to more vital and dynamic expression. To nourish an expanded sensibility, you must have constant experimentation, exploration, and reinforcement, one small bit at a time. Once any design incorporates movement and sound, they have to become the foundation for the design. In fully communicative multimedia, movement becomes the primary expressive force and main compositional element. Movement must be used expressively in order to effectively communicate a concept. Sound must

be designed as an integral part of the overall concept, rather than mere accompaniment to the visual material.

FOCUS: Expressive movement and sound.

AIM: To develop greater sensitivity to movement and sound dynamics as a way of infusing computer-generated work with more "life," energy, and feeling.

METHOD: Short weekly exercises exploring the expressive potential of movement and sound.

TEACHING TOOLS: Lectures, demonstrations, body-awareness exercises, environmental-awareness exercises, film and video screenings, slides, analytical frame-by-frame film examinations, in-class analysis of student and other work.

RESULT: A series of "acts" and "environments" sequentially arranged around the concept of a circus/sideshow/carnival, which will document the creator's experiments with and facility for employing movement and sound in an expressive, dynamic manner.

DESIGNING WITH MOVEMENT AND SOUND: SYLLABUS

Each weekly assignment functions as both an "act" or "environment" in your circus/sideshow/carnival and a formal exercise. Assignments are due on the weeks specified, but may be reworked for the final presentation.

• WEEK I

- Introduction
- Movement analysis and discussion
- Linear representation of movement/feeling exercise (by hand, on five sheets
 of paper, record with a single continuous line the feeling generated by the
 way five different people are moving)
- Character personality/naming exercise (to prepare for first assignment)
- Body-awareness exercises and assignment

• WEEK 2

- Discuss body-awareness exercises assigned
- Assignment due: The headliner (one line). Animate a line so that the
 movement of the line expresses the dominant personality trait of the
 "character" you have created, and name it appropriately. No color/grays,
 sound, backgrounds, 3D, recognizable forms.

• WEEK 3

- Assignment due: The troupe (group of lines). Animate a group of similar lines so that their interaction expresses the dominant personality characteristic of the "group," and name it appropriately. No color/grays, sound, backgrounds, 3D, recognizable forms.

• WEEK 4

 Assignment due: The star animal (one shape). Animate an amorphous shape so that the movement of the shape expresses the dominant personality trait of the "animal" you have created, and name it appropriately. No color/grays, sound, backgrounds, 3D, recognizable forms.

• WEEK 5

- Assignment due: The animal act (group of shapes). Animate a group of similar amorphous shapes so that their interaction expresses the dominant personality characteristic of the "group," and name it appropriately. No color/grays, sound, backgrounds, 3D, recognizable forms.
- Environmental-awareness exercises and assignment
- Spatial-dynamics discussion and in-class computer exercise

• WEEK 6

- Discuss environmental-awareness exercises assigned
- Assignment due: The house/room/tent (a consistent space). Develop an
 abstract, nonspecific, moving environment with a definite feeling through
 the movement of lines and shapes, and name it appropriately. No
 color/grays, sound, recognizable forms.
- Spatial-dynamics discussion and in-class computer exercise

• WEEK 7

- Assignment due: The ride (an evolving space). Develop an abstract, non-specific series of moving environments that evolve from one to the next—each with a different specific feeling—through the movement of lines and shapes, and name it appropriately. No color/grays, sound, recognizable forms.
- Introduction to sound
- Sound-awareness exercises
- Sound-creation exercises

WEEK 8

- Discuss sound-awareness exercises
- Assignment due: Intermission (sound collage). Create a sound collage that evokes a definite feeling. No recorded music or use of words in phrases or sentences.
- In-class computer exercise

• WEEK 9

- Assignment due: The playroom/divertissement (lines and sound). Create a
 divertissement evoking a specific feeling through the play of lines and sound,
 and name it appropriately. No color/grays, backgrounds, 3D; can be
 representational, but not recommended.
- In-class computer exercise

• WEEK 10

- Assignment due: "Animals" in their native habitat (shapes and sound in space). Through the play of shapes and sound in an environment, evoke the feeling of specific imaginary "animals" at play in their "native habitat," and name appropriately. Use grays/no color; can be representational, but not recommended.
- In-class computer exercise

• WEEK II

Assignment rough: Finale (anything/everything). Create a final act for your circus/sideshow/carnival, integrating what you have learned into a "finale" of your choice, and name appropriately. No restrictions.

WEEK 12

- Assignment due: Finale (anything/everything).
- Discussion of ways to connect all "acts"/exercises

• WEEK I 3

- Preview of entire show (connections). All "acts"/exercises arranged into your own circus/sideshow/carnival.

• WEEK 14

 Opening night (bravo!). Your complete circus/sideshow/carnival, named appropriately.

In-class, computer-based exercises are determined by students' particular needs and are always executed by pairs of students working together.

Each class session concludes with a screening of short films, film clips, and/or videos chosen from the 1920s through the 1990s to serve as examples of points made and sources of inspiration and stimulation. Slide and sound presentations are determined by students' needs and interests.

DESIGNING IN TIME AND SPACE

(The second part of a two-course foundation sequence for all new media)

A design class where you use the computer as a tool to continue to "play" with movement and sound in a more sophisticated, complex manner emphasizing rhythm, spatial dynamics, and principles of continuity, in order to help you to further develop your own new media "voice."

PREREQUISITE: Designing with Movement and Sound

RAISON D'ÊTRE: In fully communicative new media, movement becomes the primary expressive force and main binding element, supplanting customary notions of (static) "composition" in classic graphic design.

Once you have acquired sufficient experience through experimentation with movement and sound as expressive forces (the main focus of Designing with Movement and Sound), you are now ready to progress to the next level: movement and sound as the basis for a new, active/dynamic form of "composition."

In order for this new, active/dynamic form of "composition" to communicate in a clear, coherent manner, concepts of rhythm and spatial dynamics must be explored and mastered. When putting these concepts into practice in more complex projects, an understanding of the principles of continuity is essential.

FOCUS: Rhythm, spatial dynamics, and elements/principles of continuity.

AIM: To have you acquire a facility for using rhythm and spatial dynamics to enhance your movement and sound skills in order to communicate more complex concepts in a more sophisticated manner. To give you an opportunity to demonstrate

the extent of your newly expanded sensibilities in projects of your devising directly related to your new media concerns.

METHOD: Four simple, one-week, computer-based exercises during the first third of the course focus on using rhythm and spatial dynamics as expressive tools to evoke feeling, sound, environment, and situation. After an introduction to the elements and principles of continuity, three more complex, two-week, computer-based exercises and a final three-week student-conceived project give you an opportunity to develop more sophisticated design solutions employing all the resources available to you.

TEACHING TOOLS: Lectures, demonstrations, body-awareness exercises, environmental-awareness exercises, film rhythm-recognition exercises, film and video screenings, slides, analytical frame-by-frame film examinations, in-class analysis of student work, analysis of other new media work.

RESULT: A series of exercises and brief final project that will document the creator's experiments with and facility for employing rhythm, spatial dynamics, and elements of continuity with sophistication in order to communicate complex concepts.

DESIGNING IN TIME AND SPACE: SYLLABUS

The overall theme/context for the exercises and brief final project is determined by each student, in order to integrate individual experiments into your own specific directions/goals in new media. Exercises are due on the weeks specified, but may be reworked for the final presentation.

• WEEK T

- Introduction
- Review of previous class
- Body rhythm-awareness exercises and assignment
- Environmental rhythm-awareness exercises and assignment
- Film rhythm-recognition exercises and assignment
- Assignment: Next week bring in five different music examples (three-minute excerpts)

• WEEK 2

- Exercise due: Use of purely visual rhythms to evoke a specific feeling. No sound, color/grays, backgrounds, 3D, recognizable forms.
- Rhythm discussion and in-class computer exercise
- Music rhythm-recognition exercises

• WEEK 3

- Exercise due: Use of purely visual rhythms to evoke sound. No sound, color/grays, backgrounds, 3D, recognizable forms.
- Spatial-awareness exercises and assignment
- Spatial-dynamics discussion and in-class computer exercise

• WEEK 4

- Exercise due: Use of rhythm and space to evoke a feelingful environment.
 Use grays/no color; can be representational; sound: complementary.
- Counterpoint discussion and in-class computer exercise

WEEK 5

- Exercise due: Use of rhythm and space to evoke the "feel" of a situation. Use grays/no color; can be representational; sound: counterpoint.
- Elements/principles of continuity and in-class computer exercise

• WEEK 6

- Exercise rough: Visual/sound essay using series of still photos/images (point of view). No type/spoken words.
- Elements/principles of continuity

• WEEK 7

- Exercise due: Visual/sound essay (still photos/images).
- Elements/principles of continuity

• WEEK 8

 Exercise rough: Visual/sound narrative (expressing emotional content of situation). No dialogue/narration; sound must develop the narrative as much as visuals.

• WEEK 9

- Exercise due: Visual/sound narrative.

• WEEK 10

 Exercise rough: Expression of a point of view. You must use still and moving images, animation, type and sound.

• WEEK II

- Exercise due: Expression of a point of view.

• WEEK 12

 Final project rough: Anything student wants, using all skills mastered in the course.

• WEEK I3

- Final project refinement

• WEEK 14

- Final project due
- Final presentation of all exercises

In-class, computer-based exercises are determined by students' particular needs. Each class session concludes with a screening of short films, film clips and/or videos chosen from the 1920s through the 1990s, which serve as examples of points made and sources of inspiration and stimulation. Slide and sound presentations are determined by students' needs and interests.

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 Jay Chapman.

Index

189

activism, 323-328 Blauvelt, Andrew, 117 Space" (Helfand), 189 design, 14, 28, 30-31, 47-48, adaptability, 27 blogs. See Weblogs Adventures on Arnold's Island branding, 93, 284-286 89-91, 113-115, 169, (Greenberg), 79 254, 290. See also graphic Breuer, Marcel, 5 advertising, 3, 6, 280, 285 design A Brief History of Time, 30 African American, 269-273 Buchanan, Richard, 28 art v., 170, 176 Alexander, Christopher, 232 Burdick, Anne, 206 computer's impact on, 11, 12, Alexander Nevsky (Eisenstein), Bush, Anne, 118 15, 20, 38–39, 104, 125–126, 177, 215 182 American Institute of Graphic as conceptual practice, 45-46, 178, 290 Arts (AIGA), 15, 68, 69, Calkins, Ernst Elmo, 93 160-162 de Certeau, Michel, 52-53 as cultural activity, 12, 45, 85, apprenticeship, 4, 5, 6, 26, 67, 74 circuit of culture, 86-87 104, 231, 262–263, Aristotle, 23-24, 30, 142 client, 44, 145 274-277 Arnold, Matthew, 24 art, 149, 170, 175, 176 collaboration, 169, 178, 255-258 form-making in, 19, 36, 47, Compendium for Literates (Gerst-62 The Art of the Maker (Dormer), ner), 184, 202 as problem solving, 145-147, 49 competence, 53, 59-61 161 audience, 10, 11, 16-18, 176, 280 computers, 11, 12, 15, 20, 38-39, product driven v. systems demographic changes in, 104, 104, 125–126, 177, 215 driven, 16, 290 274, 279–283 constructivism, 227 as professional practice, 3, 31, micro- v. macro-, 41-42, 45, Cooper, Muriel, 186 136-140 scholarship in field of, 28, 169 copyright, 199 author craft, 49-53, 169 287-292 historical and cultural func-Crawford, Chris, 184-185 social and cultural context of, tions of, 200-202 "Creative Writers and Daydream-84-88, 93-94, 107, 112, ing" (Freud), 166 creativity, 45, 53, 62, 126, as publisher, 38 175, 262-263, 264-268 "The Author as Producer" (Bentheory v. practice, 102-108, jamin), 214, 215 authorship, 47, 170, 201–208, 164-165, 166-167, 109-115 "Design: Interpreter of the Millen-230-231 214-215, 233 critic, 120-122 nium", 45
"Design and Order in Everyday auteur theory applied to, critical journalism, 116-123 203-206 critique, 98-100, 101, 138, 148 Life" (Csikszentmihalyi), control issues of, 42-44, 217 Critique, 44 2.34 Csikszentmihalyi, Mihaly, 234 "Design and the Play Instinct" culture, 84-88, 107, 112, (Rand), 165 Bailey, Charles, 27, 29 175-176, 264-268 design/art schools, 14, 57-58, Baker, David, 34 "Culture Is Not Always Popular" 63-65, 126, 221 Barthes, Roland, 116, 201, 203, (Helfand and Drenttel), 19 alternative models for, 239 131-132 curriculum, design, 102-108, the Bauhaus, 5, 22, 46, 225–227, 229 Basel method, 7 192-196, 229-231 Basic Principles of Design course model for, 232-235, 236-237, 264-268 (Maier), 7 curriculum of, 6, 128–130 the Bauhaus, 5, 22, 46, 225-227, professional v. preprofessional, historical studies of, 221-222 229 68 - 72international, 6, 7, 225, Bayer, Herbert, 5 student-based, 77-80, 180 227–228, 288 Belenky, Mary, 254 in U.S., 5, 14, 15, 288 Benjamin, Walter, 214-218 Vkhutemas, 225, 227-228 women in, 221-222 Berlo, David, 274 Death of the Author (Barthes), "The Birth of the User" (Lupton), 203 design courses. See syllabi, design

"The Dematerialization of Screen

	de acceptant a consequent de la	Garante Grien Danier 174
course	alternative opportunities in,	Gonzales Crisp, Denise, 174
design criticism, 116–123	131–132	graduate study, 240–242,
design history, 8, 28, 84–88,	apprenticeship in, 4, 5, 6, 26,	255–258, 287–292
89–91, 104–105	67, 74	alternative models for, 131–132
curriculum for teaching, 92–97, 114–115, 301–307	challenges to, 36, 41–44, 178–180, 274–275, 287	
studies of American, 220–224	design history in, 8, 84–88,	design research in, 8–9, 14, 106
Design Museum, London, 81	92–97, 104–105,	at Maryland Institute College
design practice, 18, 36, 168–170,	114–115, 301–307	of Art, 217–218
178, 290	five-year program for,	at North Carolina State Uni-
design education's discrepancy	128–130	versity, 17–18, 107–108
with, 41, 46–47, 55,	form-making v. conceptual	graphic design, 11, 12, 36, 48, 75,
179–180	thinking in, 19, 36, 47,	104, 117, 171, 271
design theory v., 102-108,	62, 180, 249–250	as cognitive artifact, 297-300
109–115	graduate study in, 8-9, 14,	as conceptual practice, 45-46,
instinct's role in, 163–167	107–108, 131–132,	178
multiculturalism's influence	240–242, 255–258,	critical journalism and,
on, 274–275, 279–283	287–292	116–123
design problems, 15–16, 145–147,	intuition v. structured curricu-	future of, 11–12, 38–39,
163–167, 170	lum in, 6, 7, 259–261	44–45, 66
Design Research: Methods and	liberal arts in, 19–21, 27–28,	green, 329–334
Perspectives (Laurel), 275	33–36, 71–72, 72, 234	as liberal art, 27–28
design rockism, 81–82	as liberal arts subject, 23, 27–30	personal history in, 151–152,
designer objects, 104 designers, 175, 178–179,	models for, 4–5, 28, 36, 216,	170, 230, 231, 264–268 as persuasion, 28, 262–263,
323–328. See also graphic	232–234	274–275
designer	skills in, 59–61, 188	problem solving approach to,
"designer's voice," 48, 51-52	undergraduate curricula in,	145–147
designing	68–72, 229–231	as professional discipline, 3, 6,
with motion and sound,	values in, 63–65, 133–135	10, 13–15, 66–68
335–338	as vocational training, 22, 27	propaganda's use of, 93–94,
with self-authored text,	Weblogs' use in, 210–213	262–263
318–322 in time and space, 338–340	educator, design, 33–35, 70, 72, 75, 229–231, 237, 239,	society's impact on, 3, 14, 15,
Designing Across Cultures	268	graphic designer, 42–44, 170–171,
(Lipton), 275	challenges facing, 129	206–208
"Designing as Strategy" (Whit-	practitioner turned, 157-159	audience targeting by,
ney), 21	self-taught, 153-156, 160-162	279–283
desktop publishing, 11, 38, 104,	standards for, 160–162	authorship issues of, 201–208,
169, 215	values of, 63–65, 133–135	214
digital media, 189–190	Eisenstein, Sergei, 182	branding and, 284–286
doctorate, 287–292 "Does Today's Criticism Help	Eliot, Charles William, 25 Emigre, 109, 118, 122, 138, 205,	challenges to, 115, 274–275 education of, 164–165, 216
Design?" (Havinden), 117	206	as producer, 42, 214–218
Dormer, Peter, 49–51	Eye, 117, 118, 121, 119120	role in communication,
Drenttel, William, 19	2-3 - 3 - 3 - 3 - 3	105-106, 193, 214-218
Dwiggins, W. A., 51	F	self-taught v. educated,
Dyson, James, 81-82	Fabrica, 131	136–140
_	facture, 227–228	Graphis, 6
E 102 110	Fella, Edward, 52	Greenberg, Arnold, 79
Eagleton, Terry, 103, 118 education, design, 98–99,	"First Things First" (Garland), 64, 93	"Grid Systems in Graphic Design"
139–140. See also curricu-	form-making, 19, 36, 47, 62	(Muller-Brockmann), 82 Gritzer, Glenn, 29
lum, design; education,	Foucault, Michel, 201, 206	Gropius, Walter, 5, 23, 225, 226,
graphic design; teaching,	Frayling, Christopher, 288	229
design	Freud, Sigmund, 166–167	
creativity in, 126, 230-231	The Function of Criticism (Eagle-	н
design practice's discrepancy	ton), 118	Havinden, Ashley, 117
with, 41, 46–47, 55,	functionalism, 82–83	Hawking, Stephen, 30
179–180	G	Helfand, Jessica, 19, 189, 190
doctorate in, 287–292 empirical inquiry in, 274–277	game design, 185	history. See design history A History of Graphic Design
historical studies of American,	Garland, Ken, 64	(Meggs), 8, 95, 112, 271
220–224	du Gay, Paul, 86	Hofmann, Armin, 7, 165
play principle in, 163-167	"General Education and Profes-	homology, 86
theory in, 102–108, 109–115,	sional Programs in	hyperarchitexture, 308-312
222–223, 301–307	Graphic Design" (AIGA	_
education, general, 25–26, 27, 34, 36	and NASAD), 69 Gerstner, Karl, 184, 202	■ The Idea of a University
education, graphic design, 14, 18,	Glaser, Milton, 43, 45, 96	(Newman), 24
29–30, 46, 61–62, 190	Gombrich, E. H., 152	ideology, 113–115
, ·, · · · · · · · · · · · · · · · · ·	, , , ,	077

image collections, 172-174 industrial revolution, 3, 221 innovation, 164-165 instinct, 163-167 The Intentional Fallacy (Wimsatt and Beardsley), 201 interactive design, 182-183, 184-188, 282 Internet, See World Wide Web intuition, 6, 7, 102, 259-261 "Intuition and Ideas" (Rand), 165

Jameson, Fredric, 202 Jones, J. Christopher, 15 Joyful Wisdom (Nietzsche), 163

Kent, Sister Corita, 52 Kerr, Clark, 25 knowledge, 49-53, 66, 142, 253 Koons, Jeff, 176

language, 171 functionality and poetics of, 184-186 in graphic design education, 46, 190, 238-239 Web's dependence on, 189-190 liberal arts, 23-25 in graphic design education, 19-21, 27-28, 33-36, 71-72, 234 Lupton, Ellen, 105, 189, 202, 205 Lustig, Alvin, 51

Maier, Manfred, 7 de Man, Paul, 202 marketing, 104 Maryland Institute College of Art, 217-218 McCoy, Katherine, 45, 202, 275 McCoy, Michael, 45 media options, 41 Meggs, Philip, 8, 94, 271, 274 Merz, 218 Meyer, Hannes, 23 Mies van der Rohe, Ludwig, 5 Miller, J. Abbott, 102, 202, 205 mission, 14 modernism, 6, 9-10, 46, 47-48, 66, 106, 170, 171, 226 Moholy-Nagy, László, 5, 23, 39, 215, 259 motion designing with, 262-263, 274–275 typography integrated with, 181–183 Muir, John, 36 Muller-Brockmann, 82

National Association of Schools of Art and Design (NASAD), 15, 68, 69, 99, 138, 160-162 Neumeirer, Marty, 44

new media, 104, 128, 168, 178, 179, 181–183, 184–188, 189, 238 new wave. See postmodernism, academic Newman, Cardinal John Henry,

24 Nietzsche, Friedrich, 163-164 North Carolina State University, 17-18, 107-108 Notes on the Synthesis of Form

(Alexander), 232

One-Way Street (Benjamin), 215

"parallel content," 34-35 performance, 53, 59-61 persuasion, 28, 262-263, 274-275

"Plain Talk about Learning and a Life-in Design" (Poggenpohl), 20

Poggenpohl, Sharon, 20, 27 postmodernism, academic, 9, 10 Poyner, Rick, 81 The Practice of Everyday Life (de

Certeau), 53 "Primitivism" in Twentieth-Century Art: Affinity of the Tribal and the Modern (Rubin), 271

project control, 42-43, 44 propaganda, 93-94, 262-263

Rand, Paul, 27, 165-167, 169 Reiner, Imre, 51 research, design, 8-9, 14, 45, 106, 141–143, 287–292 rhetoric, 28 Roth, Big Daddy, 52 Rubin, William, 271 Russell, Bertrand, 253

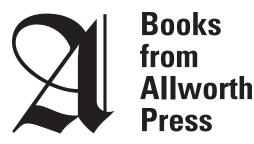
Salmon, Mark, 29 Samuel, Raphael, 220 Sarris, Andrew, 203, 204 Schlemmer, Oskar, 225-227 scholarship, 28, 71, 93 Schwitters, Kurt, 218, 259 self-authored text, 99, 318-322 skills, 59-61, 170, 188, 232-234 social science, 17, 234 society, 3, 14, 85-87 specialization, academic, 34 Stepanova, Varvara, 225, 227-228 Sterling, Bruce, 132 Sundt, Christine, 173 Swiss school of graphic design, 6-7, 9, 49, 50 systemic thinking, 36

teaching, design, 12, 34, 46, 55, 57-62, 133-135 design history curriculum for, 92-97, 114-115, 301-307 improvisation in, 148-150

intermedia project curriculum for, 157-159 liberal arts in, 19-21, 27-28, 33–36, 71–72, 234 typography curriculum for, 153-156 writing curriculum for, 192-196 technology, 98-99, 228. See also computers graphic designer's role devalued by, 42-44 for image collections, 172-174 Theatres of Memory (Samuel), 220 theory, 102-108, 109-115, 301-307 Tomorrow Now (Sterling), 132 van Toorn, Jan, 105 Type and Image: The Language of Graphic Design (Meggs), 274 typography, 171, 238, 239 curriculum for teaching, 153-156 in hyperarchitexture, 308-312 motion integrated with, 181-183 print-oriented v. screen-based, 184-188

values, 63-65, 133-135 VanderLans, Rudy, 205 Vignelli, Massimo, 42, 117 visual communication, 3, 12, 100, 236, 287 audience's role in, 10, 11 collaborative project in, 255-258 message cycle of, 69 visual literacy, 126, 236-237, 239, 313-317 Vkhutemas (art school), 225, 227-228 vocation, 25-26

"The War is Over" (Glaser), 43 Weblogs, 210-213 Weingart, Wolfgang, 9 Western Association of Schools and Colleges (WASC), 139 "What Is an Author?" (Foucault), 201 Whitney, Patrick, 21 Wild, Lorraine, 105, 106, 173 Williams, Raymond, 96 Willis, Paul, 86 Wired, 43 women, 221-222 Women's Ways of Knowing: The Development of Self, Voice and Mind (Belenky et.al.), 254 World Wide Web, 189-190



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