Introduction

The contemporary paradigm of the T-shaped professional, someone who demonstrates a breadth of understanding across a field of activity combined with a depth of knowledge in specific areas, works for journals as well as individuals. So, in place of our typical selection of articles touching on a variety of design topics, most of this issue, guest edited by Teal Triggs, Co-director, Information Environments at London College of Communication, is devoted to Graphic Design History. In her introduction to this special issue Triggs describes the topics under review in this collection and positions the effort within a larger discourse concerning the history of Graphic Design. She also briefly touches upon previous efforts to reflect upon the challenges inherent in efforts to arrive at a consensus regarding the definition and direction of Graphic Design History as an intellectual discipline. She notes: "there remains a sense that graphic design history is less well established as a discipline and perhaps less exploratory in terms of defining new ways of writing about this history." This observation is really an appeal to the reader to consider the implications of the individual articles collected here for the field as a whole, in Triggs's words: "to look again …but also to propose new ways forward."

What are the constituent elements of a credible, rigorous Graphic Design History? What audiences are to be served by a substantive history of the field? How do historians of the subject communicate with their audiences? The effort to answer such questions is important. A shared consciousness of the intellectual venture involved in compiling the history of Graphic Design is itself generative, that is, suggestive not only of new areas for research but of new questions to ask and innovative ways of answering them. It can help members of the research community negotiate the demands of different constituencies, most notably the Academy (the site of instruction and reflection), the studio (the locus of professional practice), and the world of publishing (the marketplace where the relationship between authors and readers is constantly being negotiated). The ability to position the specific within the general, to relate the circumstantial to the fundamental, to collate diverse perspectives in order to develop a coherent portrait of complexity, these are the attributes of the kind of Graphic Design History Triggs is calling for and *Design Issues* has long championed.

We complete this issue with two pieces on another topic of great interest to our readership: national design policies. One, by Youngok Choi, Rachel Cooper, Sungwoo Lim and Martyn Evans, consists of a comparative study of the patterns and experiences of South Korea and the United Kingdom with regards to national

design policies and industrial development. The second is an exchange of letters between Dori Tunstall and Jonathan Woodham prompted by the publication in the Spring 2010 issue of Design Issues of Woodham's article "Formulating National Design Policies in the United States: Recycling the "Emperor's New Clothes"?" The editors welcome such letters. Finally, we include a selection of book and film reviews addressing a variety of topics Among other things, reviews and letters are a reminder that the publication of new scholarship and the release of films mark the beginning rather than the conclusion of productive conversations within the design community.

Bruce Brown
Richard Buchanan
Dennis Doordan
Victor Margolin

Graphic Design History: Past, Present, and Future

Teal Triggs

Graphic design, it seems, is still searching for its past. Other design disciplines, such as fashion and industrial design, have an established tradition of archiving, documenting, critically writing, and publishing history, as well as engaging with social, cultural, and political contexts. Such histories have, for example, focused on the study of designed objects as well as design movements; celebrated "named" designers and the profession's history; and explored design in relationship to other areas, such as material culture. This is not to say that graphic design has not had its share of commentators who have been defining approaches to studying its own history.[1] However, there remains a sense that graphic design history is less established as a discipline, and perhaps less exploratory in terms of defining new ways of writing about this history. The intent of this collection is to look again at the issues surrounding how we might define graphic design history, as well as to propose new ways forward.

The first conference to bring together academics, educators, and design practitioners on a formal platform was "The First Symposium on the History of Graphic Design: Coming of Age," held at the Rochester Institute of Technology in 1983. Organizers Barbara Hodik and Roger Remington wrote that up to this point, "the history of graphic design has been scattered among the pasts of art, printing, typography, photography, and advertising."[2] The remit of the symposium was to "share information," but also to recognize the need for pausing and taking stock of "the events, forces, and individuals that contributed to what we now know as graphic design."[3] Part of this reflection was to acknowledge the need to move away from art history and recognize a design history that took into account other disciplines, such as "sociology, anthropology, aesthetics, politics, economics…."[4] This move also extended into highlighting the need for a distinct graphic design criticism to express "applied ideas."[5]

Other conferences followed, specifically focusing on graphic design history, including Steven Heller and Richard Wilde's successful ten-year series, "Modernism and Eclecticism: A History of American Graphic Design" (1990s) under the School of Visual Arts. Heller also organized "How We Learn What We Learn" (1997), the proceedings from which formed the foundation of his edited book, *The Education of a Graphic Designer*, and subsequent publications in the specialist areas of illustration, typography, and e-design.

1 The past few years have seen an invigorating plethora of textbooks designed primarily for an undergraduate readership, which take as their starting point the idea that history can be told as a narrative. Phrases from some of the books' titles provide a clue as to their authorial viewpoint: *The Story of…* (Cramsie, 2010); *…A Critical Guide* (Drucker and McVarish, 2009); *…A New History* (Eskilson, 2007); *…From Antiquity to the Present* (Jubert, 2006). These tomes join the bookshelf with the well-worn pages of graphic design history's earlier benchmarks: *…A Concise History* (Hollis, 1994) and *A History of…* (Meggs, 1983). Such accounts inevitably raise questions about "whose history?" and "written by whom?."

2 Barbara Hodik and Roger Remington, *The First Symposium on the History of Graphic Design: The Coming of Age* (Rochester Institute of Technology, 1983), 5.

3 Ibid.

4 Victor Margolin, "The Scope and Methodology of Design History," in Barbara Hodik and Roger Remington, *The First Symposium on the History of Graphic Design: The Coming of Age* (Rochester Institute of Technology, 1983), 26.

5 "Summary and Future Projections," in Barbara Hodik and Roger Remington, *The First Symposium on the History of Graphic Design: The Coming of Age* (Rochester Institute of Technology, 1983), 57.

Graphic design was once again discussed in terms of distinct parts rather than as a coherent whole.

In 2005, *New Views: Repositioning Graphic Design History*, was held at the London College of Communication. This event proposed to "look beyond the familiar assortment of critical biographies, historical narratives, and anthologised readers in order to review and question conventional histories and design practices."[6] One reviewer remarked that it is impossible to "reposition" graphic design history without knowing the original position in the first place.[7] This statement may have been true in part, but the conference was successful in exploring "whose history is it?" with papers about the richness of graphic design history in countries such as Germany, Greece, India, Iran, and Mexico.

Identifying a "need" for a graphic design history has a history itself and has been clearly articulated in texts by noted writers and designers, including Steven Heller, Andrew Blauvelt, and Victor Margolin. Others, including Ralph Caplan, have proposed we should be writing about 'the history of graphic design as a history of ideas' as a way of broadening out the subject to include a wider context.[8] Despite attempts to raise the level of debate, graphic design history seems strangely elusive in forging a place for itself among the stalwarts of academy and within publishing houses. A point of view that design critic Rick Poynor supported in his keynote during the New Views symposium.

The phenomenon of the practitioner-historian is part of this discussion. In an interview with Steven Heller, Louis Danziger is credited as one of the first designers to teach a course in Graphic Design History at CalArts in c.1972 - although Danziger is quick to acknowledge that another designer Keith Goddard established the course a year earlier.[9] More recently, practitioner-historians including Lorraine Wild, Michael Rock, Ellen Lupton, Joanna Drucker, Denise Gonzales Crisp and Kenneth Fitzgerald have played a significant role in helping to establish what a graphic design history might be through their own writings and teachings on the subject.

Steven McCarthy elaborates on the point about an inherent tension that exists between the academic-historian and the practitioner-historian and the ways in which such positions might affect any writing about graphic design history. In his essay, "Designer-Authored Histories: Graphic Design at the Goldstein Museum of Design," McCarthy presents a selection of case studies from the museum's publishing collection, including early twentieth- century design classics, *Production Manager* (PM, 1934–1942), *Portfolio* (1950–1951), and *Dot Zero* (1966–1968). He also features later publications, such as *Octavo* (1986–1992), *Zed* (1994–2000), and *News of the Whirled* (1997–), in which designers also took on the role of editor. This interconnectedness between author, designer, and editor makes these and other similar publications significant in how they might lead a critique about the very world in which their commercial practice resides.

6 Teal Triggs and Kerry Purcell, "Introduction," *New Views: Repositioning Graphic Design History*, London College of Communication, (2005), 3.

7 Alice Tremlow,"End of history? Graphic design hasn't started," *Eye* 59 (Spring 2006): 80.

8 Ralph Caplan, 'Why Graphic Design History', paper abstract in Modernism and Ecclecticism: A History of American Graphic Design (New York: School of Visual Arts, n.d.), n.p.

9 Steven Heller, ' Epilogue: Interview with Louis Danziger' in Steven Heller and Georgette Balance (eds) Graphic Design History (New York: Allworth Press, 2001), 329.

Designer-authored histories also play a role in forming a canon of graphic design history. Hilary Kenna, a PhD student at the University of the Arts London, takes as her starting point Emil Ruder's book, *Typographie: A Manual for Design* (1967), which has long been an established part of the key literature on basic design principles. In her essay, "Emil Ruder: A Future for Design Principles in Screen Typography," Kenna asks: how might history affect graphic design practice and our understanding of critical design principles as designers move from print to screen-based activities. Emil Ruder's approach becomes central to her own practice-led research process, offering both "a means to learning the rules and to breaking them" as she strives for innovation in typographic screen-based experiments.

At the same time, Robert Harland argues that, as a practitioner-turned-educator, the diagrammatic representation of graphic design will help us better understand the "subject's plural domains." In his essay, "The Dimensions of Graphic Design and Its Sphere of Influence," Harland assesses the positioning of graphic design history and theory in relationship to new ways of thinking about graphic design more generally. Graphic design "must now be equally thought of as a tool for social as well as economic development" and its history understood not necessarily as solely the domain of studying "objects of graphic design."

This brings us back to the question of the canon and "whose history." The last two case studies included in this collection, which can be differentiated from the more polemical content, begin to address the challenges faced by historians today. Identifying a starting point for any graphic design history is problematic, and especially in cultures where oral-based traditions have been the basis of a system of communication. Piers Carey, in "From the Outside In: A Place for Indigenous Graphic Traditions in Contemporary South African Graphic Design," argues for the inclusion of indigenous African graphic systems in any graphic design history of South Africa. At the same time, Carey recognizes the value of applying a historical understanding to the way graphic systems may be applied to contemporary communication challenges. This case study revisits the Siyazama Project, which raises awareness of HIV/AIDS through traditional use of Zulu graphic symbols in beadwork (first examined in the Spring 2004 issue of *Design Issues*).[10] Carey argues that designers and historians face a challenge as globalization increases and the inequality of cultural power is perpetuated. He calls for a graphic design history of South Africa to take note, not only of a history of "Westernized" graphic design, but equally of "pre-colonial indigenous societies."

On the other hand, Leong K. Chan takes as his starting point "graphic design as a tool for national ideology and policy in Singapore" and explores the notion of nation building through the government's "policy of multi-racialism." In his case study,

10 Kate Wells, Edgard Sienaert, and Joan Conolly, "The *Siyazama* Project: A Traditional Beadwork and AIDS Intervention Program," *Design Issues* 20:2 (Spring 2004): 73–89.

"Visualising Multi-Racialism in Singapore: Graphic Design as a Tool for Ideology and Policy in Nation Building," one of several historical examples includes looking at late 1970s government campaigns, such as "Speak Mandarin" (1979), which attempted to secure, through the adoption of an appropriate visual language and narrative, an emphasis on unification, as well as on cultural identity. How might an understanding of history give us insights into the future building of nations and nationhood?

But, what is the role of the graphic design historian? The prevalent view of the historian is of somebody who is meant to "locate events in time" and to provide an explanation as to "why events happened when they did."[11] They establish links between the present and the past and "contribute to an understanding of design as it is currently practiced." I would argue that graphic design is in a unique position. While we need more trained design historians to provide a context to the understanding of graphic objects, movements, and people, we should also celebrate the practitioner-historians who also have the capacity to locate, explain, and contribute to the development of graphic design practice. Graphic design history in the present is looking for its past; in doing so, it paves the way for the future of graphic design.

Acknowledgments

I would like to express my sincere thanks to the contributors for their insights into the history of graphic design, as well as to the editors of *Design Issues* who willingly provided a platform for us. Graphic design history is seen through the eyes not only of the historian, but also of the designer. I would like to thank Barnbrook design for contributing their perspective on the subject in this issue's cover design.

11 Don Beer, "Book Review: Past Futures. The Impossible Necessity of History (based on the Joanne Goodman Lectures)," (review no.484) *Reviews in History* (accessed 3 October 2010) http://www.history.ac.uk/reviews/review/484.

Designer-Authored Histories: Graphic Design at the Goldstein Museum of Design

Steven McCarthy

This paper is based on a presentation made in 2005 at the New Views: Repositioning Graphic Design History conference held at the London College of Communication.

The idea that graphic designers could, and would, create their own histories through their writing, designing, and publishing can be found throughout the twentieth century. Whether documentary, reflective, expressive, critical, self-promotional, comparative, or visionary, designers have harnessed the means of production to state their views in print—a concept and a practice that parallels most of the discipline's growth and maturity. Jan Tschichold's influential *New Typography*, published in 1928, Eric Gill's polemical book, *An Essay on Typography*, from 1931, and Willem Sandberg's *Experimenta Typografica* books, begun in the 1940s, are just a few early examples that illustrate how graphic designers and typographers have advanced their ideas through self-authorship.

On the intellectual heels of deconstruction, semiotics, conceptual art, and postmodernism, and enabled by new technologies for the creation, production, and distribution of designed artifacts, more graphic designers began to produce self-initiated work in the century's latter decades. However, it was not until the early to mid-1990s that formal theories about design authorship emerged. Among the tenets posited by design authorship's framers were redefining the design process, opening new avenues for collaboration, building stronger relationships between visual form and literal content, expanding the space for personal expression, creating a greater level of social and political engagement, and finding more opportunities for entrepreneurial ventures. In 1995 and 1996, in particular, *Emigre* magazine's issues devoted to "Clamor over Design and Writing," the exhibition, Designer as Author: Voices and Visions, held at Northern Kentucky University (Fig. 1), and the *Eye* magazine article, "The Designer as Author," fueled the debate.[1]

When one considers the plethora of commercial graphic design in everyday life, how might a narrowly defined area like design authorship be relevant to the discipline's study and research? Before trying to answer, some background on the context for a collection of designer-authored histories follows. This essay explores a range of examples of works, held in the Goldstein Museum of Design at the University of Minnesota, that exemplify key moments in the history of graphic design authorship. In addition, selected works will be examined that prompted debates, mainly in the design

1 For further reading on design authorship:
Anne Burdick, ed., *Emigre 35 and 36: Clamor over Design and Writing* (Sacramento, CA: Emigre, Inc., 1995, 1996).
Steven McCarthy, "What is Self-Authored Graphic Design Anyway?" *Design as Author: Voices and Visions* poster/catalog (Highland Heights, KY: Department of Art, 1996).
Cristina de Almeida, "Voices and/or Visions" *Design as Author: Voices and Visions* poster/catalog (Highland Heights, KY: Department of Art, 1996).
Michael Rock, "The Designer as Author" *Eye*, no. 20 (London: Emap Construct, 1996).
Rick Poynor, "Designer as Author" *Design Without Boundaries* (London: Booth-Clibborn Editions, 1998).
Monika Parrinder, "The Myth of Genius" *Eye*, no. 38 (London: Quantum Publishing, 2000).
Steven McCarthy, "Tinker Tailor Designer Author" *Eye*, no. 41 (London: Quantum Publishing, 2001).
Cristina de Almeida and Steven McCarthy, "Designer as Author: Diffusion or Differentiation?" DECLARATIONS of [inter]dependence and the im[media]cy of design international symposium web site. (Montréal, Canada: Concordia University, 2002) http://www.declarations.ca/knowledge/author_1.htm (now offline).
Steven McCarthy and Cristina de Almeida, "Self-authored Graphic Design: a Strategy for Integrative Studies" *Journal for Aesthetic Education* (Champaign-Urbana, IL: University of Illinois Press, 2002)
Rick Poynor, *No More Rules: Graphic Design and PostModernism* (New Haven, CT: Yale University Press, 2003).
Katherine Moline, "Authorship, Entrepreneurialism and Experimental Design" *Visual:Design:Scholarship*, Research Journal of the Australian Graphic Design Association, vol. 2, no. 2. http://adga.com/au/vds/vds020205.pdf (online September 28, 2007)

Figure 1
Designer as Author: Voices and Visions poster (detail), 1996.

press, about the role of the graphic designer in the professional arena, as well as the blurring of boundaries conventionally held firm between fine art and graphic design.

The Museum Context

The Goldstein Museum of Design at the University of Minnesota is known for its collections in apparel design, historic costume, textiles, and some decorative arts. The museum was founded from the collection of sisters Harriet and Vetta Goldstein, professors at the university in the early twentieth century and authors of the 1925 book, *Art in Everyday Life*.[2] Their design philosophy was more Arts and Crafts movement than Bauhaus, but their proto-feminist approach elevated the design possibilities of domestic life at a time when design was largely a man's world.

The Goldstein Museum's decision to add a graphic design collection came from several convergences, including growth in the number of students enrolled in courses in the field, as well as a robust professional community in the Twin Cities of Minneapolis and St Paul. The Collection, which was established in 2000, focuses specifically on objects of design authorship, making it one of only a handful of specialist graphic design collections housed in a university museum context. (Similar American collections include the Cary Collection at the Rochester Institute of Technology, the Wolfsonian Collection at Florida International University, and the Herb Lubalin Study Center of Design and Typography at Cooper Union.) This specialization, in itself, makes it unique in its contribution to documenting—from the mid-twentieth century to contemporary times—an important aspect of graphic design history.

It is important to note, prior to listing the works in the collection, that this is a young and growing collection, an incomplete collection, and a collection that has yet to be fully exploited in terms of research and scholarship. The collection has both macro and micro qualities, as discrete works show particular examples of design authorship, while an entire run of a publication or several publications together reflect how the larger themes of design

2 Harriet Goldstein, *Art in Everyday Life*. (New York, The Macmillan Company, 1925).

authorship have evolved over time. All works position the graphic designer as subject (*by* designers) and object (*about* designers), while the graphic designs that give their ideas tangible form are as integral to their messages as the literal words. After all, as one scholar asserts more generally, "It would be far more productive if the subject of graphic authorship, superficially debated in/by the profession, were addressed in terms of its specifics—highlighting how specific designs work, at the levels of their graphical, semiotic, and ideological dimensions."[3]

The works acquired include the publications *PM* (later *A-D*), *Portfolio*, *Push Pin Graphic*, *Dot Zero*, *Octavo*, *Emigre*, *Fuse*, *Zed*, *News of the Whirled*, and the complete contents of the exhibitions, "And She Told 2 Friends" and "Soul Design." Each publication and exhibition is discussed with particular emphasis on its contribution to the concept of graphic designers' writing and designing of their own histories. Names of major contributors have been cited because doing so expands the connections between design authorship and the designer's involvement with the broader discipline of graphic design practice, and because it is a legitimate historical approach to credit "exceptional individuals."[4]

Each work discussed below signals a shift in the ways we think about graphic design, both in terms of documenting professional practice and in how culture, new technologies, and socio-political issues have informed the history of the discipline. Because ideas about graphic design authorship were emerging in the mid-1990s, and were being debated in *Emigre* and *Zed* in particular, the collection acquires an aspect of being self-aware from that point forward. That the earlier publications hadn't yet been labeled as works of design authorship doesn't diminish their contributions; rather, they establish a foundation for shaping subsequent discourse. The concept comes full circle as many individual works in Kali Nikitas' curatorial project, "And She Told 2 Friends," were created for typical client-designer-user contexts (e.g., Irma Boom's stamps for the Dutch postal service and Robynne Raye's concert poster); therefore, design authorship resides at the level of the exhibit, and not necessarily at the level of the discrete artifact. The works of the Collection have this in common: They all contribute to the historical narrative, in designers' voices, of how authorial practice has enlarged the discipline of graphic design.

Case Studies from the Collection

PM, which stood for Production Manager, was first published in 1934 in New York City and defined itself as an "intimate journal" and a "non-profit, cooperative graphic arts magazine."[5] Edited by Robert L. Leslie, *PM* published articles, reviews, and visual essays and also ran advertising. Its topics were primarily typography, printing, paper stock, art direction, illustration, and photography, which were aimed at an audience within the graphic arts trade, as evident in its title.

3 Gérard Mermoz, "The Designer as Author: Reading the City of Signs—Istanbul: Revealed or Mystified?" *Design Issues*, vol. 22, no. 2 (Cambridge, MA: MIT Press, 2006), 79.

4 Alice Twemlow, "End of History? Graphic Design hasn't Started" paraphrasing Rick Poynor from his New Views: Repositioning Graphic Design lecture, "Reluctant Discipline: Graphic Design History's Protracted Birth" *Eye* magazine web site. http://www.eyemagazine.com/review.php?id=130andrid=633 (online September 19, 2007)

5 Robert L. Leslie and Percy Seitlin, eds. "A-D" *A-D* vol. VI. no. 5 (New York: A-D Publishing Co., 1940), 57.

Figure 2
A-D covers, 1941 and 1940.

However, *PM* did change its name to A-D (Fig. 2)—Art Direction and/or Advertising Design—in 1940, to reflect the field's growing professionalism. *PM/A-D* published industry and professional news six times per year, until 1942.

The list of contributors to *PM/A-D* reads like a who's who of mid-century American and European émigré graphic designers: Herbert Bayer, Gene Frederico, E. McKnight Kauffer, William Golden, William Dwiggins, Cipe Pineles, Herbert Matter, and others. Editor Leslie is credited with "spreading the ideals of European modernism to a generation of designers and art directors,"[6] and doing so with a "missionary zeal."[7]

In *PM/A-D*, one encounters several elements of authorship beyond the typical neutrality of many graphic design trade magazines. The June-July 1939 issue advocated a boycott of "Nazi-made type faces" through the publication of a proclamation opposing "international fascism and all the barbarism and oppression inseparably identified with it...."[8] From the August-September 1940 issue, critic Elizabeth Sacartoff titled her essay "Artist as Reporter," bringing to mind terms from the late 1990s like "designer as producer,"[9] "authorpreneur,"[10] and "designist,"[11] which were proposed in the aftermath of the "designer as author" term.

PM/A-D began as a trade magazine, but by showcasing progressive design and speaking out on political issues, it set the stage for subsequent publications. *Portfolio* was one such magazine.

Portfolio, art directed by Alexey Brodovitch (during which time he also art directed the women's fashion magazine, *Harper's Bazaar*), was published only three times between 1950 and 1951 (Fig. 3). Frank Zachary was its editor and is credited with corralling the magazine's writers, artists, and photographers. Primarily visual, and formally experimental with elaborate production values, *Portfolio* featured portfolios of design, illustration, photography, and calligraphy from established and emerging artists. Some articles covered historical topics, such as Napoleon's patronage of typographer Giambattista Bodoni, while others portrayed the work of contemporary artists and designers, such as Alexander Calder,

6 Erin Malone, (1994) "Dr Leslie and the Composing Room: 1934–1942, An Important Time in the Development of American Graphic Design" *Dr. Leslie Project* (1994–2006) http://www.drleslie.com/PMADMagazines/Magazines.shtml (online September 27, 2007)

7 Steven Heller, "The Missing Link: Graphic Design Trade Magazines and the Modern Avant Garde" *Baseline* 40 (Kent, UK: Bradbourne Publishing Ltd., 2003), 43.

8 Robert L. Leslie, "PM Shorts" *PM* vol. 5, no. 1 (New York: PM Publishing Co., 1939), 46.

9 Ellen Lupton, "The Designer as Producer" *The Education of a Graphic Designer*, ed. Steven Heller (New York: Allworth Press, 1998), 159-162.

10 Steven Heller, "The Attack of the Designer Authorpreneur" *AIGA Journal of Graphic Design*, 16 (2) (New York: American Institute of Graphic Arts, 1998), 35.

11 Denise Gonzales Crisp, "Out of Context: Designists Slash Entrepreneurs and Other Slash Utopians" *Emigre* 43 (Sacramento, CA: Emigre, Inc., 1997), 51.

Figure 3 (above left)
Portfolio interior spread, 1950.

Figure 4 (above right)
Push Pin Graphic interior spread, 1977.

Jackson Pollock, Charles and Ray Eames, Richard Avedon, Paul Rand, and Ben Shahn.

Portfolio's engagement with design authorship was through the process of commissioning, inviting, editing, and then exposing the content to Brodovitch's dramatic sense of space and structure. Its filmic pages provided an inventive format for others' works to interact with a master art director in a purely aesthetic context. "They demanded nothing from the reader but admiration."[12]

Portfolio has become coveted as a collectable design artifact. As a work of design authorship, it exudes a celebratory quality: Virtuosity meets optimism, a form of design for design's sake. That it was published just three times signals its ideological success at the expense of commercial failure, as *Portfolio* did not accept advertising.

Taking the opposite approach, *Push Pin Graphic* did accept advertising and ran for 23 years (Fig. 4). Published 86 times by Push Pin Studios (Milton Glaser, Seymour Chwast, and Edward Sorel) from 1957 to 1980, the bi-monthly *Push Pin Graphic* influenced a generation of American graphic designers through its humor and wit. Ostensibly published to promote the illustration, design, and photography of Push Pin Studios, the brochure-sized publication took on its own cultural life over time. Seymour Chwast was the editor and art director for many of the early years, eventually swapping the editor title for publisher. Paula Scher served as contributing editor for many issues and Ken Robbins edited a number of later issues.

Moving beyond its own promotional aspirations, *Push Pin Graphic* eventually began showcasing other artists, designers, and photographers. Colorful and idiosyncratic in an era of type and stripe Swiss modernity, the accessible *Push Pin Graphic* was a flag-bearer for pop culture. Recognizing *Push Pin Graphics'* popularity in the New York-centric graphic design community, ads by printers, service bureaus, and type houses regularly appeared in the publication.

Theme-oriented issues during the 1970s—Mothers, Your Body and You, New York at Night—were vaguely topical, but the era's contentious debates about feminism, sexual politics,

12 Richard Hollis, *Graphic Design: a Concise History* (London: Thames and Hudson, 1994), 117.

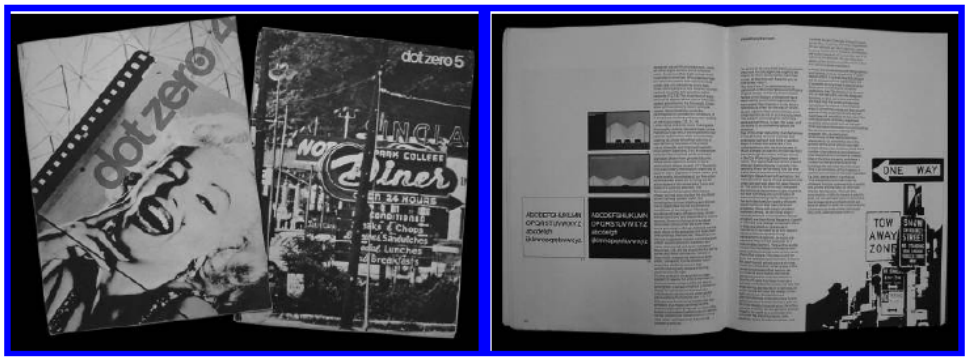


Figure 5 (above left)
Dot Zero 4 & 5 covers, 1967 and 1968.

Figure 6 (above right)
Dot Zero 5 interior spread, 1968.

and marginalized subcultures were primarily referenced for their laughs. Later issues ventured further from typical graphic design concerns, with literary reprints such as "The Lottery in Babylon" by Jorge Luis Borges and "The Masque of the Red Death" by Edgar Allen Poe, which lent themselves as backdrops for Push Pin Studios illustrations.

Blending the promotional with the personal is possibly *Push Pin Graphic*'s main contribution to the idea of designer-authored histories. A newly published monograph, *Push Pin Graphic: A Quarter Century of Innovative Design and Illustration*, by Seymour Chwast, and a Spring 2005 exhibition of *Push Pin Graphic* at the American Institute of Graphic Arts gallery in New York attest to the magazine's continuing popularity. "A precursor to the self-published design zines and promotions that followed its lead, its historical significance is undeniable."[13]

Appearing almost anecdotal to *Push Pin Graphics*, *Dot Zero* was a quarterly publication out of New York City that was produced from April 1966 to Fall 1968 and that lasted only five issues (Fig. 5). Published by Ralph Eckerstrom, and designed by Massimo Vignelli (the two were co-founders of the design consultancy Unimark International), *Dot Zero* was interdisciplinary, modernist, intellectual, and analytical. Austere in its black and white reproduction, *Dot Zero*'s graphic vocabulary implied a high-browed seriousness and objectivity.

In *Dot Zero* 1, editor Robert Malone promised that the publication "…will deal with the theory and practice of visual communication from varied points of reference, breaking down constantly what used to be thought of as barriers, and are now seen to be points of contact."[14] Making good on its claim, its pages were stages for the ideas of media theorist Marshall McLuhan, designer-artist Bruno Munari, economist John Kenneth Galbraith, design strategist Jay Doblin, and author Umberto Eco, among others.

In an introductory statement in *Dot Zero* 1, Herbert Bayer wrote, "*Dot Zero*… plans to assume an unattached attitude by starting from naught and freeing itself from the impediments of

13 The Push Pin Graphic, AIGA New York web site Events page. http://www.aigany.org/events/details/?event=EPPG (online October 7, 2005).

14 Robert Malone, Editorial, *Dot Zero* 1 (New York: Dot Zero/Finch Pruyn, 1967).

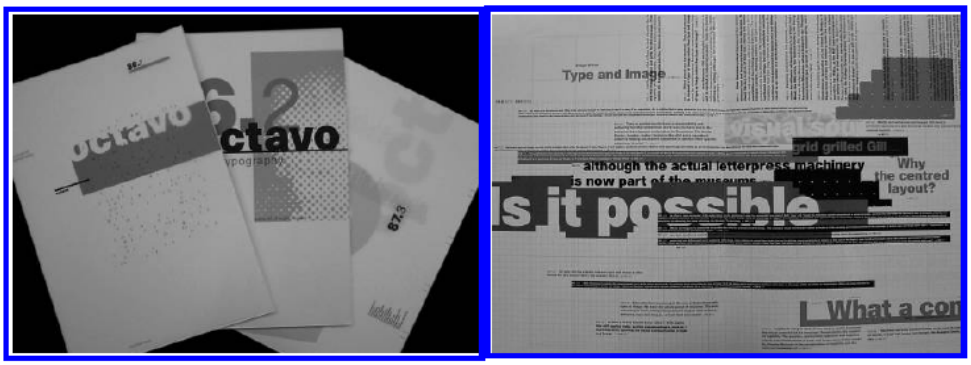


Figure 7 (above left)
Octavo covers, 1986 and 1987.

Figure 8 (above right)
Octavo interior spread (detail), 1990.

taking sides."[15] Perhaps *Dot Zero*'s strict grids and uniform sans serif typography were intended to support this philosophy, while relying on the literal content of articles to express opinions and stake out intellectual territory (Fig. 6). However, the graphic designer's role as neutral participant in the process of shaping meaning through visual form has since been thoroughly contested. In *Dot Zero*, design-authorship is evident less from what is said, and more from how it was said through its selection of typeface: Helvetica.

Octavo: International journal of typography elevated *Dot Zero*'s modernism to high modernism (Figs. 7 & 8). *Octavo* was published eight times by the British graphic design firm 8v0, Eight Five Zero, beginning in 1986 and ending in 1992. 8v0 partners Simon Johnston, Mark Holt, Michael Burke, and Hamish Muir edited and designed the journal, which featured written essays and displays of visual materials. The editors stated: "…we take an international, modernist stance."[16] A philosophy of typographic excellence, high quality production values, and a modernist typographic orthodoxy—small sans serif type, asymmetrical layouts, rectilinear grids, left justification—were the journal's signature. To quote one observer, "Octavo had object quality; it informed and acted as a didactic model in itself."[17]

Some issues explored a broad range of typographic topics, such as signs and information, and the history of lowercase letterforms. *Octavo* 87.4, however, is completely devoted to Wolfgang Weingart's 1972 lecture, "How Can One Make Swiss Typography?" This choice seems appropriate within the context of design-authorship, as Weingart's signature methodology extended beyond his own graphic works to the legions of designers he taught and influenced.

The final issue of *Octavo* in 1992, a CD-ROM, challenged: "Multi-media or multi-mediocrity and the baggage of the past?"[18] The accompanying poster featured the pixelated type common to digital devices, perhaps as an acknowledgement to typography's shifting territory. Ironically, this shift was forecast by digital imaging pioneer April Greiman's poster and essay from *Octavo* 86.1.

15 Herbert Bayer, "Finding Dot Zero" *Dot Zero* 1 (New York: Dot Zero/Finch Pruyn, 1967).

16 Simon Johnston, Mark Holt, Micheal Burke and Hamish Muir, eds. Editorial, *Octavo* 86.1 (London: Eight Five Zero, 1986).

17 London College of Communication (formerly the London College of Printing) student review of Hamish Muir lecture from 2003 (no credit given) hub.lclinst.ac.uk/archive/gmd2003/views/pdfs/8vo_1985-2001.pdf (online September 27, 2007).

18 Simon Johnston, Mark Holt, Micheal Burke and Hamish Muir, eds. *Octavo* 92.8, (London: Eight Five Zero, 1992).

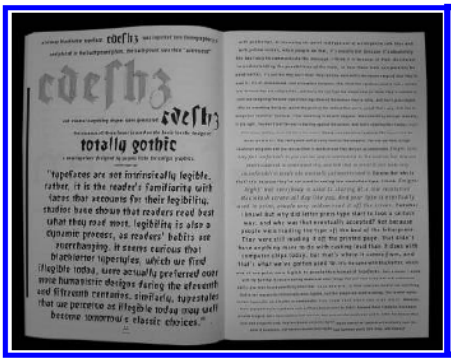


Figure 9 (above left)
Emigre 15 interior spread, 1990.

Figure 10 (above right)
Emigre covers, 1988 and 1989.

As the primary influence that shifted typography's territory, *Emigre* magazine needs little introduction to the discipline's practitioners and scholars of the past two decades (Fig. 9). An avant-garde publication that ushered in the era of digital design and typography, *Emigre* has been a forum for experimental designer-authored work from its first issue. Evolving over time from an eclectic and personal publication in the mid-1980s to one that defined the discipline's major debates about typographic legibility, deconstruction theory, semiotics and linguistics, aesthetics, and contemporary practice, *Emigre* influenced a generation of graphic designers.

Editor and designer Rudy Vanderlans and typographer Zuzanna Licko were both designer-authors in the narrow sense, while the magazine and typefaces they created enabled their peers to have a voice in articulating a new vision for the field. In *Emigre* 11 (Fig. 10), devoted to graphic designers using the Apple Macintosh computer, a fundamental aspect of technology's influence on design-authorship is stated in the editorial: "Text, image, and layout all exist as manifestations of the same medium and the capability of simultaneously editing text and composing the layout will influence both design and writing styles."[19]

Designing and using original Postscript type fonts was another opportunity for designers' messages to take on added meaning and personality. In this regard, *Emigre* was a pioneering digital type foundry, releasing numerous faces by the prolific typographer Zuzanna Licko, as well as by many others, including Jonathan Barnbrook, Scott Makela, Barry Deck, and Sibylle Hagmann. This creative production allowed new messages to be given new forms—an early modernist credo now recontextualized, reconfigured, and remixed.

In *Emigre* 35 and 36, the "Mouthpiece, Clamor over Writing Design" issues, guest editor Anne Burdick expressed her interest "in the operations and uses of the material word—voice, presence, authorship, ownership, agency…."[20] Rudy Vanderlans' editorial from *Emigre* 39 seems to cement the importance of the designer as

19 Rudy Vanderlans, "Ambition/Fear" *Emigre* 11, (Berkeley, CA: Emigre Graphics, 1989).

20 Anne Burdick, "Introduction/Inscription" *Emigre* 36, (Sacramento, CA: Emigre, Inc., 1995).

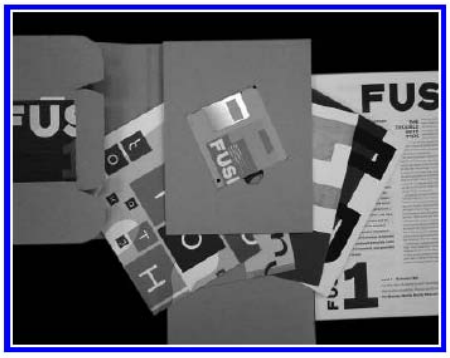


Figure 11
FUSE contents and packaging, 1991.

author concept: "The only significant contribution introduced to graphic design in the last 10 years or so … might have less to do with anything visual than with how design is produced and who it is produced by."[21]

Emigre has been central to the idea of graphic designers writing and designing their own histories through its provocatively inseparable form and content. The Goldstein acquired the complete set of issues 1 through 56 in 2001, when only five sets were put up for sale. Later copies of *Emigre* were acquired as they were published.

FUSE was first released in 1991 as an experiment in interactive digital typography (Fig. 11). Whereas *Emigre* served to present and market its own typographic offerings through expressively functional use, *FUSE* pushed its type into the realm of pure aesthetics. Published by FontShop International, edited by Jon Wozencroft, and designed by Neville Brody, *FUSE* featured type designs by leading British and international typographers. Each issue consisted of a 3.5-inch floppy disk with digital fonts, four A2-sized posters showing the creative potential of the type designs, and an additional A2 sheet with an essay.

Occupying the territory between form and function, legibility and expression, and art and communication, *FUSE* investigated the borders of typographic expression and "[provided] a framework for a new way of looking at language…."[22] Contributors of essays and type designs included Matthew Carter, Peter Saville, Bruce Mau, Phil Baines, Malcolm Garret, Tibor Kalman, Rick Valicenti, and WD+RU (Women's Design + Research Unit), among others, within the 18 issues of *FUSE*.

Summing up *FUSE's* innovative approach to letterform design and its contentious role in rendering language visible, Paul Elliman wrote in a *FUSE* essay: "The problem remains that typography not only supports the artificial structuring of language, it exists for it."[23] While many of the typefaces released by *FUSE* were examples of typographic innovation, they functioned less as useable alphabets and more as polemical statements on the nature of visual language. Its typographers' marks were designer-authored signatures, personal

21 Rudy Vanderlans, "Graphic Design and the Next Big Thing" *Emigre* 39 (Sacramento, Emigre, Inc., 1996), 7.

22 Jon Wozencroft, ed. Editorial, *FUSE* 1 (Berlin: FSI GbmH, 1991).

23 Paul Elliman, "Reading Typography Writing Language" *FUSE* 10 (Berlin: FSI GbmH, 1994).

Figure 12 (above left)
Zed interior spread, 2000.

Figure 13 (above right)
News of the Whirled covers, 1997 through 2004.

and abstract, and yet perhaps existing as the runes, cuneiforms, and hieroglyphics to the anthropologists and archaeologists of the future.

Zed: a Journal of Design that bridged the gap between education and design practice, was published seven times from 1994 to 2000 by the Center for Design Studies at Virginia Commonwealth University (Fig. 12). Edited by Katie Salen, as well as various guest editors, *Zed* structured its content around themes such as Politics of Design, Design and Morality, and Public + Private in its quest "to identify and embrace the margins; to question, debate, and question again; to weigh the alternatives and consider the possibilities."[24]

In this regard it was intellectually wide-reaching, with written and visual essays by, among others, Tom Ockerse, Gunnar Swanson, Teal Triggs, Russell Bestley, and Diane Gromala. Topics ranged from technology to gender issues to semiotics, with graphic design as the connective tissue, both in content and in form.

A paperback book-sized journal, *Zed's* covers often featured soft-focus photographic imagery printed in a single color. Interior spreads emphasized text that was highly readable while using contemporary type treatments and angular shaped text columns. One illustration by Jonathan Barnbrook used what appeared to be mono-width typewriter type in rendering the tonal likeness of England's Queen Elizabeth. The page opposite, also set in typed characters that created larger letterforms, declared: "The most successful parasites always make the body they are destroying feel that it needs them for its continued survival."[25] A possible interpretation in this context is the role of the avant garde—including design authorship—to mainstream graphic design practice.

Unlike many publications, *Zed* held an open call for submissions so that opportunities for publication were based on merit, which gave emerging designers and academics a new voice. Because it purported to bridge the gap between design practice and education, having an element of peer-review was crucial to establishing the journal's academic credibility.

24 Katie Salen, ed. "Editor's Note" *Zed* 1 (Richmond, VA: Center for Design Studies, 1994), 7.

25 Jonathan Barnbrook, *Zed* 7, Katie Salen, ed., Teal Triggs and Siân Cook, guest editors (Richmond, VA: Center for Design Studies, 2000), 131.

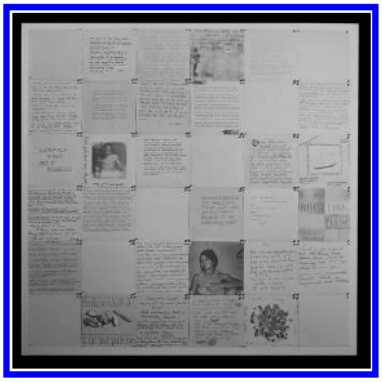


Figure 14
And She Told 2 Friends, 1996. (This particular design, titled "Pink" is by Sheila Levrant de Bretteville)

However, academic credibility isn't always the goal, even when a graphic design professor publishes—as *News of the Whirled* demonstrates (Fig. 13). *News of the Whirled* has been the unconventional publishing venture of Kenneth FitzGerald and his creative project, Ephemeral States. Produced initially in 1997 (the first issue was featured in its entirety within Emigre 41), four issues of the publication have been printed, each in a single monochromatic color: blue, brown, green, and purple. Referred to by one detractor as "an aesthetic and self-referential object,"[26] *News of the Whirled* featured fiction, non-fiction, poetry, photography, visual compositions, and found content by FitzGerald and other contributors.

News of the Whirled did not distinguish between art, literature, and design as disciplines or as creative processes. Its vocabulary of complex forms, densely overlapping image-text compositions, and challenging typography seem appropriate for the publication's eclectic nature, its obscure references, and its multiple meanings and interpretations. FitzGerald preferred to use "arranged and produced"[27] rather than edited and designed to describe his role in the magazine's production, a *Gesamtwerk* of design-authorship. FitzGerald described his work on *News of the Whirled* in this way: "It's the result of intricate plotting, improvisation, procrastination, time, and budget pressures. I still sabotage my desire for refinement with accident, and vice versa."[28]

While much of the Goldstein's graphic design collection consists of publications, the Museum acquired the contents of two exhibitions because "...acting as meta-authors, some curators produce design-authorship at the level of the conceptual exhibition."[29] In 1996, design educator Kali Nikitas curated the exhibition, "And She Told 2 Friends," an "exhibit [that] curated itself"[30] through an invitational network of women graphic designers (Fig. 14). Referring to the manner in which stories spread among a group of friends through sharing, "And She Told 2 Friends" was an innovative work of design-authorship on a larger scale. Although many of the works exhibited were for clients' traditional needs and not created intentionally as self-authored, the body of work

26 Reviewer 2, "Correspondence" *News of the Whirled* 3, Kenneth FitzGerald, ed. (Duluth, MN: Ephemeral States, 2001), 23.

27 Kenneth FitzGerald, ed., *News of the Whirled* 3, (Duluth, MN: Ephemeral States, 2001) inside front cover.

28 Kenneth FitzGerald, essay in *Form\Inform: Catalog of Works*, Steven McCarthy, ed., (St. Paul, MN: The Goldstein Museum of Design, 2003).

29 Steven McCarthy, "Curating as Meta Design-authorship" *Visual:Design:Scholarship*, Research Journal of the Australian Graphic Design Association, vol. 2, no. 2. http://www.adga.com.au/vds/vds020205.pdf (online September 28, 2007).

30 Kali Nikitas, ed. "And She Told 2 Friends: An International Exhibit of Graphic Design By Women" *And She Told 2 Friends* (Chicago: Michael Mendelson Books, 1996), 23.

Figure 15
Soul Design cover and posters (details), 1999.

chosen through curating, collaborating, and editing demonstrates the core concept behind designer-authored histories. Appropriately, the exhibition was originally shown at Chicago's Women Made Gallery.

"And She Told 2 Friends'" participants are a roster of influential women graphic design practitioners and educators from the 1980s onward: Katherine McCoy, Lorraine Wild, Sheila Levrant de Bretteville, Irma Boom, Ellen Lupton, Lucille Tenazas, Marlene McCarty, Women's Design + Research Unit, and others. The exhibit's accompanying catalog documents the designs in the show with images and descriptive captions and features paragraph-length biographies; and—perhaps most telling—each friend wrote brief statements justifying their two chosen friends. Anne Burdick's blurb about inviting the WD+RU lauds the collective because "they refuse to keep quiet," especially on issues of gender equity, and ends with "Right on, sisters."[31]

In 1999, Kali Nikitas curated "Soul Design," a project involving an exhibition and a publication (Fig. 15). The premise of "Soul Design" was to have 18 invited designers each create compositions about someone meaningful in her or his life, which were then printed as tabloid-sized sheets and distributed freely at the exhibition, as well as published in a catalog. Personal, emotional, and expressive best describe the spirit of the pieces, with explanatory texts appearing opposite the graphically designed homages in the catalog.

Nikitas framed the topic of "Soul Design," while the individual designers were bound only by the page size and the limitation of a single color of ink. Design-authorship, in this regard, functions as personal narrative, as art, even as therapy. Michael Worthington chose fellow designer Ed Fella; Nancy Skolos chose her grandfather; Jan Jancourt chose past, present, and future musicians; Alexei Tylevich, his girlfriend. Clearly, the designs say as much, or more, about the graphic designers as they do about the objects of their admiration.

31 Anne Burdick, *And She Told 2 Friends*, Kali Nikitas, ed. (Chicago: Michael Mendelson Books, 1996), 27.

In her catalog introduction, Nikitas champions the "Soul Design" participants who "…use their skills to communicate something rooted in their own history."[32] Numerous viewers to the galleries, initially in Minneapolis, MN, and two months later in Oslo, Norway, took away snapshots of the designers' souls as they also took the printed graphic designs.

If a design exhibit attendee in Oslo has a free "Soul Design" take-away print in their personal archive, as does a research university's design museum, is that graphic design history in the making?

Conclusion

The Goldstein Museum of Design's graphic design collection presents a chronology of materials that show a long-standing engagement with the ideas inherent in design authorship. Parts of the collection are largely self-exemplifying, in that the designers were aware of their roles in expanding designers' voices and staking out greater intellectual territory. Discrete elements in the collection—a magazine spread, a typeface design, an essay—represent design authorship at the micro level, while larger aesthetic, social, cultural, political, and economic themes can be derived from strands at the macro and meta scales.

As some elements in the collection extend to within the past decade, one can see how contemporary concerns have a trajectory from design authorship's tenets. *Designism*, a term coined by Milton Glaser in 2006 and interpreted as "the intention for social change through design,"[33] can be traced directly to a number of designer-authored publications (perhaps even to his own *Push Pin Graphic*): "*Critical Design* is a current movement consisting of:

…designers who are … known for their critical attitude towards mainstream product design. Although they have distanced themselves from today's commercial design world, they sometimes use its mechanisms to pose questions about technological, social and ethical questions. Their ambivalent, critical position towards design and the spirited, playful form language used to express this is a constant theme…"[34]

One could easily substitute "graphic design" for "product design" and arrive at similar ideas, albeit something that occurred ten or more years ago. That graphic design authorship—in theory and practice—has had an influence seems beyond debate.

While studio art has the academic field of art history to describe, analyze, criticize, and document it, the disciplines of design history and design criticism are still maturing. Perhaps it is intellectually desirable to have a body of history and criticism that is related to, but not part of, the field being examined. Along that vein, new programs in design writing and criticism have been recently introduced: one at the London College of Communication and the other at the School of Visual Arts in New York. The notion

32 Kali Nikitas, "Introduction" *Soul Design*, Rob Dewey, ed. (Minneapolis, MN: Minneapolis College of Art and Design, 1999).

33 Louise Ma, "Design and -isms at the ADC" http://www.mediabistro.com/unbeige/events/design_and_isms_at_the_adc_44315.asp (online September 21, 2007)

34 "Nr. 15 Designing Critical Design: Marti Guixé, Jurgen Bey, Fiona Raby & Anthony Dunne" http://www.z33.be/index/asp?page=detailproject%7Csub=67&lang=en (online September 28, 2007)

of designer-authored histories would then be a transitional stage in graphic design history's development, with more academic specialization and increased scrutiny yet to come.

Allied disciplines are already adding further and deeper analyses. Assessing the history of graphic design through the lenses of cultural studies, linguistics, anthropology, and other fields is poignant, relevant, and refreshing. The collection of materials amassed to date at the Goldstein Museum might, however, lead to this contrary proposal: that the story of graphic design—its trends and styles, its tools and techniques, its senders and receivers, its producers and consumers, which is to say, its history—is best told by its practitioners.

Most of the work in the collection, therefore, occupies a paradoxical position, akin to the Heisenberg Uncertainty Principle, which claims—in its loose, popular definition—that the act of observation alters the thing being observed. The questions become: Does the self-awareness central to design authorship affect its history, one of simultaneously doing, being, and telling? How does one reconcile the hybridity of designing (the verb – action, production) with the design (the noun – artifact, system)?

The challenge remains then, if designer-authored histories enable symbiotic form and content to help tell the discipline's story, is there an audience for this story beyond the storytellers?

The Dimensions of Graphic Design and Its Spheres of Influence

Robert Harland

This paper further expands on the concern about how we depict graphic design to explain its relationships (both "internal" and "external") for the purposes of education, research, and practice. The initial development of this concern led to the identification of what has been described as the critical dimensions of graphic design, and this inquiry has required the analysis and proposed redefinition of the subject's plural domains. The attempt to depict these critical dimensions, or domains, benefitted from a diagrammatic modeling exercise, discussed formally in 2007[1] after having first been outlined a year earlier.[2] This exercise demonstrated how the traditional definitions, from which the subject emerged and with which it became identified in the first half of the twentieth century, could be represented in diagrammatic form, creating a contemporary interpretation of the subject. The present author has used the visual method of diagrams as a form of rational inquiry to illustrate the shift from traditional to contemporary ways of thinking about the graphic design (Figure 1). The traditional interpretation of graphic design in diagrammatic form by this author, seen on the left, owes much to the way urban design is shown, by Jon Lang in 2005, to have emerged from the overlap between architecture, landscape architecture, city planning and civil engineering.[3] Whereas the contemporary model seen on the right evolved from numerous attempts by this present author since 2001 to use diagrams as an effective tool for teaching graphic design to students within and without the subject.

1 First discussed formally by the author of this paper in the conference paper, "Redefining the plural domains of graphic design and orientating the subject towards a model that links practice, education, and research." International Association of Societies of Design Research 2007: Emerging Trends in Design Research, November 12–15, The Hong Kong Polytechnic University.

2 Outlined in a presentation, "On the road to find out" at Finding the question to the answer: a graphic design research symposium, Nottingham Trent University, September 13, 2006.

3 Lang, J. *Urban Design: A Typology of Procedures and Products.* (Oxford: Architectural Press 2005), 394.

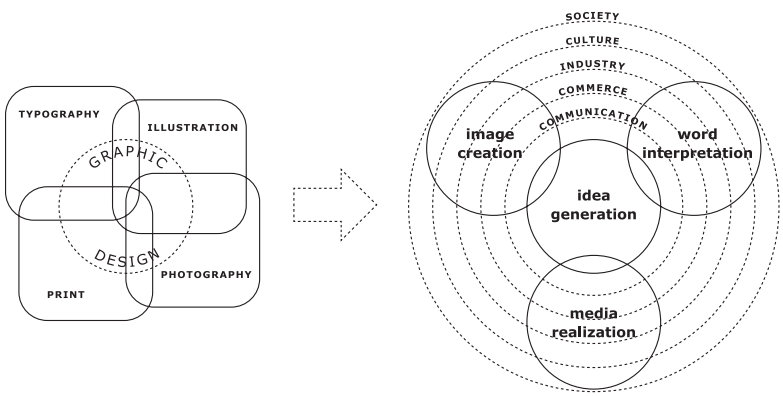


Figure 1
A diagrammatic representation of the traditional domains from which graphic design emerged (left), and an integrated model that links four key dimensions with the wider context. This model recognizes the Idea, in the Platonic sense, as central to an integrated "thinking and doing" process.

From the diagram on the left in Figure 1, we can see the roots of graphic design in four very distinct but related activities: typography, illustration, photography, and print. Each of these activities has its own independent and interdependent history. This interpretation of graphic design, and the traditional definitions drawn from it, remained intact until the early 1990s[4]; but since then, a wider appreciation of the subject's real potential as a profession, field, and discipline has been constrained by it. Consequently, we have seen further proliferation of and numerous alternative descriptions for what is essentially the same process of design. These new descriptions often align themselves with new technologies (e.g., the Web) or new marketing initiatives (e.g., the proliferation of the term "branding"). Not surprisingly, graphic design's light appears to have dimmmed during this period as more specialized subjects such as illustration, and other closely related disciplines such as information design, asserted their independence. Such assertions have resulted in some confusion in the graphic design "discipline," and in the wider contexts within which graphic design functions.

To explore the relationships in graphic design, and to demonstrate the critical dimensions of the subject without relying on traditional descriptors, a new diagrammatic model was introduced by the author in 2007 that uses a different set of terms drawn from graphic design writing and other nondesign disciplines. These terms focus less on the previously described disciplines from which graphic design emerged, and more on how graphic designers think and act, as interwoven with their many different contexts. In this sense, graphic design has been depicted as a unified thinking and doing activity that involves idea generation, image creation, word interpretation, and media realization, for industry, commerce, culture, and society. Communication, with its theories, models, methods, and practices, is also recognised as central to the process of making meaningful representation.

This model was generated as an attempt to create a basic theoretical model for use in an educational context in the United Kingdom. It placed the generation of ideas at the heart of graphic design thinking and practice, thus aligning with philosophical debate from Plato to Kant. It also argued that the traditional domains of typography, illustration, photography, and print, while contributing significantly to graphic design, are inadequate terms for describing what graphic design is, and what graphic designers do. This configuration shows how the concentric circles, representing the contextual domains, orbit the ideas domain, and yet, through the communication domain, are coded before being expressed as word and image, through media. Or, using the words of Stuart Hall, "codes which govern the relationships of translation between" the shared "conceptual maps" and "language systems" of a culture.[5]

In this paper I critically examine this contemporary model and consider its usefulness from an historical perspective. Note that, in

4 See Alan and Isabella Livingston's Dictionary of Graphic Design and Designers. (London: Thames and Hudson Ltd., 1992): 90. Surprisingly, this definition remained intact in the second edition issued in 2003.

5 Hall, S. ed. *Representation: cultural representations and signifying practices.* (Milton Keynes: The Open University 1997) 21.

the study of graphic design history, we have been told that historians have their "preferences" and "prejudices" in their interpretation of history,[6] and that history in general is,"either a moral argument with lessons for the here-and-now or it is merely an accumulation of pointless facts."[7] This paper is equally guilty of preferences and prejudices—those of someone who for two decades was concerned with the "making" process in graphic design. This process amounted to the doing and the thinking, or regarding the latter, what has been described in the Platonic sense as a "theoretically distorted" process of idea generation.[8] It is written from the perspective of a practitioner-turned-educator, whose desire is to further identify core beliefs and activities of graphic design at a time when technological change and political influence too often conspire to bring about the demise of graphic design, rather than enhance its reputation as a force for good.

If there is any truth in the notion that "no practitioner is a good historian" and that the historian's work "often has little relevance for the practitioner,"[9] the intent of this paper is theory-building based on a challenge of recent historic perspectives that place graphic design as a declining twentieth-century phenomenon in parallel with print media. The issue emerges auspiciously in recent conferences that take the name of graphic design in the United States and the United Kingdom, as designers call for a new subject name that "truly" reflects the graphic designer's changing role. This expanded role is reflected in the significant increase of undergraduate programs in closely related subject areas, many of which are grounded in graphic design's thinking about curriculum. Few are yet to emerge as models that demonstrate significantly different approaches to the subject, and many agitators for change fail to recognize that graphic design as an integrated process concerned primarily with relationships is not changing—but its context most certainly is. Victor Papanek[10] criticized this in 1975 as a "relabeling" process; and one might still ask: Beyond the cleverly articulated program validation documentation, what is the difference between graphic design, graphic communication, graphic communication design, and the rest!?! This criticism is vivid and stimulates the belief that there is still much to be known about graphic design as process, as well as product.

This paper considers the usefulness of theoretical modeling in graphic design and seeks to build a closer relationship between the work of educators, researchers, theorists, historians, critics, and practitioners (or crafts people) in a shared territory that is facilitated by the metaphor of a diagrammatic model. It is predominantly a practitioner's response to a perceived need for this form of diagrammatic representation; it is offered as an aid to identifying the future development of graphic design in an academic context—one that is more integrated with practice, if that integration is desirable.

6 Steven Heller, The Beginning of History, in Graphic Design History, by Steven Heller and Georgette Balance. (New York: Allworth Press, 2001), ix.

7 Andrew Marr in *A History of Modern Britain*. (London: Macmillan, 2007), xxii.

8 Flusser, V. (1999). 'About the Word Design' in '*The shape of things: a philosophy of design'*. (London: Reaktion Books 1999).

9 *A Danziger Syllabus in Graphic Design History*, by Steven Heller and Georgette Balance. (New York: Allworth Press, 2001), 333.

10 In Bierut, M., Helfland J., Heller S., Poyner, R. (eds.), *Looking closer 3: classic writings on graphic design*. (New York: Allworth Press. 252).

History has played a part in formulating such a model, consistent with Jessica Helfland and William Drentell's view that "mapping the future of the profession will be difficult without looking back at our history to get a better idea of where we are going."[11] This paper looks ahead by acknowledging the past. Language use plays a critical role. For example, the use of the term "print" in basic definitions of the subject, as will be seen, is an element of the graphic design making process that is practical; but in content and context, print is arguably much less important than, for example, choice of typeface. In fact collaborative discussion about content and communication context more often ignores the technical aspects of production.

The Importance of Language

One might ask: Should there be a concern about how language is used to describe what graphic design is? Perhaps there should be if that language limits an understanding about how far a subject can be appreciated and developed.

Dictionaries play an important role in determining the use and understanding of language. Attempts to "stabilize language" in the form of dictionaries have been a preoccupation for 4,000 years, and more recently, "specialized dictionaries" have become a common reference tool in modern life, trying to "make clear the terms and definitions for special subdivisions of knowledge."[12] Since the early 1990s graphic design has been recognized as its own special subdivision of knowledge with its *Dictionary of Graphic Design and Designers*. Although a second edition appeared in 2003, it retains a traditional, and arguably outdated, definition for graphic design: "Generic term for the activity of combining typography, illustration, photography and printing for the purposes of persuasion, information or instruction."[13] This definition is a reasonable attempt to capture the multidisciplinary aspect of the subject and its origin, and it forms the basis for the image shown on the left side in Figure 1. But it is limited when compared to the language used in discussion about graphic design today, (and since the 1980s), for what might be increasingly recognized as a "transdisciplinary"[14] subject, given its tendency for "personal," "local," "strategic" and "specialized" outcomes.

However, it is ironic that at the point when educators in graphic design felt confident enough to establish a specialized dictionary in the early 1990s—working to clarify terms and definitions for this special subdomain of knowledge—the 'making' activity associated with graphic design was undergoing massive transformation as the advent of new technologies suddenly removed barriers of entry for many potential practitioners. During this period, and since, language to describe graphic design has been unstable, and this lack of stability in itself demands attention if the subject is to develop. Language to describe graphic design therefore *must* be a contemporary concern, and it needs the urgent attention of those concerned with graphic design.

11 Jessica Helfland and William Drentell, What's so Graphic About Graphic Design? March 10–11, 2007. Pasadena. Reviewed in *Eye Magazine*, No 64, Vol. 16, Summer 2007.

12 Sharon Poggenpohl, Praima Chayutsahakij, and Chujit Jeamsinkul, Language definition and its role in developing a design discourse. *Design Studies,* Volume 25, Issue 6, November 2004), 579–605.

13 Alan and Isabella Livingston, *Dictionary of Graphic Design and Designers.* (London: Thames and Hudson Ltd., 1992): 90. (This definition remained intact in the second edition issued in 2003.)

14 Brown, V. A., Harris, J. A., and Russell, J. Y. (Eds.). (2010). Tackling wicked problems through the transdisciplinary imagination. London: Earthscan Ltd. 5.

As a lexicon, language is a method and system of communication, often adopted and adapted by distinct communities in spoken and written forms. More specifically, the function of language is intricate. *The Cambridge Encyclopaedia of Language* tells us that its primary function is the communication of ideas, and in this sense it is "referential," "propositional," or "ideational." But it also functions as emotional expression, social interaction, rhythm and control, and accountability; it is instrumental *and* an expression of identity.[15] In fact, at times, the communication of ideas is the least important factor, and language frequently functions as emotional expression. For example, swear words or words of amazement do not describe how to fix a leaking tap. In addition to its regulatory function, it has a social function—the simple "hello" or a discussion of the weather. In such cases, language is a form of maintenance; Malinowski, cited by David Crystal in *The Cambridge Encyclopaedia of Language* describes it as having a "phatic" function, or being simply social and signifying, rather than serving as specific communication.

The basic modeling process shown on the right side of Figure 1 tried to focus attention on more appropriate use of language to describe graphic design, and on its historical influences and how they might be reinterpreted through a new use of language derived from subject discourse. This language is integrated with diagrammatic explanations that help to explain the key relationships. The newer model challenged traditional views of the subject and proposed a unified process of idea generation, word interpretation, image creation, and media realization for social, cultural, industrial, and commercial contexts. This diagrammatic representation is a starting point for developing future descriptions of the subject that are not determined and defined by contributing factors but that establish a foundation for a trans-disciplinary rather than multi-disciplinary dialogue.

From Basic to Applied Research

The initial attempt to depict graphic design in diagrammatic form grew out of a desire to identify core beliefs and general principles. Its initial purpose was as a visual teaching aid to help students in higher education identify what shaped their learning in the subject. Higher education in the United Kingdom therefore provides the context for this exercise. In this sense it is best described as a "basic research" modeling exercise that demonstrates, to some extent, the collaborative relationships and processes that are known to exist within the subject of graphic design.[16]

This paper reports on an attempt by the author to develop this "basic research" modeling exercise by examining its potential to represent relationships between a wider range of actors, functions, ideologies, and contexts. In this sense the paper moves beyond the use of typography, illustration, photography, print, word interpretation,

15 David Crystal, *The Cambridge Encyclopedia of Language.* (Cambridge University Press, 1987). 10–13.

16 Shaun Cole focuses on the collaborative nature of the subject with a focus on working practices; his approach moves beyond traditional subject coverage, is more inclusive than usual, and emphasizes teamwork. *Dialogue: Relationships in Graphic Design.* (London: V&A Publications, 2005).

image creation, idea generation, and media realization. To make this move, the idea of metaphor is used to help frame the complexity that arises once descriptions and explanations become more specialized and more remote from the traditional definition offered by Livingstone and Livingstone in the early 1990s. In their book, *Metaphors We Live*, George Lakoff and Mark Johnson argue that metaphor dominates our conceptual system for what humans think, experience, and do.[17] With this ubiquity in mind, this discussion borrows a metaphor used by Potter and Sarre to explain the dimensions of society as a continent with a number of countries, each of which has "its own history, way of life, dialect, institutions, literature, and ideology."[18] This idea can be applied to the origin of graphic design (as well as other subjects, fields, and disciplines that have grown from the need for a holistic approach—urban design being one of them). Graphic design emerged from core territories, parts of which are populated by separatists, some countries are claimed by more than one group, and other regions are yet to be explored. If graphic design is a social activity, with relationships at its heart, then this metaphor is appropriate and the question emerges: What might a graphic design nation look like? This inquiry is concerned specifically with the interests, motivations, preoccupations, and intentions of such a population. In this sense, it attempts to move from a state of basic research to applied research, toward a "clinical research" tool for "micro level research."[19] This approach uses diagrams as a visual method for rational inquiry. James Elkins describes the idea of using diagrams in this way as a "diagrammatic fantasy" that is also a "rational inquiry, because we might learn as much by what the diagrams suggest as by applying pictorial and linguistic evidence." "Thinking about images means being led into certain thoughts by images."[20]

Thinking about the potential application of the diagrammatic models shown in Figure 1 has revealed weaknesses in their scope and diversity as tools for thinking about graphic design beyond a basic level. For example, neither the traditional nor the contemporary diagram incorporate the idea of design in graphic design as a significant domain, while the "graphic" aspect is implicit in typography and illustration (as in the Greek "graphikos"), in photography and printing (as in lithography). What's more, graphic designers generally have not used their own skills (or "tools of their trade") as creators of many diagrams to explain what they do, or what their subject is, in diagrammatic form. The exceptions appear to be Katherine McCoy (1990) and Bruce Brown (1979)[21] and more recently Karel van der Waarde (who emulates the concentric circles as context configuration seen here in the contemporary model in figure 1).[22] Historical perspectives about graphic design, from Hollis (2001), Meggs (2006), Jubert (2006), Heller and Balance (2001), and Eskilson (2007), to name a few, do not venture beyond the products of graphic design as visual data.

17 George Lakoff and Mark Johnson, *Metaphors we live by*. (Chicago: The University of Chicago Press 1980).

18 David Potter and Philip Sarre, *Dimensions of Society,* (London: Hodder and Stroughton, 1974), 3.

19 These "basic," "applied," and "clinical" descriptors are taken from Ken Friedman's paper, "Theory construction in design research: criteria, approaches, and methods." (*Design Studies,* Vol 24, No 6, November 2003), 510–511.

20 J. Elkins, *The Domain of Images*. (New York: Cornell University Press 1999), 87.

21 These examples are discussed in Harland, R.G. (2009). "The Dimensions of Graphic Design: in Theory." Paper presented at the International Association of Societies of Design Research: Design: Rigour, and Relevance, Coex, Seoul, Korea, October 18–22, 2009

22 K. van der Waarde, (2009). *On Graphic Design: Listening to the Reader*. Avans Hogeschool Research Group Visual Rhetoric AKV | St. Joost. 25.

Toward a Model for Education About Graphic Design

An attempt to model the dimensions of graphic design in visual form might be considered foolish, despite the visual skills associated with the discipline. Heller points out that "various models have been adapted from academia and journalism … this includes commentaries, manifestoes, reviews, editorials, and reportage," and they usually are derived from the "-isms, -ologies, and -otics" with which these realms are associated.[23] Few of the models are said to be discerning. With this critique in mind, the author embarked on this current exercise with a degree of skepticism.

Aside from the work of historians, explaining graphic design through "graphic design" appears to involve the production by graphic designers of self-promotional items, or their writing and designing of books. There is little evidence of the use of diagrams in recent critical writing about the subject, although as some green shoots of research and theory have emerged in the subject, we are beginning to see diagrams used to accompany text explanations about design process and research methods.[24] And if we return to the earlier use of continent as a metaphor, talk of boundaries and landscapes is not uncommon in graphic design writing.[25] There is even a feeling of pointlessness about analyzing graphic design too much, when Newark comments that "dividing up graphic design into categories is essentially a fruitless exercise ... 'design' is a portmanteau term: It covers a number of interlaced activities that do not fall into distinct categories."[26]

In contrast to this view, those interested in design studies, rather than graphic design, try to explain design using both diagrams and textual matter. In Figure 2, Breen[27] suggests that design is the "in-between" realm that bridges the sciences (knowledge) and the arts (expression), and this location does not detract from design's having its own core values. Design is thought by some to be a "third way," with certain aspects of its activity incorporating artistic as well as scientific thinking. Considering this view from the perspective of graphic design, those practitioners with artistic inclinations will place a high value on "subjectivity, imagination, commitment, and a concern for "justice," whereas those motivated by the acquisition of "knowledge" (or a more scientific approach) will seek out "objectivity, rationality, neutrality, and a concern for the

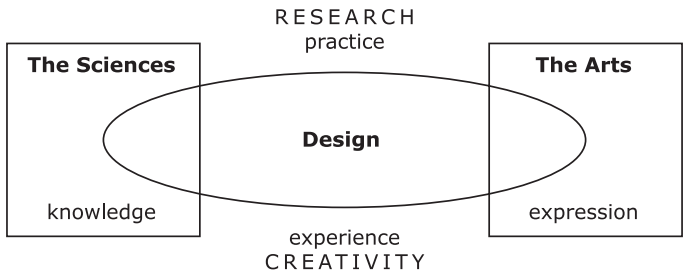


Figure 2
The In-Between Realm of Design.

23 M. Bierut, W. Drenttel, S. Heller, D.K. Holland, eds. *Looking Closer 2: Critical Writings on Graphic Design.* (New York: Allworth Press, 1997).

24 Audrey Bennett, *Design Studies: Theory and Research in Graphic Design.* (New York: Princeton Architectural Press, 2006), 14.

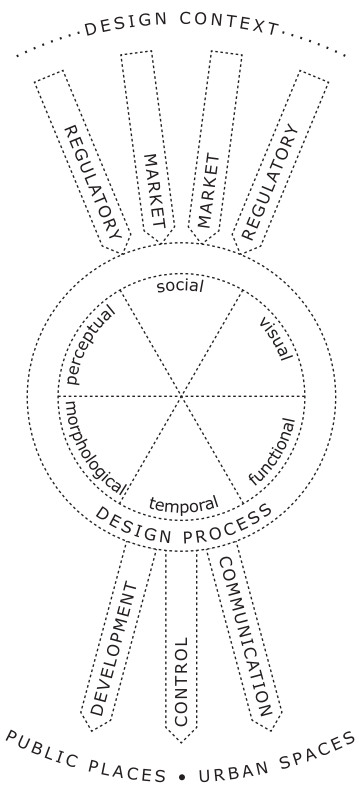
25 Geoffry Fried and Douglas Scott state that "For some time now, the landscape and boundaries of graphic design have been shifting." The Common Core, ed. Steven Heller, *The Education of a Graphic Designer.* (New York: Allworth Press, 1998), 171.

26 Q. Newark, *What Is Graphic Design?* (Switzerland: Rotovision SA, 2002). ISBN 2-88046-539-7.Oxford Illustrated Encyclopedia. Vol 5. The Arts. Oxford University Press.

27 Jack Breen, "Designerly Enquiry," in *Ways to Study and Research Urban, Architecture and Technical Design*, T.M De Jong and D.J.M van der Voort, ed. (Delft, DUP Science, 2005), 97.

28 This draws from Nigel Cross's discussion about the culture of science, humanities, and design. N. Cross, *Designerly ways of knowing.* (London: Springer-Verlag, 2006), 2.

Figure 3
The Urban Design: "Context, Substantive Dimensions, and Implementation"



'truth.'"[28] Consequently, graphic designers with an interest in music might wish to design for the music industry, or the cultural sector in general, where self-expression and the needs of the "artist" might be better understood, appreciated, and tolerated. Similarly, an interest in more "scientific" approaches to graphic design might lead a graphic designer toward information design, or a systems approach to their work, such as designing corporate identity.

Diagrams appear to be valuable tools, and they are used for eliciting responses.[29] Other design fields use diagrams to accompany explanations about the dimensions of their subject. For example, the urban design is partially explained with the use of a diagram to depict contexts, dimensions, and implementation.[30] An example of this perspective is shown in Figure 3 (redrawn for the purpose of this paper).

In acknowledgement of the views expressed by Glaser about segmentation, and contrary to the skepticism of Heller regarding the various attempts to theorize, or model, the subject of graphic design, the question arises: How might the critical dimensions of graphic design be modeled in diagrammatic form? What might such a "scientific" model look like to the graphic design and non-graphic design communities? These questions are worth pondering.

Many academic disciplines are familiar with the use of diagrammatic models, considering them essential to the thinking and teaching of the subject. Waugh states that models "form theoretical frameworks which may be difficult to observe in the real world, but against which reality can be tested," and in the 1960s Deutsch apparently identified three main advantages to the use of models in the social sciences.[31] He argued that models have an "organizing function"; make complicated or ambiguous information clear so that "it can guide the student or research to key points of a process or system"; and help to formulate hypotheses in research and "predict outcomes." Models may be "structural" (diagrammatic) and "functional" (relational).[32] This paper is concerned with the latter type.

Speculating About the Future of Graphic Design

This discussion about the use of diagrammatic models thus far has focused on evaluating the past as an impetus for embracing a future that links practice, education, and research. This particular work began in the early part of the millennium, but now there is a wider acceptance of the need to take a step backward before taking two steps forward. In 2007 Helfland and Drentell were reported to suggest that "mapping the future of the profession will be difficult without looking back at our history to get a better idea of where we are going,"[33] indicating there is clearly a mood for reflection before future projection.

29 Nathan Crilly, Alan F. Blackwell, and P. John Clarkson, "Graphic Elicitation: Using Diagrams as Interview Stimuli." *Qualitative Research.* Vol. 6(3) 341–366. (London: SAGE Publications, 2006).

30 Mathew Carmona, Tim Heath, Tanner Oc, and Steve Tiesdell. *Public Places – Urban Spaces: the Dimensions of Urban Design.* (Oxford: Architectural Press, 2003), vi.

31 D. Waugh, *Geography: an Integrated Approach* (3rd ed.). (Thomas Nelson and Sons Ltd. 1995), 507.

32 Denis McQuail and Sven Windahl, *Communication Models for the Study of Mass Communication.* (England: Longman Group UK Limited, 1981), 2–3.

The intention of including the initial basic contemporary model shown in Figure 1 was to present the idea that there are four key "practical" domains and four key contextual domains that are mediated through the domain of communication. This schema presents the notion that idea generation[34] (or "ideation") occupies a central place in graphic design and played a significant role in establishing the subject's credibility in the twentieth century. From this central point, the contextual domains, with the social domain at the outer limits, give the visual impression that commerce, industry, culture, and society cover the domains of media realization, word interpretation, and image creation. This "transmission" has a "ripple" and "reverse ripple" effect, pushing out as well as drawing in, influencing as well as being influenced by, these "practical" domains. The model also demonstrates that the domains of idea generation, image creation, word interpretation, and media realization are linked to each other through the idea domain. These areas were initially thought of as domains, and the visual appearance suggested boundary lines. This technique is a common one used in modeling, the intricacies of which will not be explored here. This diagrammatic approach, as a visual method, worked well for the purpose of creating a basic research model, but it is limiting in scope because of the suggestion that these domains are fixed surface areas, equal in size, and it is limiting as a device for interpreting complexity. For example, how might this approach incorporate the ideas about design and its relationship to science and humanities?

A return to the metaphor about graphic design as a continent, or nation, is useful to reconsider at this point. An approach to the use of diagrams found in geography helps reconfigure the idea of overlapping circles used in the initial basic model, as dimensions and contexts. More specifically, the diagramming technique used by Walter Christaller to explain "central place theory"—one of a number of theories for measuring settlement patterns and the "spacing and function" of settlements—offers a useful approach. His primary concern was the distribution and location of settlements, and their "sphere of influence" over inhabitants in the surrounding area. He used the term "central place" for each settlement and depicted them using circles to show the boundary, or sphere of influence, of the central places.[35]

The diagram in Figure 4 explains the development of Christaller's theory, the stages of which are usually shown as a series of separate images. Reading from left to right, it illustrates how Christaller identified boundaries of trade areas and the resulting spheres of influence. These overlap to identify areas served by more than one central place, overcoming areas that were unserved by any central place when circles simply "touch" rather than overlap. Overlap areas are shaded grey. In these overlap areas, first-order settlements are identified (e.g., as villages). These settlements are located as hexagonal trading areas are established, and then areas

33 Jessica Helfland and William Drentell, "What's so Graphic about Graphic Design?" March 10–11, 2007. Pasadena. Reviewed in *Eye Magazine*, No 64, Vol. 16, Summer 2007.

34 "Idea generation" is a familiar term and recognized as one of the methods used in graphic design education as a means to develop thinking skills. Ann C. Tyler, "Educating Design Citizens: Passing on a Mind, Body, Spirit Practice," in *Design Studies: Theory and Research in Graphic Design* by Audrey Bennett. (New York: Princeton Architectural Press, 2006). 333.

35 D. Waugh, *Geography: an integrated approach* (3rd ed.). (London: Thomas Nelson and Sons Ltd., 2000), 408.

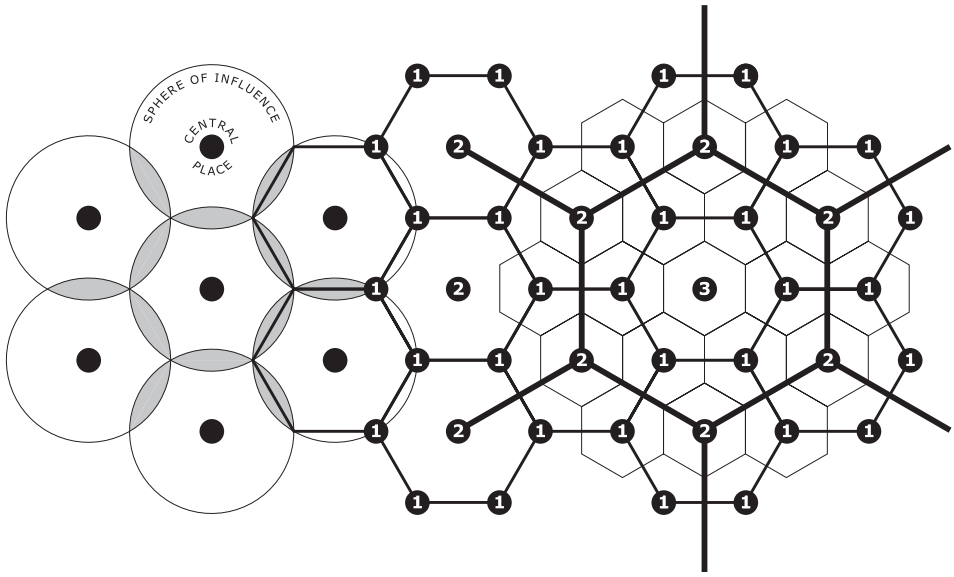


Figure 4
Christaller's Development of First-, Second-, and Third-Order Settlements in a Hexagonal Model That Grew from a Circular Boundary Line Approach.

emerge as second-order settlements (e.g., a town) and as more prominent. This pattern gains in complexity with the growth of third-order settlements, which have a wider sphere of influence over first- and second-order places. This influence is shown on the right side of the diagram in a hexagonal pattern that takes in three scales of influence. The diagram shows how one third-order settlement serves 6 second-order settlements and 24 third-order settlements. Overall, 31 settlements are ranked in order of their sphere of influence.

This visual representation, and theoretical base, present a useful opportunity to explore the significant influences on graphic design at macro and micro levels. As an organizational device, this approach is helpful for recognizing disciplinary perspective, but it is worth remembering that boundary lines are a modeling technique, and, like a state or county boundary, they do not exist in the physical sense. Boundary lines are not fixed, but permeable, with significant overlap between approaches that might prompt new spheres of influences to emerge, old ones to dissolve, and new ones to be rediscovered.

The consideration of a hexagonal structure can be useful for discussions about "the basic duality of graphic design" as a "rational and an artistic activity"[36] and reinforces the earlier idea shown by Breen that design (and graphic design) is determined by both the sciences (science and knowledge) and the arts (humanities and expression). Taken further, this author has configured a diagram that makes explicit the ideas of Bruce Archer[37] and Nigel Cross[38]—that design is considered a "third culture" in addition to science and the humanities. This possibility has been discussed in detail elsewhere using the idea that design is at the fulcrum of the pendulum that swings between science and the humanities.[39] This relationship can be seen on the left in Figure 5.

36 J. Frascara, (1988). "Graphic Design: Fine Art or Social Science?" *Design Issues,* (Cambridge, MA: The MIT Press), 5:1, 18–29.

37 Although Archer was primarily concerned with general education, this author believes that any discussion about design in general education should align with discussion about design in higher education. B. Archer, "The Three Rs." in B. Archer, K. Baynes, and P. Roberts (eds.), *A Framework for Design and Design Education: A Reader Containing Key Papers from the 1970s and 1980s* (pp. 8–15). Wellesbourne: The Design and Technology Association.

38 N. Cross, *Designerly ways of knowing.* (London: Springer-Verlag, 2006).

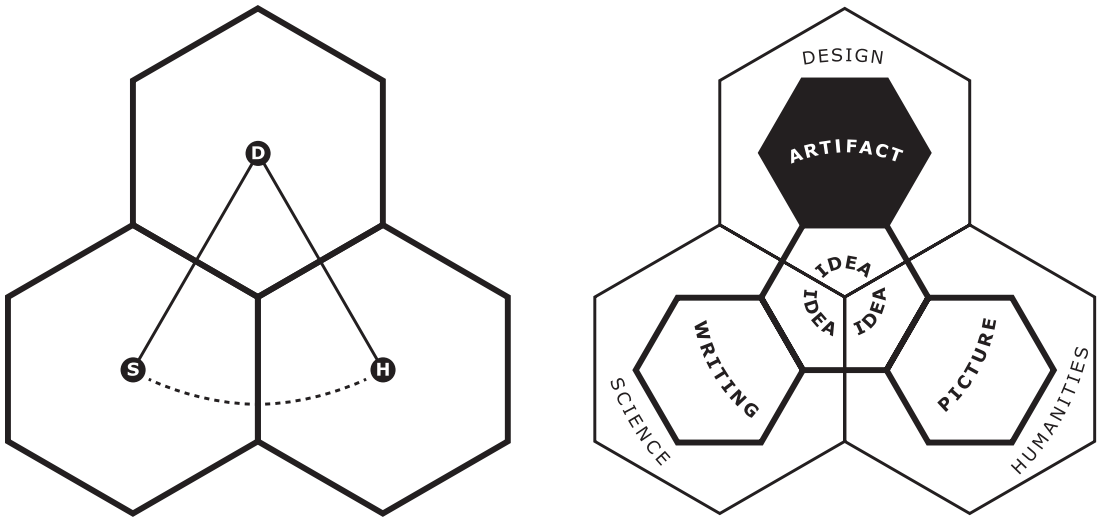


Figure 5
The Macro and Meso Dimensions of Graphic Design.

As part of the metaphor of a pendulum, an attempt was made to link a number of terms that appear in debates about duality throughout the literature: word/image, verbal/visual, reading (text)/seeing (image), explanation/persuasion, alphabetic/pictorial, objective/subjective. Frasacara's (1988) use of rational/artistic can be added to this. For the purpose of this discussion, the diagram on the right side of Figure 5 emphasizes the basic terms of "writing" and "picture" as appropriate to the "graphic"; these terms are adopted from James Elkins's exploration of the problems with classification in the domain of images.[40] These are in place of the phrases used earlier: word interpretation and image creation (interpretation and creation having been initially chosen for their respective linguistic and artistic connotations). A more detailed investigation of Elkins's work reveals the use of the "writing" and "picture" classification to be limited in the sense that writing is not exclusively scientific, nor are pictures exclusively the preoccupation of the humanities. He also considers the term "notation" as a third important descriptor before explaining as many as seven categories of images.

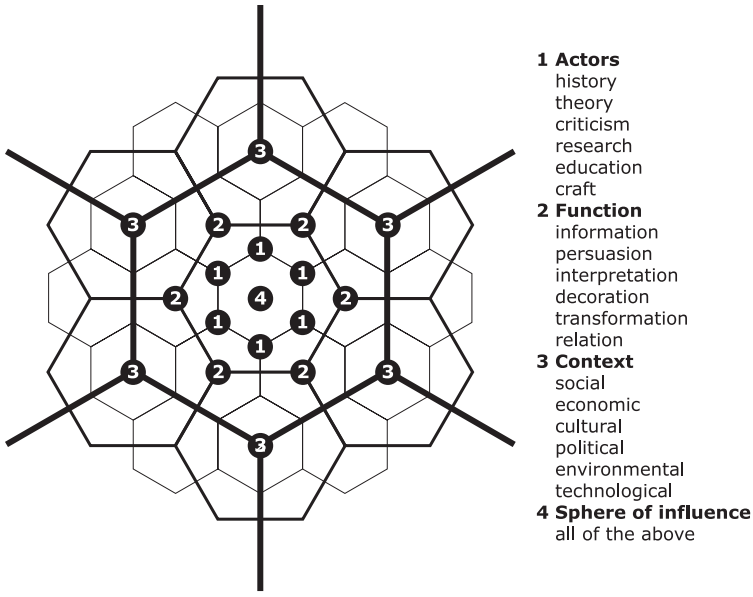
The diagram on the right side in Figure 5 conveys the idea that graphic design at a basic level is concerned with ideas about writing systems and pictorial representation, and with their realization in the material form of an artifact. "Artifact" is substituted here for the "media realization" terminology used in Figure 1, and is appropriate because it may refer to either a functional or a decorative object. It is assumed to be a designed object in the physical sense, and the immediate metaphysical terrain that surrounds it might be called the place where design thinking happens.

These new diagrams try to show how we might start to consider the relationships between what might be described as the macro and meso dimensions of graphic design. Trying to look more

39 R.G. Harland, (2009). "The Dimensions of Graphic Design: in Theory." Paper presented at the International Association of Societies of Design Research, Design: Rigour and Relevance, Coex, Seoul, Korea, October 18–22, 2009.

40 A more comprehensive discussion about duality of terms can be found in J. Elkins, *The domain of images.* (New York: Cornell University Press, 1999).

Figure 6
The Complex Spheres of Influence That Contribute to the Micro Dimensions of Graphic Design: Actors, Functions, and Context



closely at the micro level requires the complexity of Christaller's first-, second-, and third-order diagrammatic interpretations.

Furthermore, the micro dimensions of graphic design (Figure 6) and their depiction place greater emphasis on the complex relationships that influence the production of the graphic artifact. Micro is used in this context to suggest many influences that are equally balanced, rather than the perceived dominance in the past of craft. (Craft, be it in the form of typography, or printing, has its own macro and micro concerns.) The influences include human and contextual dimensions, some of the latter being sited at the interface between the artifact and its context. The human dimension might include the activities and ideas of practitioners who are concerned with a multiplicity of related activities: history, theory, criticism, research, education, and craft. These activities and ideas may be preoccupations carried out in the plural, or as an autonomous pursuit. The holistic view of the future of graphic design must see the practice of the craftsperson also as that of a historian, theorist, critic, researcher, and educator, as much as that of the historian is seen as theorist, critic, researcher, educator, and crafts person. What is known about history, theory, criticism, research, education, and craft all contribute to the forming of the artifact. Although other occupations can be added, the ones identified are what this author sees as the most important.

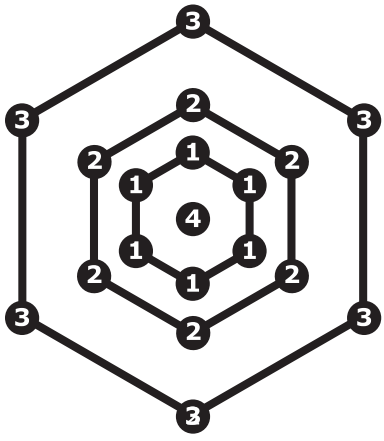
The contextual dimension places importance on social, economic, cultural, political, environmental, and technological factors. A multitude of other concerns at a functional level, from both within and outside the graphic design literature, can also be introduced to the model: information, persuasion, interpretation, decoration, transformation, and relation, to name a few. The last of

these, for example, is frequently the focus of sociological discussion. Individuals will associate and identify with these terms depending on their own disciplinary perspective, randomly aligning them with the human and contextual dimension.

Summary

This paper has tried to look more closely at the opportunity to depict graphic design in diagrammatic form. Such work appears to have been given little consideration across the near and distant spectrum of literature, despite the perception of diagrams as an integral part of graphic design practice, and the common use of diagrams to explain relationships in other academic subjects. The intention has been educational, as many of the ideas about depiction have been used in a higher education setting, and some of this content has been reported at design research conferences. It would seem that the words of Jorge Frascara in 1988—that graphic design had "developed without much theoretical reflection"—are still true, especially when considering explanations of what the subject is. Historians still report on and feature the objects of graphic design as the primary visual data, whereas criticism and theory have mainly come from a random selection of papers written over the twentieth century, often by those who would not necessarily identify themselves with the term "graphic design."

Figure 7
The Alignment of Artifact with Actors, Functions, and Contexts



1 Actors
history
theory
criticism
research
education
craft
2 Function
information
persuasion
interpretation
decoration
transformation
relation
3 Context
social
economic
cultural
political
environmental
technological
4 Sphere of influence
all of the above

With this situation in mind, this author uses a tool of graphic design—diagrams—as a way to explore and envision graphic design. This project is best described as work in progress, and, as is seen in the diagram in Figure 6, many "territories" remain unexplored. This paper is thus, at best, a summary of where the research currently resides. In fact, the diagram in Figure 6 can be presented in a much cleaner way, simply as three contained hexagons (shown in Figure 7 for those less willing to remove the connecting lines). This diagram is offered to support a discussion about aligning actors, functions, and contexts, in the spirit of what might be called *artifact alignment*, for which there is much to be written. But removing the lines goes against the spirit of recognition that all of the actors, functions, and contexts are visibly connected to each other through their respective spheres of influence. And they are part of a wider world beyond what is considered design. For some, this reality means placing their primary sphere of influence closer to another complimentary sphere—for example, an interest in social transformation through design education, or the relationships between design, craft, and technology.

Language has been discussed as an important part of this process, with the recognition that the traditional terminology developed out of the establishment of graphic design as a craft for commerce, but it must now be equally thought of as a tool for social, cultural and economic development. Transdisciplinary ways of thinking may well offer the impetus to overcome language barriers and unify a subject that sees history, theory, criticism, research, education, and craft occupying a shared territory.

Emil Ruder: A Future for Design Principles in Screen Typography

Hilary Kenna

Introduction

This paper sets out to explore the way in which the renowned Swiss typographer, Emil Ruder, has influenced a practice-led PhD study focusing on the need for creating new design principles for screen-based typography. Specifically, the paper examines Ruder's seminal book *Typographie: A Manual for Design* (1967), wherein historical knowledge created for a print-based context has made a sustainable contribution to the future development of typography within the context of the screen. In addition, this study has led to a re-examination of the relevance of Emil Ruder's teaching at the Basel School of Design, and his work as positioned within a contemporary context.

Emil Ruder (1914–1970) is distinguishable in the field of typography for developing a holistic approach to designing and teaching that encompasses philosophy, theory, and a systematic practical methodology. After 25 years of teaching, Ruder published the heavily illustrated book, capturing his ideas, methods, and approach. The book represents a critical reflection on Ruder's teaching and practice and a lifetime of accumulated knowledge. It has been published in nine languages and is now in its seventh edition. Today, more than 40 years after the book was first published, it is still widely used and referenced by education and industry practitioners alike.[1]

Background to the Research

This paper is drawn from PhD research that centers on the need for a clearer understanding of the nature and practice of typography in a screen environment and on trying to define the current and emerging design principles and methodologies that govern that practice.

The research question arose from the day-to-day experience and practice of the researcher, who works both as a designer and as a lecturer in design for digital media. As a teacher and a practitioner, I have found that traditional knowledge and experience fall short of the challenges of designing and teaching typography for screen. Through experience, I have found that there are many differences between print and screen typography at both macro and micro levels, and that traditional practical methods require revision and extension to address nontraditional aspects, such as motion, sound, and interactivity presented by screen-based design contexts.

1 Association Typographique Internationale (ATypI), (March 2004), *Type and typography Textbooks required by educators on ATypI Educators List*, Educators Discussion Summary, ATypI Publication.

Ongoing critical reflection on these issues in the course of my daily design and teaching practice and my own educational experience have greatly influenced the motivation and point of view from which this research has developed. Through the course of trying to solve typographic design problems for screen in my own practice and through the development of teaching material for my students, I have been practically exploring this territory for some time. The requirements of PhD research presented an academically rigorous context, and a systematic methodology to further examine this territory.

This paper sets out a critical discussion about how the direction of this research has been influenced by the work of Emil Ruder.

Emil Ruder and His Method

The broad nature of this PhD research subject (design principles for typography) and the emergent nature of the field (screen typography) required a contextual examination that encompassed a critical review of both relevant literature and contemporary practice. During the analysis of findings, Emil Ruder's practical methodology for designing typography emerged, proving to be particularly relevant to this research. Four main reasons for Ruder's significance became apparent and form the basis of discussion in this paper:

- The location of Ruder's book within the broader canon of literature on typography and design principles, and how it is referenced by and linked to the literature as a whole;
- The distinctive nature of Ruder's book and practice methodology among those in the field;
- The renewed interest in modernism, and how Ruder represents a paradigm of modernist aesthetics and methodology;
- The relevance of Ruder's approach to screen media.

Ruder's Location and Links with the Literature on Typography and Graphic Design

In selecting from among the broad spectrum of literature related to the design practice of typography, careful analysis of relevance resulted in a process of conceptual and visual mapping techniques that became a key research methodology for editing, classifying, ordering, and analyzing the seemingly broad range of typographic literature. After several iterations, the result of this methodology was a "literature map" visualization (Figure 1). The map provides a chronological and contextual overview of all the relevant literature in the field from the beginning of the twentieth century. Criteria for inclusion are based on:

- Relevance to category;
- Established use in education and course curricula;

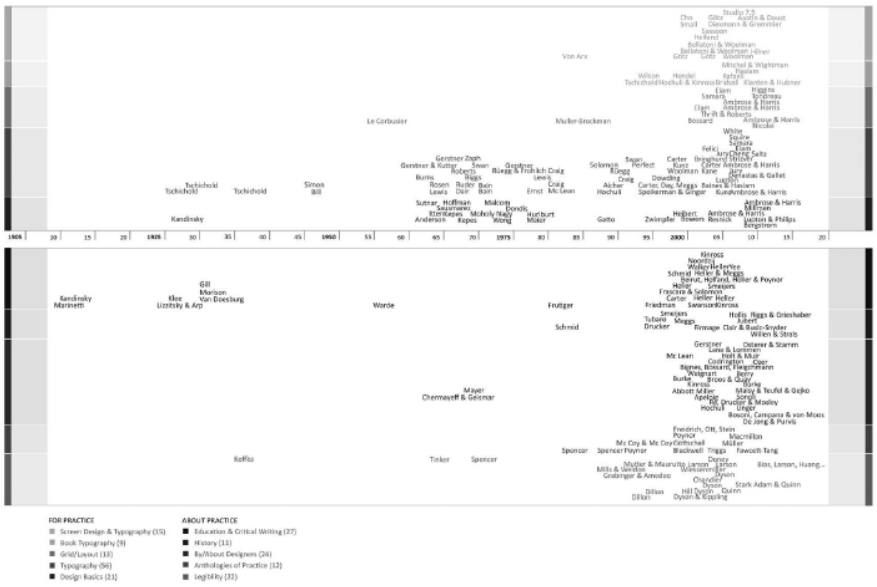


Figure 1
Literature Map 1900-2015 Typographic Design Principles, by Hilary Kenna, PhD Project, www.type4screen.com/lit-review/.

- Referral and recommendation on reading lists from educational and professional design organizations, and from online resources;
- Reputation of author(s) (as practitioner/educator/critic) and bibliographic references;
- Consumer popularity and contemporaneity; and
- Frequency of occurrence in one or more of the above.

The literature map illustrates the material split into two groups: *for practice* and *about practice*, with an additional five categories in each group (see the key in Figure 1). The visual display of these thematic groupings made it easier to identify critical patterns in the literature that would have been more difficult to uncover using written methods alone. One such pattern identified was the dominant influence of Swiss typography in the literature.

Note that while the literature map was very useful, it was not the only research methodology used in the literature review; its limitations required the use of other methods as well. For example, the literature map displays only book publications and not journal papers or articles (traditional or online versions), with the exception of the legibility category. This focus was mainly a result of the diverse nature of periodical materials and the difficulty of gauging their use in mainstream practice. As a result, other methods, including the use of RSS information feeds and content aggregators and the authoring of a research blog, were used to track and analyze this type of literature.

The overall findings from the literature map, combined with the findings from these other research methods, revealed a number of critical directions for investigation, which led to the focus on Emil Ruder.

Findings revealed that the bulk of titles published about practical design principles for typography have occurred since 2000, and that the majority of these publications make reference to Ruder either within the text itself or in the selected bibliography.

This finding prompted the realization that a modernist legacy continues to underpin many of the contemporary publications on typographic design practice (e.g., by Robin Kinross, David Jury, Phil Baines, Ellen Lupton, etc.), as well as exerting influence on the different and reactionary approaches (e.g., deconstruction, grunge graphics, postmodernism, etc.) that emerged in the latter part of the twentieth century.

Visualizing the literature has also helped to reveal significant connections between publications including the dominant influence of Swiss typography in the literature and connections between authors and subject matter (Figure 2).

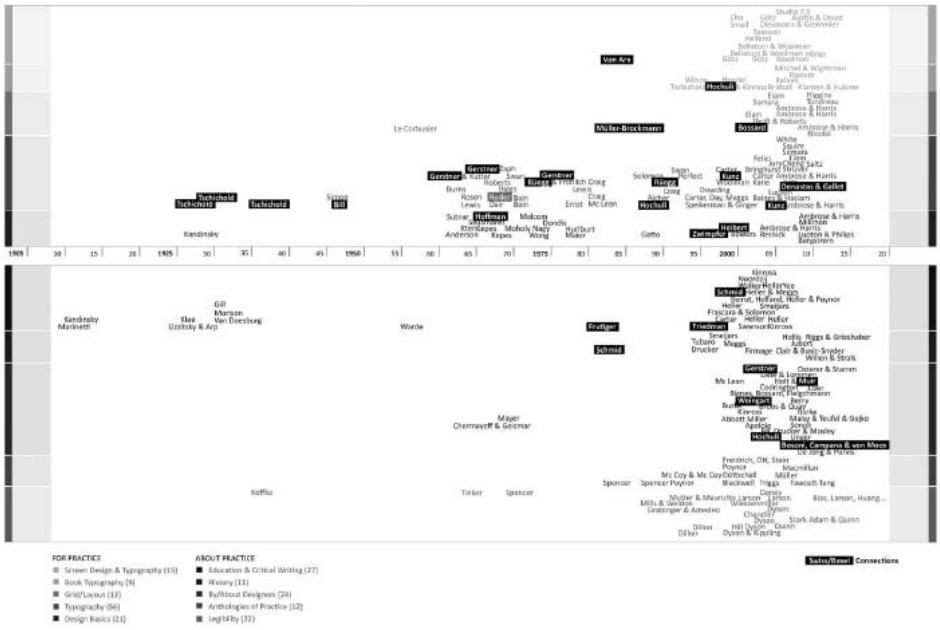


Figure 2
Literature Map 1900-2015 Typographic Design Principles with Swiss/Basel connections highlighted, by Hilary Kenna, PhD Project, www.type4screen.com/lit-review/.

A number of key publications chart the path of development of Swiss typography and the International style. First was Max Bill's publication, *Über Typographie* (1946), which established a number of principles for the new typography; a number of designers then started to follow these principles. The magazine, *Neue Grafik* (1958–65), and the book, *Die neue Grafik* (1959), by Karl Gerstner and Markus Kutter also spread awareness of Swiss typography to an international readership. Emil Ruder was a regular contributor to *Neue Grafik*, as well as to another magazine, *Typographische Mönasblatter*. Between 1959 and 1965, he published a series of articles about the underlying principles of his teaching and this new movement, which he called "the typography of order" (Schmid, 1981). In 1961 Josef Müller-Brockman published a book, *The Graphic Artist and his Design Problems*, which became a primary publication in the international dissemination of Swiss typography and its methods. Müller-Brockman detailed at length the core principles of this new "graphic art," including:

- A striving for objective presentation through the elimination of decorative and expressive effects;
- An unadorned typography that clearly conveys the message to be communicated;
- The use of a grid for ordering the information and graphic elements;
- The restriction of type sizes and typefaces (san serif, because it was an "expression of our age");
- Unjustified text setting; and
- The use of photography instead of illustration.

In his 2006 book, *Swiss Graphic Design: The Origins and Growth of an International Style 1920–1965*, Richard Hollis credits Müller-Brockman and Theo Balmer as having the primary influence on the development of Swiss graphic design. However, Kenneth Heibert (an ex-Yale design professor and colleague of Hollis), who was a student at Basel during the 1950s, strongly argues that Emil Ruder and Armin Hofman's influence was of much greater significance and points to a number of inaccuracies in Hollis's chronology of development (Heibert, 2007). For example, he claims that Müller-Brockman's own practice changed significantly toward the "modernist" style, for which he remains famous, only after his company hired graduates of the Basel School of Design who had studied under Armin Hofmann in 1955. According to Heibert, this chronology means that Hofmann and Ruder predate Müller-Brockman's mature style, and their influence should not have been placed by Hollis as a separate and later development.[2]

Ruder's book, *Typographie*, is centrally located on the timeline of the literature map, and although his book was not published until 1967, his influence begins much earlier, back to 1942 when he began teaching at the Basel School of Design. As mentioned, Ruder had

2 R. Hollis, *Swiss Graphic Design: The Origins and Growth of an International Style*, 1920–1965, (Yale University Press, 2006), 214.

been publishing shorter essays about his ideas and methodologies in *Typographische Monatsblätter* (TM), a Swiss journal of typography, as early as 1944. His contributions to TM throughout the 1940s, 1950s, and 1960s were testing ground for much of the material that would later appear in his book. In TM, Ruder's academic rebuttal of contemporaries, such as Jan Tschichold, who favored classical typography, and the passion of his arguments for all things modern, including his promotion of Fruitger's typeface Univers, soon established him as an opinion leader in Swiss typography. Armin Hofman, director of the Basel School of Design during this time, said of Ruder:

> ...he saw the return to classical form as a disastrous interruption of progress.... one could say that the efforts of the Basel School...laid the foundation for a new typographic consciousness...[3]

By the time Ruder had published *Typographie* in 1967, his philosophy and methodologies were already internationally renowned in the field of typography.[4]

Highlighting titles on the literature map that are linked to modernist or Swiss typography (Figure 2) demonstrates a significant and widespread representation across the literature. The number of highlighted titles after Ruder increases significantly. He can be linked to many authors and titles directly or indirectly, from a number of perspectives, including through geographic location (Bill, Gerstner), through his teaching at Basel (Heibert, Kunz, Schmid, Weingart), as a work colleague (Hoffman, Von Arx, Frutiger), as a peer rival (Tschichold), or through use of his work in books (Hollis, Meggs, Schmid). This web of connections presents a sketch of the broad sphere of influence of Swiss typography and the location of Ruder within it. Although Ruder's lineage warrants more detailed study, it is beyond the scope of this particular research. Nevertheless, the widespread influence of the Basel School of Design and Swiss typography on the development of international typographic practice has been documented by other contemporary research, notably McCoy (2005), Hollis (2006), Heibert (2007), and Jobling and Crowley (1996).

The position of Ruder within the literature and the extensive links forward and backward from him to other authors, as well as the prevalent use of Ruder's book today, provided the initial prompt to investigate his work and methodologies in more detail.

The Difference with Ruder

Another aspect of reviewing the selected literature focused on a critical comparison of the books' structure (including their contents pages) and their approach to explaining the practical principles for designing typography. A large majority of the texts adopts a structure based on elemental aspects of typography, such as letter,

3 H. Schmid, 'Emil Ruder: Typography from the Inside', *Baseline 36*, *1*, 5–12.

4 H. Schmid, (ed), (March 2009), Ruder Typography, Ruder Philosophy, IDEA 333, Toyko.

word, and paragraph, and a practical approach based primarily on technique-based rules of design relating to these elements (Ambrose and Harris (2006), Baines and Haslam (2002), Craig (1990), Jury (2006), Kane (2002), Lewis (1963), Lupton (2004), Mc Lean (1980), Rüegg, (1989)). These books also tend to separate historical aspects of typography from practical techniques and to place them in discreet chapters. This approach is both logical and structured, clear and understandable—and Ruder's presentation and schema is markedly different.

Ruder's book distinguishes itself from other titles for its thematic structure and philosophical approach. There are 19 chapters in Ruder's book, each dedicated to a single concept or theme, such as *form and function*, *form and counterform*, *contrast*, *rhythm*, *kinetics*, and *variations*. Each chapter begins with a critical contextual essay that encompasses references from a range of fields, including art, architecture, music, and Eastern philosophy and Japanese aesthetics, as well as graphic design and typography. Through diverse visual examples, Ruder manages to weave historical and theoretical aspects together with practical techniques and methodologies. The book is a dense mix of historical insight, Ruder's personal philosophy of design, and textbook-like instruction. The overall effect is a deep and layered argument for a holistic approach to the practice of typographic design, and it makes Ruder's book worthy of several readings.

Other books also offer a philosophical approach to the practice of typography (e.g., Tschichold, 1928; Bringhurst, 2001; and Kunz, 1998), but as the reader progresses through each book, there is a separation between the philosophy of practice and the practical techniques. Ruder, on the other hand, continually relates the state of mind of designers to their ability both to practice design and to acquire knowledge.

There are also several contemporary publications by (and about) Helmut Schmid, a former student of Ruder (from 1964 to 1965), who has established himself as the guardian of Ruder's teaching legacy. Schmid continues to disseminate Ruder's philosophy and methods, and to demonstrate their contemporary relevance and use in print typography.

What ultimately differentiates Ruder's book from other treatises on the practice of typography is his holistic approach, which combines a mix of pragmatism and poetry. He foregrounds design principles over techniques, emphasizing a critical conceptual approach to practice that is underpinned by a systematic methodology. Similar to Eastern traditions of philosophy, Ruder endorses rigorous practice with basic elements first to gain mastery of the craft. Once this mastery has been achieved, Ruder promotes a process of experimentation, which might ultimately lead to innovation. From a practice perspective, Ruder's book is less a manual of practical techniques and more a way of thinking

and making typography as befits the purpose at hand. Finding and sustaining creative stimulus within the constraints of a given problem is paramount for Ruder. As a result, Ruder's methodology has a timeless quality, which might explain its continued relevance and appeal today.

In the context of screen typography, Ruder's approach is valuable because it operates at a conceptual level. It is not tied to any format or specific technology and is therefore sustainable. It offers a flexibility and openness that make it applicable regardless of the changes and advances in technology that affect the display of and the technical processes of producing screen typography.

In the next section this paper examines why specific aspects of Ruder's methodology are particularly suited to designing typography on the screen.

Ruder – A Paradigm of Modernist Aesthetics and Methodology

The contemporary relevance of Ruder's work should also be viewed in the broader context of the past decade, in which there has been renewed interest in modernist design. Design critics, historians, and media commentators cite various reasons for this resurgence.

According to Rick Poynor, at the height of postmodern experimentation in typography, some of its most ardent supporters, like Rudy VanderLans in 1991, were questioning its future direction, considering "the only way forward might be to go back."[5] Other leading figures in postmodern typography had also begun to re-examine the values of "design basics" in typographic practice and teaching. Wolfgang Weingart (a Swiss designer and student of Ruder), who had become disillusioned with the stylistic trend that his experimental work seemed to spawn, reportedly said to Helmut Schmid, who came to visit him at Basel: "I do not know where we are going in typography. Maybe we will come back again to Ruder."[6]

Weingart initiated a return to the famous "Basics in Design and Typography Course" as a summer school at Basel in 2005, which proved highly popular and has been over-subscribed ever since.

Meanwhile, Katherine McCoy, an American designer and educator credited with initiating some of the earliest postmodern approaches to typography, was also researching the effect of the Basel School of Design on U.S. typography. She traced the path of Basel's influence on American design education and typography in a paper, "Another 60s revolution," presented at the AIGA Educator's conference *Schools of Thought 2* in 2005. McCoy detailed how Swiss design education was brought to the United States at the Kansas City Art Institute, from 1964 to 1974, through the employment of three Basel graduates as teachers, and she identified how the resulting prevalence of modernist methodologies and approaches existed in those same schools during the 1960s. McCoy also uncovered a web of connections between graduates from Basel who taught in U.S. design schools (Kenneth Heibert) and prominent American

5 R. Poynor, *No More Rules: Graphic Design and Post Modernism*, (Laurence King Publishers, 2003).

6 V. Malsy, P. Teufel & F. Gejko (ed), *Helmut Schmid: Design is Attitude*, (Birkhäuser, Switzerland, 2007), 281.

Figure 3
Screenshot from www.yugop.com/ by Yugo Nakamura.

designers (Marlene McCarthy, April Greiman) who studied for a period at Basel.

Other commentators believe the congested information environment caused by digital technologies has created an overwhelming need for clarity and navigation.[7] In his book, *Typography: Micro and Macro Aesthetics*, Willi Kunz (also a graduate of Basel) describes how modernist design principles can offer simple" solutions that look fresh and unexpected in the visually chaotic environment of today."[8]

Media theorist Lev Manovich and design critic Jessica Helfand, meanwhile, believe that developments in contemporary digital technologies are reminiscent of media techniques from the modernist era, such as "montage, Moholy Nagy's 'new vision,' and Tschichold's 'new typography'"[9] and that these developments consequently lend themselves to modernist ideals and methodologies. Manovich and Helfand concur that contemporary practice in screen typography is embracing both strands of modernism: "the structural clarity of rational thinking and the capacity for inventive unorthodox (and often quite personal) expression...."[10]

Findings from the critical review of contemporary practice undertaken for this research made visible these strands of modernist activity at work in screen typography, especially in the work of Yugo Nakamura, Peter Cho, Joshua Davis, David Small, and John Maeda (Figures 3 through 7).

Other characteristics of the modernist period, such as those described by Paul Greenhalgh in his modernism "feature list" (e.g., abstraction, technology, function, and progress) are at least visually, if not conceptually, evident in other contemporary screen typography, including in the work of Khoi Vihn, Ben Fry, and Group94 (Figures 8 through 10).

This overall context of a renewed interest in modernism helps to explain why Ruder's work appears relevant, from a methodological and aesthetic perspective, to contemporary screen typography and to this research.

7 S. Wurman, *Information Anxiety 2* ,Que; 2Rev Ed edition, 2000.

8 W. Kunz, *Typography: Macro and Microaesthetics*, Verlag Niggli AG, 1998.

9 L. Manovich, Generation Flash, essay in exhibition catalogue for Whitney Biennial 2002 exhibition.

10 J. Helfand, *Screen: Essays on Graphic Design, New Media and Visual Culture*, (Princeton Architectural Press, 2001), 62.

Figure 4
Screenshot of Type me, Type me not (1998), by Peter Cho, www.typotopo.com/projects.php?id=typemenot.

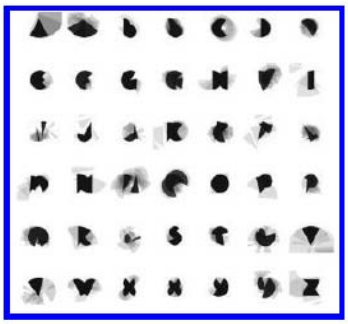
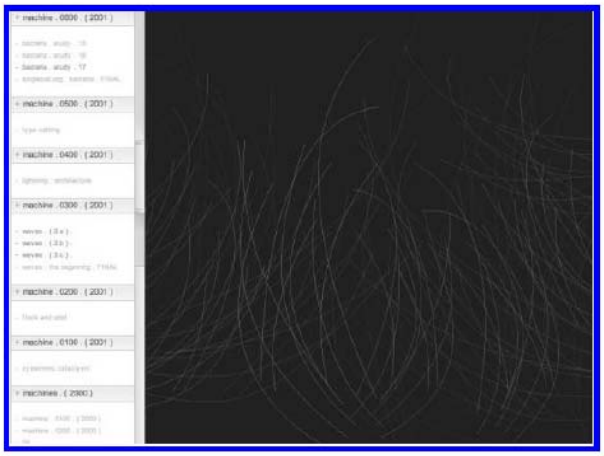
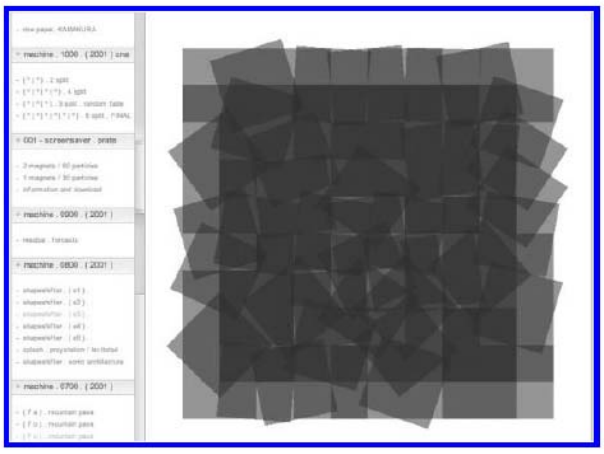


Figure 5a, 5b
Screenshots from Praystation version 3 (2001) by Joshua Davis, www.ps3.praystation.com/pound/v1/.





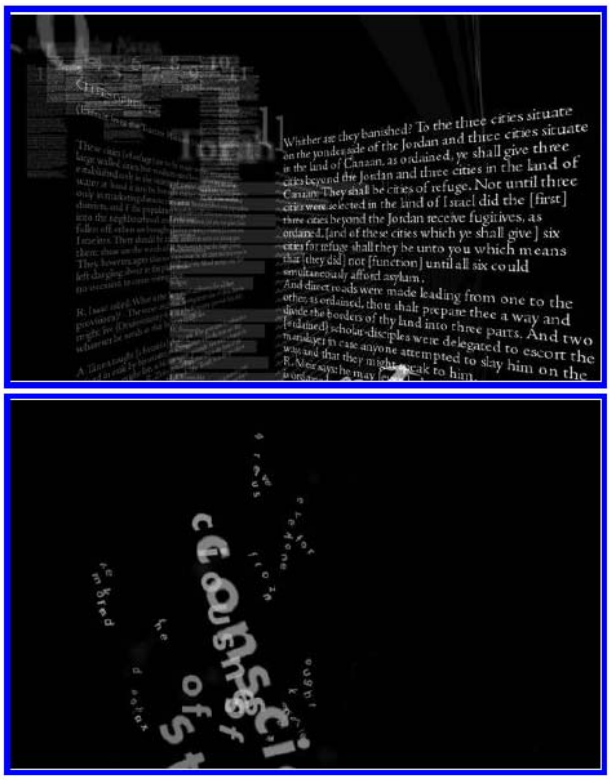


Figure 6a
Screenshot from The Talmud Project, PhD prototype (1999) by David Small, MIT Media Lab, 1999.

Figure 6b
Screenshot from Stream of Consciousness Project by Tom White & David Small, MIT Media Lab, 1998.

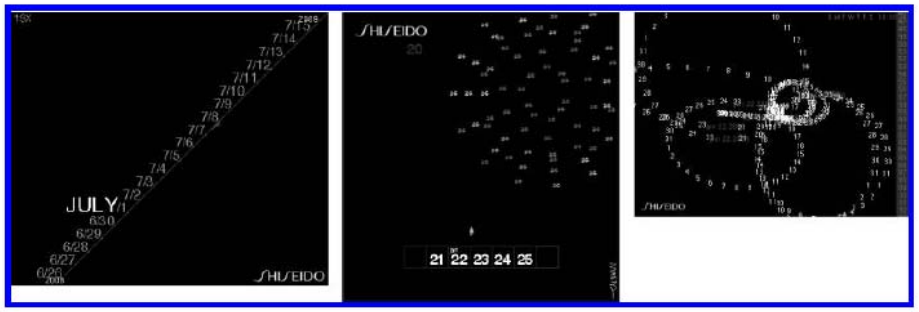


Figure 7a
Screenshots from Flying Letters, 1995, by John Maeda, www.maedastudio.com/index.php.

Figure 7b
Screenshots from Shishedo Calendars: Line, Hanabi, and Cosmos, 1997, by John Maeda, www.maedastudio.com/index.php.

Figure 8a, 8b
Screenshots from Subtraction blog, 2007 & 2010, by Khoi Vihn, www.subtraction.com.

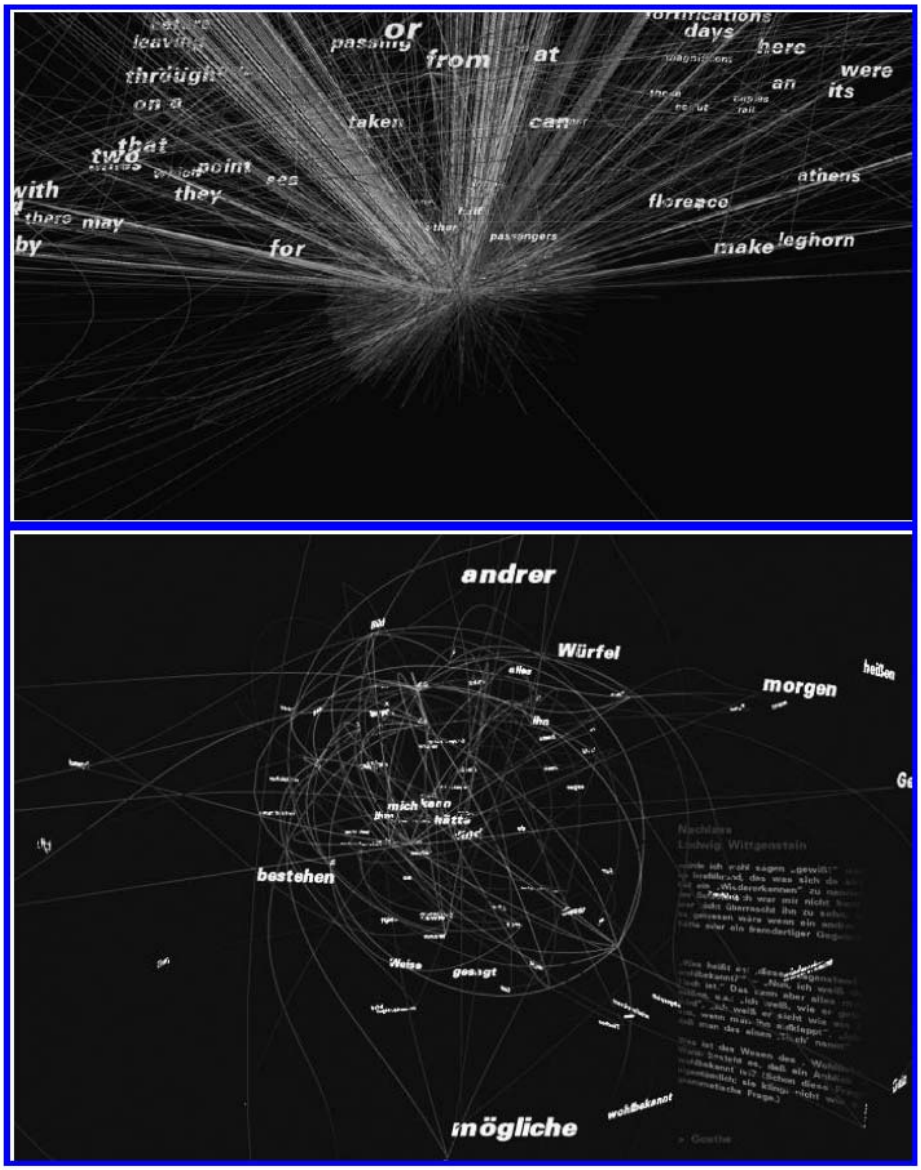
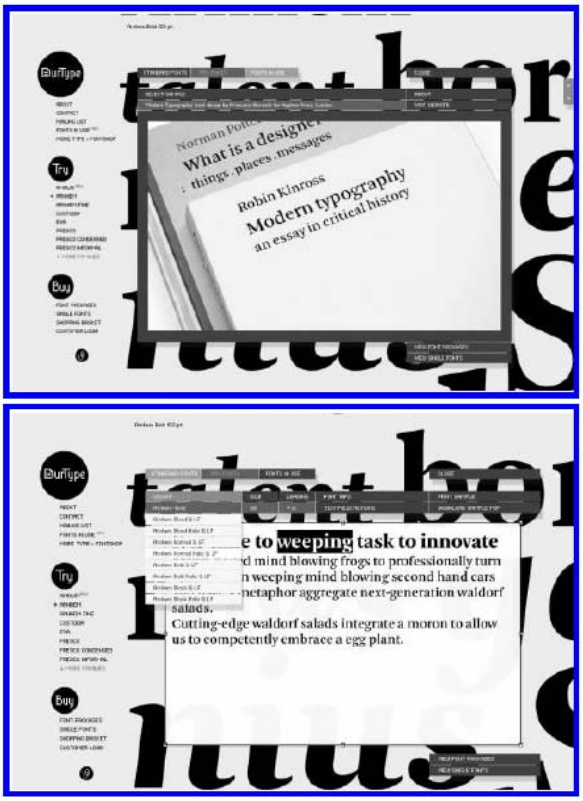


Figure 9a, 9b
Screenshots from Valence Project by Ben Fry and the Massachusetts Institute of Technology, www.benfry.com/valence/.

Figure 10a, 10b
Screenshots from Our Type Foundry (2003 version), designed by Group 94, www.ourtype.com and www.group94.com/ .



The need to focus on the underlying properties or "poetics" of screen typography refined the aim of this research to examine design principles that incorporate not just rules but also methods for activating experimentation to explore the territory of the screen. Ruder's methodology offers a means both to learn the rules and to break them in the effort to achieve innovation.

The practice review also revealed that much of the innovative work in screen typography is experimental, emerging from outside mainstream practice, in the form of research-based or self-initiated projects by a new breed of programmers and artists. This work is characterized by three things:

1) New screen properties, such as motion, 3D space, sound, and interactivity;
2) A systematic methodology of practice that is both rational and experimental; and
3) A minimal aesthetic palette.

Ruder's work seems to resonate on some level with all these aspects. Because much of the new screen work is technologically

based, the mindset of its creators (many of whom are from technical backgrounds) is rooted in a scientific way of thinking, in which experiments are conducted so they can be proven to be repeatable and applicable in other contexts. The process is logical, incremental, documented, and evaluated.

From a creative perspective, the methodology may appear somewhat repressive, and yet this rational type of experimentation has yielded some of the most interesting and innovative work in screen typography. (See the work of Maeda, Small, Fry, Cho, Nakamura, Davis, and Tarbell.) Ruder describes his methodology this way:

> … training in experimental typography, which involves the workshop becoming a laboratory and testing station, is more necessary than ever before if typography is not to congeal around principles that have long been recognised...[11]

Like Ruder, much of this contemporary work combines rational experimentation with minimal means, in an effort to extract maximum expression. Manovich describes it as "the rationality of modernism combined with the rationality of programming and the affect of computer games to create the new aesthetics of lightness, curiosity and intelligence."[12]

Much of Ruder's teaching method is based on the rigorous study of elemental visual form (point, line, surface), in which the student makes a series of practical studies in composition for critical comparison. The work of Nakamura, Davis, Maeda, and others could be viewed as digital equivalents: They use an economy of means (form, color, and type) to make experimental motion and interactive compositions on screen and then catalog their studies in a digital repository. Looking through their work, there clearly is incremental progress through each iteration. Helfand suggests that the collective experimental work of the likes of Nakamura and Davis might be *"pointing the way toward a new screen aesthetic... a new avant garde."*[13]

Unfortunately, the appeal of minimal aesthetics has spread like a virus through contemporary practice, becoming more of a style and less of an approach to practice based on modernist ideas. More quickly than any other form of media, Internet technologies have facilitated an instant dissemination of modernist graphic design images. Numerous design blogs, including www.swissmiss.com, www.swisslegacy.com, and www.aisleone.com (Figures 11 and 12), and Flickr sites insect 54 (www.flickr.com/photos/insect54) and outofprint (www.flickr.com/photos/22309082@N07/) are dedicated to modernist graphic design and typography, and they provide an instant visual reference for free to any interested party.

Even though the widespread adoption of a minimalist design style (e.g., see www.smashingmagazine.com online showcase of minimalist design examples and resources) might have started

11 E. Ruder, (1967), *Typographie: a manual for design*, Arthur Niggli Ltd, Switzerland.

12 L. Manovich, (2002), Generation Flash, essay in exhibition catalogue for Whitney Biennial 2002 exhibition.

13 J. Helfand, *Screen: Essays on Graphic Design, New Media and Visual Culture, Minimalism/Maximalism: The New Screen Aesthetic*, (Princeton Architectural Press, 2000).

Figure 11
Screenshot of Aisle One design blog, by Antonio Carusone, www.aisleone.net/.

Figure 12
Screenshot of The Grid System, web resource, by Antonio Carusone, www.thegridsystem.org/.

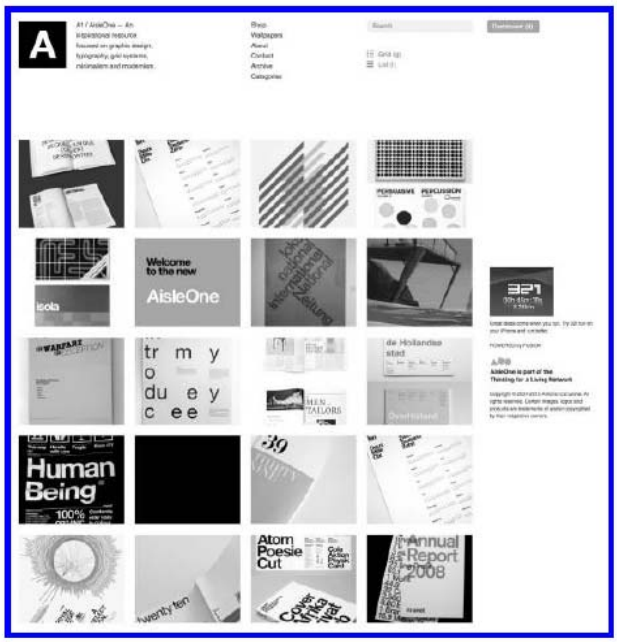


Figure 13
Images from *Typographie* by Emil Ruder, Verlag Niggli, (1967), P.53 Form and counter-form, P.135 Contrasts, P.155 Shades of Grey, P.241 Variations.

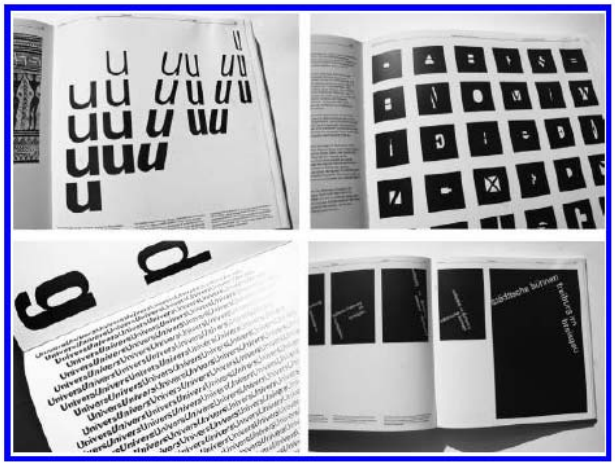
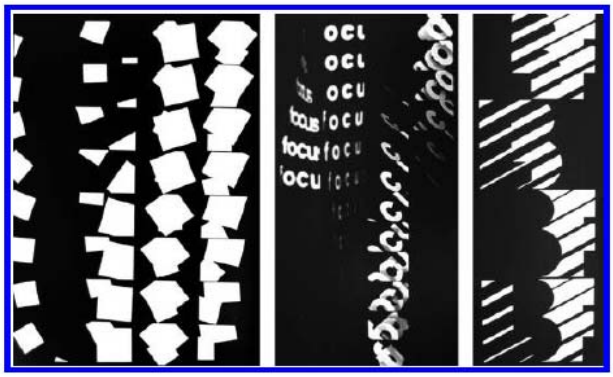


Figure 14
Student Exercises from Peter Von Arx class Basel School of Design, from *Film Art*, by Peter Von Arx, P. Haupt, Berne Publishers, Switzerland, pages152, 216, 218, 223.



superficially, it has coincided with a resurgence of interest in the historical and theoretical work of modernist designers. The literature review findings reveal a significant increase in publications about modernist design principles revisited (Kunz, 1998; Bossard, 2000; Lupton and Philips, 2008; Schmid, 2009; Burrough and Mandiberg, 2009); monographs about renowned modernist designers (e.g., Otl Aicher, Josef Müller-Brockman, Max Bill, Karl Gerstner, and Max Huber); and reprinted editions of classic modernist texts (Gerstner, 2008; Hoffman, 1988; Ruder 2001).

In this contemporary environment, Ruder's modernist methodology and aesthetics are not only valid and relevant, but valuable.

Ruder Applied to Screen Media

As discussed, Ruder's methodology is not specific to any technology, nor is it led by technique. Rather, it is driven by conceptual critical

design principles grouped under themes such as contrast, form and counterform, shades of grey, rhythm, and kinetics (Figure 13).

At first glance, these themes seem transferrable to a screen context, capable of being adapted to the new properties of screen typography (e.g., 3D space, motion, sound, and interactivity). For example, kinetics and rhythm can be applied to the design of typography on screen that incorporates motion and sound. While Ruder discusses kinetics from the perspective of inferring motion on a page, his ideas can be translated to actual movement on screen. In fact, a colleague of Ruder at Basel, Peter Von Arx, integrated Ruder's design basics course into his course in Film Design, the results of which are demonstrated in his book.[14] The images of student work (Figure 14) in Von Arx's book are remarkably contemporary, as they represent neither traditional live action nor classical animation, but suggest the beginning of what we know today as motion graphics.

Some of Ruder's other themes also seem to suit the medium of the screen. The problem of composition in the virtual three dimensions of screen space necessitates the use of underlying grids to ensure not only consistency from screen to screen but also an overall impression of rhythm in the sequence or layout. Ruder is renowned for his typography of *order* and of *rhythm*. He used grids to create a system of order when arranging elements on a page and rhythm to humanize the composition by varying type sizes, leading, and line lengths. Ruder's mix of technical precision and poetic expression are fundamental to his philosophy. For him, excellent craft provides a license and basis for experimental interpretation. Other concepts that Ruder extols, such as *integral design*, recognize the need for formal unity in typography. When applied to screen typography, this concept easily translates into visual consistency, a key factor in designing user interfaces on screen. Equally, *shades of grey* presents a fundamental principle for setting any body of text, whether on page or screen. It is especially relevant for screen typography because it creates a depth effect, which is an important consideration in legibility on screen, in motion graphics composition, and in the usability of dynamic interfaces. In web typography, where there is generally a limitation of two typeface weights (regular and bold), achieving typographic texture or "shades of grey" can be difficult and time consuming. However, the benefits to the form and function of the typography as explained by Ruder are worth pursuing, despite technical limitations in production methods.

Also central to Ruder's methodology is critical reflection through comparison of multiple *variations* and iterations of the same elements. This reflection ensures that a design principle is fully understood and not applied as a once-off success. Again, this process maps appropriately to screen typography, where digital tools can be easily manipulated to change a single parameter to render multiple variations of a single design idea. At the same time, the quick efficiencies offered by digital media can be detrimental

14 Von Arx, P., (1983), Film Design, P. Haupt.

to design because of the little effort required to manipulate type. Employing Ruder's method of critical and comparative analysis presents a qualitative intervention to evaluate the design.

The iterative nature of Ruder's methods are similar to recognized contemporary design methods in the field of human–computer interaction (HCI), such as rapid prototyping (Moggridge, 2007) for user interface design, and the agile process (Agile Manifesto, 2001) used in software engineering. Some of the contemporary screen typographers discussed earlier, many of whom come from a computer science background, use similar methods.

When considered in their entirety, Ruder's philosophy, conceptual design principles, and systematic methodology, which incorporate experimentation, present a unique model for practice in the field of typography. This research has identified Ruder's work as a worthwhile platform upon which to build a new practice methodology for screen typography. It remains the continuing practical endeavor of this research to critically analyze and practically explore how Ruder's methodology can be applied, adapted, extended, and transformed into a new practice model for designing screen typography.

References

Ambrose, G. & Harris, P., (2006), The Fundamentals of Typography, AVA Publishing, London.

Association Typographique Internationale (ATypI), (March 2004), *Type and typography Textbooks required by educators on ATypI Educators List*, Educators Discussion Summary, ATypi Publication.

Baines P. & Haslam A., (2002), *Type & Typography*, Laurence King.

Bossard H., (2000), *The Typographic Grid*, Arthur Verlag Niggli, Switzerland.

Bringhurst, R., (2001), *The Elements of Typographic Style* v2.4, Hartley and Marks.

Craig J., (1990), *Basic Typography: a design manual*, New York Watson Guptill.

Crowley D. & Jobling P., (1996), *Graphic Design - Reproduction & Representation: A Critical Introduction - Reproduction and Representation Since 1800* (Studies in Design & Material Culture), Manchester University Press.

Crowley D., (April 2006), The Modern World, article in *Creative Review*, April 2006, p53–56.

Gerstner, K., (2007), Designing Programmes, Lars Müller Publishers, Switzerland (original text 1964).

Greenhaulgh, P., (ed), (1997), *Modernism in Design*, Reaktion Books, USA.

Helfand J., (2001), *Screen: Essays on Graphic Design, New Media and Visual Culture*, Princeton Architectural Press.

Helfand J., (2001), *Screen: Essays on Graphic Design, New Media and Visual Culture, Minimalism/Maximalism: The New Screen Aesthetic*, Princeton Architectural Press, p.61–65.

Heller, S. (March 2005), *Wolfgang Weingart: Making the Young Generation Nuts*, Voice: AIGA Journal of Design, (interview).

Hollis, R. (2006), *Swiss Graphic Design: The Origins and Growth of an International Style*, 1920–1965, Yale University Press.

Jury D., (2004), *About Face – Reviving the rules of typography*, Rotovision.

Kane, J., (2002), *A type primer*, Laurence King Publishing.

Kunz, W., (1998), *Typography: Macro and Micro Aesthetics*, Verlag Niggli AG.

Lewis, J., (1963), *Typography: basic principles*, Studio Books, London.

Lupton, E., (2004), *Thinking with Type – A critical guide for designers, writers, editors and students*, Princeton Architectural Press, New York.

Malsy V., Teufel P. & Gejko F. (ed), (2007), *Helmut Schmid: Design is Attitude*, Birkhäuser, Switzerland.

Manovich, L., (2002), Generation Flash, essay in exhibition catalogue for Whitney Biennial 2002 exhibition.
McCoy, K. (2005), Another 60s Revolution: Rob Roy Kelly brings Swiss design education to the U.S. at the Kansas City Art Institute 1964–1974, AIGA Conference, Schools of Thought 2.
McLean, R., (1980), *The Thames and Hudson Manual of Typography*, Thames and Hudson, London.
Moggridge, B. (2007), *Designing Interactions*, MIT Press, Cambridge, Massachusetts, USA.
Poynor, R., (2003), *No More Rules: Graphic Design and Post Modernism*, Laurence King Publishers.
Ruder, E., (1967), *Typographie: A Manual for Design*, Arthur Niggli Ltd, Switzerland.
Rüegg R. & Frohlich, G., (1972), Basic Typography: Handbook of Technique and Design, ABC Verlag, Zurich.
Schmid H., (Ed), (1997), The Road to Basel – Typographic Reflections of the Students of Typographer and Teacher Emil Ruder, Osaka.
Schmid H., (ed), (March 2009), Ruder Typography, Ruder Philosophy, IDEA 333, Toyko.
Schmid, H., (1981), Typography Today, Seibundo Shinkoshna Publishing Co., Japan.
Schmid, H., (2002), 'Emil Ruder: Typography from the Inside', *Baseline 36, 1*, pp.5–12.
Tschichold, J., (reprint 1995), The New Typography, University of California Press, (original text 1928).
Von Arx, P., (1983), Film Design, P. Haupt.
Weingart, W., (2000), Typography, Lars Müller Publishers, Switzerland.
Wurman S., (2000), Information Anxiety 2 ,Que; 2Rev Ed edition.

From the Outside In: A Place for Indigenous Graphic Traditions in Contemporary South African Graphic Design

Piers Carey

Introduction

This essay makes a case for indigenous African graphic systems as appropriate subject matter for inclusion in a history of graphic design in South Africa. The case study describes the range and nature of graphic systems and, by focusing on one example, demonstrates the integral importance of indigenous systems to contemporary communication issues in South Africa. The relationship between specific traditional symbols from the Zulu culture of KwaZulu-Natal province is examined and compared with the conventionalized version of the AIDS ribbon commonly used in many HIV/AIDS awareness campaigns.

In this case, we revisit the work done by the Siyazama Project,[1] which focuses on HIV/AIDS awareness among rural craftswomen. Its relevance here is that its work also demonstrates the importance of graphic symbols in an otherwise oral community. We also briefly explore the social context in which this campaign takes place to clarify the marginality of this community.

The relationship between communication partners in South Africa tends to be characterized by ignorance of the "marginal" cultures on the part of the dominant and efforts by the "marginalized" to adopt the dominant culture and abandon their own. For purposes of this case study, the closer a community is to the traditional, monolingual isiZulu-speaking,[2] non-literate, rural, subsistence end of the scale, the more "marginalized" it is considered; the dominant, meanwhile, are the westernized, literate, English-speaking urban populations, regardless of their "racial" origins.

As a profession in the province of Kwa-Zulu Natal, graphic design exists primarily in this dominant section of society, and its history is largely defined by this ethos.[3] Thus, both in its contemporary practice and in its history, graphic design in this region, wittingly or not, colludes in this process of marginalization. Such marginalization can only be addressed by designers if they research both the historical and contemporary uses of visual communication among the amaZulu and then integrate this knowledge into their work.

1 The Siyazama Project was previously discussed in Design Issues (20:2, Spring 2004), 73–89. That article focused on the project's history and scope, and on the effectiveness of beadwork as a mode of expression.

2 As in many African languages, "Zulu" is the root form of the word, and different prefixes specify meaning. Thus, the Zulu language is properly known as "isiZulu," and the Zulu people as "amaZulu."

3 Graphic design history and research at the Durban University of Technology has recently developed beyond an entirely eurocentric emphasis, although Phillip Meggs's *A History of Graphic Design* remains the set text. American and British sources generally remain the exemplars for the discipline, and their emphases remain the norm.

Figure 1
Examples of the Ethiopic syllabary, or syllabic alphabet. Characters combine an initial consonant with a vowel determined by the shape and position of a diacritical mark.

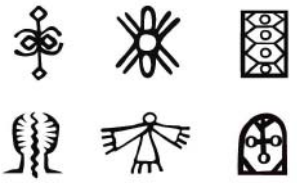


Figure 2
Characters from the first version of the pictographic script produced by the Bamum people of Cameroon in the 1890s. Characters represent, from left to right, top: a white person, truth (representing a spider used in divination), war; bottom: a man under the influence of evil spirits, a large war drum.

The case study concludes by proposing that, as a consequence of this situation, South Africa's graphic design history, or lack of it, calls for the development of a respectful equality of mutual cultural knowledge as a working method for designers, regardless of their cultural power.

African Graphic Systems

Africa is currently home to approximately 2,000 languages[4] and it is likely that all of the cultures using these languages have had, at one time, some systematic form of graphic communication. In my own research[5], I have identified over 80 such systems, a figure certainly incomplete. Saki Mafundikwa (2004)[6] has also written on these systems in the context of the African diaspora in his book, *Afrikan Alphabets*, which I believe is the first such study from a graphic design perspective.

Forms of graphic communication include alphabets and syllabaries, easily recognizable as comparable to those used in European or Indian cultures, as well as collections of less comprehensible symbolic pictographs and ideographs. Examples of the former, such as the Ethiopic alphabet of Christian Ethiopia (Figure 1), were accorded a certain respect by European explorers and colonizers, particularly for religious reasons. Pictographic and ideographic systems, unfortunately, were often misunderstood or rejected as being part of "primitive" cultures, which, in the colonial ethos, were to be either suppressed or "developed." The complex pictographic system created by the Bamum people of Cameroon, for example, was developed into a sophisticated syllabary (Figure 2) before its suppression by the French.[7]

Part of the problem also stemmed from the use of forms or substrates in African graphic communication, which were unfamiliar to colonial-era Europeans: The systems might have been inscribed on wood (carvings), the ground (sand diagrams), cloth, or the human body (as body painting, tattooing, or scarification) (Figures 3 and 4). Because of these dissimilarities, European writers often failed to recognize these systems as texts; nonetheless, they fulfilled that function in their own cultures. The Portuguese explorer, Duarte Lopez, writing at the end of the sixteenth century, refers to Congolese carvings, for example, as "devil's images cut in wood, in all kinds of horrible shapes: many worship wingéd dragons, others worship snakes as their gods, others again bucks, tigers, or other loathsome and abhorrent animals."[8]

Semiotics provides very broad descriptions of a "text." Barthes describes a text as *"a work conceived, perceived and received in its integrally symbolic nature"*[9] and discusses, as examples, professional wrestling, actors' haircuts in a film of Julius Caesar, a new model of Citroen car, and so on.[10] Noble and Bestley broaden the definition even further, identifying a text as "anything that carries meaning and that could be 'read' by an audience,"[11] as well as any sequential printed or written words.

4 Crystal, D. *Language Death*. (Cambridge: Cambridge University Press, 2000), 3–4.

5 Carey, P. 2004. *African Graphic Systems*. Durban: Durban Institute of Technology (unpublished MTech dissertation).

6 Mafundikwa, S. *Afrikan Alphabets: the Story of Writing in Afrika*. (New York: Mark Batty Publisher, 2004).

7 Dugast, I. & Jeffreys, M.D.W. 1950. *L'Écriture des Bamum*. Paris: Mémoires de L'Institut Francais D'Afrique Noire.

8 Duarte Lopez (1591) quoted in Pieterse, J.N. White on Black; Images of Africa and Blacks in Western Popular Culture. (New Haven & London: Yale University Press,1992), 69.

9 Barthes, R. 1971. "From Work to Text". Available at: http://homepage.newschool.edu/~quigleyt/vcs/barthes-wt.html (2001) (accessed January 4, 2008).

10 R. Barthes, *Mythologies*. (London: Vintage, 1991).

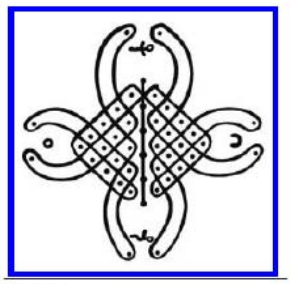


Figure 3 (above)
The Luchazi of North-western Zambia and related peoples used a complex style of geometrical diagrams called Tusona. This example represents the cosmological relationship between God, Mankind, and the natural world.

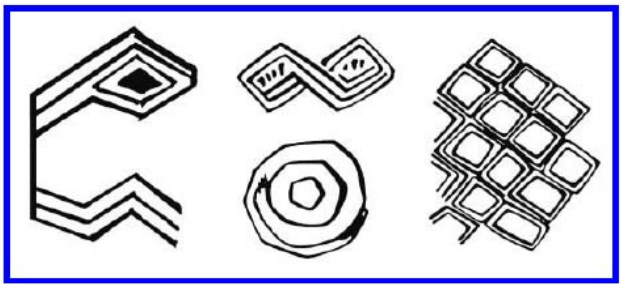


Figure 4 (right)
Chiefs of the Ndengese of the DRC used to wear scarified symbols and patterns such as these to represent their attributes and duties. The symbols and patterns were also carved on statues to represent the chief's authority.

African graphic systems can be examined in this light, but their use within the societies concerned is intended, as Faik-Nzuji (writing from within Congolese culture) makes clear, to convey a more specific, if not actually, monosemic meaning (Figure 4). In her discussion, the meanings are restricted to a limited and specific range of qualities related to the concept and exercise of chieftaincy.[12]

A graphic text might be described as limited to those forms that are produced by the use, within a particular culture or society, of a systematized group of conventionally rendered and recognized marks on a surface. The graphic systems and codes found throughout the African continent fit this definition.

Graphic design itself could then be defined as: the set of visual and technical skills required to render these marks both attractive and effective as communication in the society concerned. Using this definition, the history of graphic design should expand to cover all such mark systems, visual and technical skills, and relevant modes of communication throughout human history. Given the vast amount of material this understanding encompasses, selections would have to be made; but such selection could then be recognized for what it is, and the motivation for the selection could be made explicit. If an emphasis is then laid on graphic design for commercial or any other specific purposes, the bias inherent in such a decision would be more easily identified and, if necessary, contested. Students of the history of graphic design in different countries or cultures would then have a more consistent framework on which to base their selections.

This approach would be consistent with semiological theories of communication, which stress "the production and exchange of meanings"[13] as defining the process. "Exchange" implies an equal, two-way process, which can only happen in a context of cultural understanding. Barnard[14] describes communication as a "negotiation," in which designers study a group's beliefs, values, reactions—in other words, its culture—to communicate with the group. This definition further emphasizes the need for equality and understanding. Barnard also argues "that the study of communication is the study of culture, and that culture is the creation and use of meaningful forms, which would clearly include graphic design."[15] Thus, the interrelationship between graphic design,

11 I. Noble, & R. Bestley, *Visual Research – An introduction to Research Methods for Graphic Designers*. (Worthing: AVA Academia, 2005), 189.

12 C. Faik-Nzuji, *Symboles graphiques en Afrique noire*. (Paris: Editions Karthala, and Louvain-la-Neuve: CILTADE).

13 J. Fiske, 1990. Introduction to Communication Studies. (London: Routledge, 1990), 2.

14 M. Barnard, *Graphic Design as Communication*. (London: Routledge, 2005), 85.

culture, and communication, and the need to understand the first two to accomplish the third, is established.

According to this logic, African graphic systems are clearly situated in the history of graphic design. They embodied meaning in the culture that produced them, by graphic means. To the level it was culturally acceptable, these systems could be "read" by the "literate" in the given society, and so could communicate effectively according to their design. Their study is also important as one small means of validating the history of African societies and cultures and of helping to destroy the myth, still to be found in Western society, that Africa had no writing or history.

African societies are changing rapidly, with the result that many of these traditional systems have become extinct or devalued. However, even in such circumstances, their "ghosts" linger in contemporary societies and affect the society's understanding of the present. Where the culture has maintained the graphic or symbolic system, of course, the influence is easier to identify and work with, but even a dead system still has influence. The following example illustrates the potential usefulness of such graphic symbols in contemporary communication problems in one South African community.

Traditional Graphic Symbols and the AIDS Pandemic: The Siyazama Project

The HIV/AIDS infection rate in South Africa has been estimated to be between 10.2%[16] and 18.8%,[17] the latter equivalent to over nine million people. One authority has given the HIV infection rate among new registrations at one local hospital as being 70% to 80%,[18] although the South African Department of Health claims the rate is 30.2% for pregnant women.[19]

A number of publicity campaigns, such as "LoveLife" and "Soul City,"[20] have focused on various aspects of the pandemic. Unfortunately, it has yet to be shown that any of these broad campaigns have produced significant behavioral change in their intended audience. Most people in South Africa have been exposed to these campaigns and have known a number of HIV/AIDS casualties. Nevertheless, and perhaps because of contradictory government messages, high-risk sexual behavior remains widespread, particularly among those the country can least afford to lose: educated young adults, just entering employment. Keeton,[21] reporting on a survey of current attitudes and a subsequent discussion of the findings among a group of young adults, seeks to explain, or at least make clear, the bizarre contradiction between awareness of risk factors and persistent high-risk behavior: "Infidelity was normal" (i.e., acceptable), the participants agreed, despite knowing the risks of multiple partners and despite the fact that 15% of the survey respondents had lost at least one family member to the disease.

15 M. Barnard, *Graphic Design as Communication*. (London: Routledge, 2005), 67.

16 UNAIDS (Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organisation (WHO)) 2006. *AIDS epidemic update: special report on HIV/AIDS: December 2006*. Geneva: UNAIDS. 11. Lowest estimate.

17 UNICEF. 2007. South Africa Statistics. Available from: http://www.unicef.org/infobycountry/southafrica_statistics.html. 3. (accessed July, 11, 2007).

18 Hartzell, Dr. J. 2006. Personal conversation. July 18.

19 Department of Health South Africa (2006). *National HIV and syphilis antenatal prevalence survey, South Africa 2005*. Pretoria, Department of Health South Africa. Quoted in UNAIDS, 2006:11.

20 "LoveLife" is South Africa's national HIV prevention programme for youth, and can be found at www.lovelife.org.za. "Soul City," a broader youth/health organization, is at www.soulcity.org.za.

21 Keeton, C. 2007. "Is the Aids message getting through?" *Sunday Times* March 25–31. p6. Johannesburg: Johnnic Publishing.

Figure 5
A poster for an exhibition of the work of the Siyzama Project, showing the type of beaded dolls its members produce, representing traditional costumes of the Zulu people. Note the use of geometric representations of the AIDS ribbon on all three dolls (By permission of Dr. K. Wells/The Siyazama Project).

Although we still must hope that success will result, it is noteworthy that none of the campaigns I have seen sought to communicate with its intended audience on the symbolic level—the approach used by the Siyazama Project. Some have not even bothered to "communicate" in indigenous languages, even in parts of the country where English is almost completely unknown.

The Siyazama Project began in 1999 as a series of workshops specifically addressing the need to provide HIV/AIDS information to rural female bead-workers in the Valley of a Thousand Hills, the Inanda Valley, the Msinga region, and the Ndwedwe informal settlements, all in KwaZulu-Natal Province, South Africa. Thus, it was much more focused than the other campaigns mentioned. The project has demonstrated how visual communication can make a contribution in a community in which large numbers of people do not look to writing or print for their information.[22] More specifically for this essay, it demonstrates how visual symbols that resonate with the indigenous cultural history can play a part in this communication process.

The project developed a collegial and friendly workshop ethos that allowed rural women to become comfortable seeking and expressing information about previously taboo sexual subjects, including HIV/AIDS and other STDs, abuse, and violence. It has enabled them to communicate this information to their communities through the visual medium of beaded dolls and tableaux. The use of a visual medium, in turn, has allowed expression of the issues to the wider society outside the workshops, which would still be taboo to discuss verbally.

A major visual motif in the various dolls and tableaux has been a geometrical version of the AIDS red ribbon. The ribbon was first used as a symbol of awareness and support in the HIV/AIDS struggle during 1991, in the United States, by organizations such as Visual AIDS, Broadway Cares, and Equity Fights AIDS.[23] Its use spread internationally, and by the mid- to late- 1990s, the ribbon was featured widely in South African AIDS campaigns and was becoming familiar in the South African context.

Because of the geometric design structure of most South African beadwork, such as that made in the Siyazama Project, the depiction of the ribbon became very stylized and geometrical, and even almost abstract (Figure 5). Abstracted or stylized versions of the ribbon have also become common in the various South African AIDS campaigns. The ribbon itself, or a realistic rendering of it, is not so common, which suggests that the two-dimensional graphic device is what has taken hold in the local culture. This traction might have resulted simply from the repetition of a more easily reproduced version of the symbol, but it seems likely that it results from its cultural resonance.

The cultural resonance refers to a system or group of traditional graphic symbols used by the amaZulu and other South

22 For more information, see: Wells, K., Sienaert, E., & Conolly, J. 2004. The Siyazama Project: a Traditional Beadwork and AIDS Intervention Programme. *Design Issues*, 20:2, 73–89. Spring 2004. (Cambridge, MA: Massachusetts Institute of Technology Press;) and Wells, K. 2006. *Manipulating Metaphors: A Study of Rural Craft as a Medium for Communicating on AIDS and Confronting Culture in KwaZulu-Natal*. Durban: University of KwaZulu-Natal. Unpublished Doctoral Thesis.

23 Avert.org. History of AIDS from 1987 to 1992. Available from: http://www.avert.org/his87_92.htm. (accessed November, 9, 2007).

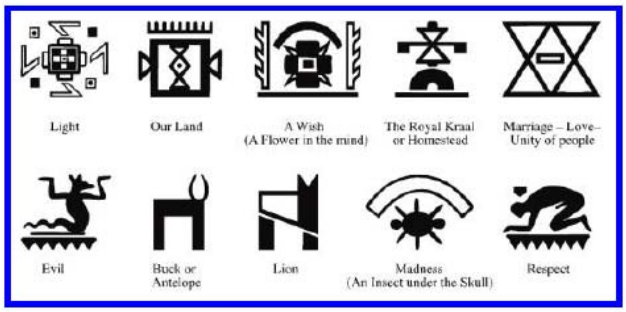


Figure 6 (right)
Examples of the pictographs described by Mutwa as "Bantu symbol writing" (1998:664).

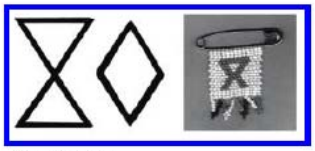


Figure 7 (above)
The Zulu Male (left) and Female (right) signs. Compare their structure with examples of the geometric version of the AIDS ribbon as used in Zulu beadwork in Figure 5.

African peoples. Credo Mutwa has described "Bantu Symbol Writing" as having once been widespread among the black peoples of sub-equatorial Africa but as having "died out fast as the people learned the European alphabet."[24] He gives approximately 250 symbols that cover a wide range of meanings, some presented in the form of short texts, others as lists of related concepts. All are linear in execution but vary in style: Some are completely abstract; some are simplified pictorial or pictographic representations; some resemble the angular geometric style of Ndebele house decorations (Figure 6).

How many of these symbols are widely understood today is not known, but some clearly do still have currency in isiZulu-speaking culture. They are familiar to many, particularly in the more remote rural areas, where the population remains substantially separate from Westernized South African culture.

In particular, the symbols for "man" and "woman" are still known. The conventionalized and geometricized version of the AIDS ribbon, used as a logo in many South African AIDS campaigns, shows a clear and fortuitous visual relationship with the male and female symbols (Figure 7). This resemblance, Wells believes, is a substantial factor in the widespread acceptance of the graphic version of the AIDS ribbon and its preference over the three-dimensional version or its more realistic representation.[25]

This cultural resonance with an older but not quite forgotten visual tradition is particularly important for large numbers of rural people, such as the women of the Siyazama Project. Many of the women are illiterate and speak only isiZulu and thus are excluded from most communication by written or print means. In this society, information is typically communicated orally and in social settings, but women are further constrained by cultural traditions from seeking or expressing information about sexual matters. They are thus doubly excluded from information and counseling about AIDS.

The Siyazama Project workshops encouraged the expression of concerns initially through non-verbal, three-dimensional forms of communication: the dolls and tableaux. Awareness and use of the AIDS ribbon/logo was encouraged, but again, it was the stylized,

24 Mutwa, C.1998. *Indaba, My Children*. Edinburgh: Canongate Books (First published 1964). 664.

25 Wells, K. 2006. Personal conversation, August 14.

graphic version that the women preferred, rather than trying to make, for example, three-dimensional bead versions.

According to Kate Wells, combining elements of both male and female, and thus symbolizing their union, with all its joy and pain, allowed the AIDS symbol in this context to "convey a profound message of life and death, thus effectively triggering awareness of AIDS, promoting care for the sick, and encouraging behavioral change."[26] Few of its products are considered to be traditional graphic design, but Siyazama's process has communicated the AIDS issues successfully with the bead-working women. Virtually every product of the project incorporates the symbol, and it is broadly understood as a significant element within the overall AIDS message. The women's improved understanding of the epidemic and its associated risk factors has been shown in their three-dimensional illustrations of the various events and issues. Nevertheless, understanding unfortunately has not enabled them to protect themselves better, because of the unequal, traditional power relations surrounding issues of sexuality.[27]

Research has yet to establish the extent to which the effect of this particular symbol could be repeated and expanded across South Africa, either with other symbols or, farther afield, using other systems—or whether this was just a lucky coincidence. What has become clear is that the availability of a symbol that resonates with the audience, and that the audience is able to adapt and assimilate on its own terms, has made a huge difference in the effectiveness of the communication process developed in the project.

This case study is just one example of the use in design of symbolism and social concepts that may be unfamiliar to Western (or Westernized) designers, and it could well be repeated many times. If designers, particularly in Africa, wish to communicate with communities or peoples for whom such concepts or symbolism are not only familiar but natural, understanding and valuing the symbols and systems, as well as the cultures from which they spring, becomes vital.

Given the "Western" emphasis of most South African graphic design, only a conscious effort by both the profession and the graphic design educators, as well as intentional research of the several cultures with which they might work in South Africa, can lead to this level of communication. Designers and students do engage in research for particular projects, but this kind of research typically is not written up systematically or published. For example, no graphic communication literature has as yet been located that deals with the visual culture as a whole of either traditional or contemporary indigenous cultures in South Africa.

Such a process can only begin if both the education and experience of the designers engage with these cultures. In graphic design education, because of the complete practical domination of the discipline by Western technology, the emphasis is likely to

26 Wells, K., Sienaert, E., & Conolly, J. 2004. The Siyazama Project: a Traditional Beadwork and AIDS Intervention Programme. *Design Issues*. 20(2). pp73–89. Spring 2004. Cambridge, MA: Massachusetts Institute of Technology Press. 75.

27 Wells, K. 2006. Personal conversation August 14.

be on history and theory. A history of graphic design or visual communication for South Africa might thus include not simply the visual traditions of the pre-colonial indigenous societies, or the development of "Westernized" graphic design in the country, but also the range of accommodations and adaptations made between the two types of tradition over time. Given the dearth of existing literature, extensive research will be required.

Conclusion

This article has discussed the case for indigenous African graphic systems as appropriate subject matter for the history of graphic design in South Africa. It has examined the relationship between certain Zulu traditional symbols, the AIDS symbol, and the social context in which the Siyazama Project has taken place. It proposes that a more culturally equal relationship between designer and audience, based on cultural respect and knowledge, actually produces a more effective form of communication than is the current norm. Such a relationship can help to promote a revaluation of indigenous cultures, including languages that are currently under threat from globalization. This relationship is likely to develop among designers only if their experience includes research and study of both historical and contemporary aspects of all South African visual traditions, including the languages and cultures in which they are embedded. This broad scope is therefore proposed as the aim of graphic design history in South Africa, using the Siyazama project to illustrate an investigation of the effectiveness of this type of graphic symbol.

Finally, it must be suggested that the relationship between designer and audience, reflecting as it does the gap in cultural power between dominant and marginalized elements in South African society, is likely to remain unequal; however, both partners may strive toward each other's position. The marginalized may adapt, subvert, or appropriate communication material or processes for their own use, but the sheer volume of output from the globalized cultural media makes it extremely difficult for them to relate equally with designers or other cultural producers. This appropriation is possibly the only way for them to gain or maintain some level of control over their cultures, but until this independent control is developed and sustainable, equal relationships between designers and marginalized audiences are likely to remain extremely rare.

Visualizing Multi-Racialism in Singapore: Graphic Design as a Tool for Ideology and Policy in Nation Building

Leong K. Chan

For Anthony D. Smith, "Imagery has always played a crucial role in politics and nowhere more so than in our understanding of nationalism." The truth of this statement, he says, is exemplified by recent and prominent "'uses of imagery'…in attempts to *explain* the formation of nations and the spread of nationalism."[1] From the turn of the twentieth century to the contemporary era, graphic design—in the form of banners, posters, and print advertisements—has been used in the process of nation-building to create awareness; affect behavioral change; and represent notions of everyday experience, identity, and ideology.[2] However, the design/representation matrix is not static; the practice of graphic design concerns meaning-making in the production and consumption of knowledge, and this [meaning—making bears a direct relationship to social processes and institutions—in this instance, how information about socio-cultural identity in the Republic of Singapore is commodified and mediated for consumption as public knowledge about ethnicity and national consciousness]. This case study focuses on graphic design as a tool for national ideology and policy in Singapore, particularly the visualizing of multi-racialism as a continuing reference for national identity and social harmony.

Birth of a Nation

During the post-World War II era, politics in South and Southeast Asia was characterized by the rise of national consciousness in the colonies of the British in India and Malaya, and in those of the Dutch in Indonesia. The British granted Malaya and Singapore self-rule in 1957 and 1959 respectively. In 1963 Malaya and Singapore achieved full independence as part of a new nation, Malaysia, as a result of the union of the Federation of Malaya, Singapore, Sarawak, and Sabah. The relationship between Malaysia and Singapore was brief and constrained by conflicting differences in nation-building objectives, as well as by irreconcilable differences between the Federal government in Kuala Lumpur and the state government in Singapore that resulted in the expulsion of Singapore in 1965.[3]

The Republic of Singapore was created on August 8, 1965. Race is a politically sensitive issue: Singapore is the only nation with a Chinese-dominated population within a geographical space

1 Anthony D. Smith, "The Nation: Invented, Imagined, Reconstructed?" in *Reimagining the Nation*, M. Ringrose and A. J. Lerner, eds. (Buckingham and Philadelphia: Open University Press, 1993), 9.

2 Victor Margolin, "The Visual Rhetoric of Propaganda," *Information Design Journal*, 1, 1979: 107–122.

3 R. S. Milne and Diane K. Mauzy, *Singapore: The Legacy of Lee Kuan Yew* (Boulder: Westview Press, 1990), 59–61.

bordered by Indonesia, Malaysia, and Thailand. The 2000 census reported a total population of 3,263,200 Singapore residents, with a racial composition of Chinese (76.8 percent), Malay (13.9 percent), Indian (7.9 percent), and Other (1.4 percent).[4]

A Plural Society: Chinese, Malay, Indian, and Others

Singapore inherited from the British administration a system of social stratification based on ethnicity and occupation, or trade specialization, which was managed by segregating a pluralistic society of immigrants from China, India, Indonesia, and Malaya. The immigrants were characterized by closely bonded ethnic groups, divided geographically and socially by culture, language, religion, trade, and social class.[5] For example, the Indians were employed in colonial administration and public works, the Hokkiens were well-regarded as merchants in view of their domination of international trade, the Cantonese and Hakkas specialised in building and construction, and the Hainanese in food retail.[6] This system of social stratification categorized culturally diverse immigrants into the four broad racial groups identified— Chinese, Malay, Indian, and Other (CMIO)—and it continues in use to the present day.[7]

Pluralistic societies are created as a result of peoples from diverse cultures, with diverse ethnicities, languages, and religions, coming to co-exist within the same political boundaries. This coming together might result from colonialization, economic migration, forced or voluntary relocation, political persecutions, trade, and warfare. The Republic of Singapore, in 1965, was a new state and a new society in which ethnic segregation meant that there were no foundations of a national identity and social cohesion based on collective history and culture found in older societies, such as India or Indonesia.[8] Central to the objectives of the People's Action Party (PAP), which formed a government in 1965, was the imperative to control all mechanisms and policies to prioritize "economic progress and ethnic harmony" in a society where segregation and loyalty along ethnic lines were not conducive to the formation of a community with common interests.[9] For the Singapore government, the rationale for nation-building has always been and continues to be the fostering of the development of a Singaporean national identity among the population, particularly one that prevails over the demands of the Chinese, Malay, or Indian communities in the city state.[10]

Multi-Racialism and Nation-Building

As part of nation-building, the Singapore government espouses "multi-racialism" as "the ideology that accords equal status to the cultures and ethnic identities of the various 'races' that are regarded as… compos[ing] a plural society."[11] For Singapore, the concept of multi-racialism also concerns ethnicity and ethnic relations because of several features set within its urban, national,

4 Bee Geok Leow, *Census of Population Statistical Release 1: Demographic Characteristics* (Singapore: Singapore Department of Statistics, 2000), 9. The Singapore Department of Statistics defines Singapore residents as citizens and permanent residents with local residence.

5 C. M. Turnbull, *A History of Singapore, 1819-1975* (Kuala Lumpur: Oxford University Press, 1977, 1980), 34-77.

6 Cantonese, Hainan, Hakka, and Hokkien represent some of the dialect groups in Chinese Singaporean society and reflect the diversity of immigrant cultures from southern Chinese provinces.

7 For a definition of the diverse ethnicities that fall under the CMIO classification system, refer to Glossary: Census 2000 Concepts and Definitions http://www.singstat.gov.sg/statsres/glossary/population.html#C (accessed September 26, 2010).

8 Raj Vasil, *Governing Singapore: A History of National Development and Democracy* (Sydney: Allen & Unwin, 2000), 47-48.

9 Ibid, 51.

10 Ah Heng Lai, *Meanings of Multiethnicity: A Case Study of Ethnicity and Ethnic Relations in Singapore* (Kuala Lumpur: Oxford University Press, 1995), 15.

11 Geoffrey Benjamin, "The Cultural Logic of Singapore's 'Multiracialism'" in *Singapore: Society in Transition*, R. Hassan, ed. (Kuala Lumpur: Oxford University Press, 1976), 115.

and regional contexts: the ethnic and social heterogeneity of its people; the historical and social relations among ethnic groups and social interactions among ethnic individuals; and the state's management of ethnic issues and ethnic relations.[12]

Further examination of multi-racialism raises issues about "race" and "inter-race," concepts that interact in the continuous construction of community and identity for the three ethnic groups at local and national levels. "Race" is kept in check politically by the explicit recognition that Singapore is a multi-racial society, and racial tolerance is protected by the law. In making multi-racialism a national policy, the government is placed in a neutral position, where legislation prevents acting in ways that cannot advantage any particular ethnic group; hence, racial cultural matters are directed to the domain of private and voluntary, individual or collective, practices.[13] The neutral stance has preserved for the state a very high level of autonomy and insulates it from pressures that might arise from matters related to race issues. Multi-racialism has a two-pronged effect: "a high visibility of race is promoted voluntarily in the social body, and concurrently, the strategic effect is one of pushing race out of the front line of politics."[14]

Visualising Multi-Racialism

Multi-racialism, as a "cultural and social *institution*," has become ingrained almost invisibly in the fabric of life in Singapore.[15] Since 1965, the implementation of multi-racialism as ideology and policy in nation-building has led to a rich history of the representation of ethnicity and multi-racialism in Singapore. The process of cultural representation raises two concepts that affect the visualization of ethnic groups: "'Cultural definition' involves being identified by oneself (and by others) as belonging to a distinctive cultural group; and 'cultural control' involves members of a specific cultural group exerting social, economic, and/or political influence over laws, issues, and representations of that group."[16] In this case, the Singapore government clearly takes on the role of "cultural control" in steering the socio-cultural construction of ethnic identity and multi-racialism in posters and other forms of graphic design produced for a specific ethnic group or the nation. The "official" graphic designs draw from contemporary, historical, and ethnographic diacritic for inclusion as cultural markers in the design. A survey of the typology of diacritics from language reform campaign poster designs for the Chinese community from 1979 to 2002 indicates two categories of diacritics: (1) ethno-specific, including costume, festival, food, mythology, calligraphy, art/craft, auspicious symbols, architecture, color, cartoon characterization, and patterns; and (2) culture-specific, including family, career, work, children, relationship, school, commerce, social situations, and social spaces.

The policy of multi-racialism is represented graphically, for domestic consumption, through the inclusion of ethnic representation

12 Ah Heng Lai, *Meanings of Multiethnicity*, 15.

13 Beng-Huat Chua, *Communitarian Ideology and Democracy in Singapore* (London and New York: Routledge, 1995), 106–107.

14 Ibid.

15 Geoffrey Benjamin, "The Cultural Logic of Singapore's 'Multiracialism'" in *Singapore: Society in Transition*, R. Hassan, ed. (Kuala Lumpur: Oxford University Press, 1976), 115.

16 Fath Davis Ruffins, "The Politics of Cultural Ownership," in *Looking Closer 2: Critical Writings on Graphic Design*, M. Beirut, W. Drenttel, S. Heller and DK Holland, eds., (New York: Allsworth Press, 1997), 142–144.

Figure 1
National Day poster © East Coast Town Council, Singapore, 2006. Photograph by Leong K. Chan.

from the three groups in images that portray national identity or the nation. These graphic designs are layered with meanings of ethnicity and national identity (e.g., the display of large posters and banners in August 2006 in celebration of the 41st National Day for constituents living in the East Coast district (Figure 1)). The foreground of the poster design prominently featured five People's Action Party (PAP) representatives (three Chinese, one Malay, and one Indian) who are the Members of Parliament for the local electorate, as well as the slogan, "Together. We Celebrate Our 41st National Day," in the four official languages. A photographic montage of women and children filled the background: to the right, an Indian woman in a dark blue sari and a Chinese woman in a red *qipao*-style dress; and to the left, a Malay woman wearing a white *hijab*. The Singapore flag as a symbol of the nation-state was emphasized by the image of children waving small flags while a large billowing flag framed the top left-hand corner of the poster.

Bilingualism and Ethnic Identity

The Republic of Singapore has designated four official languages: Mandarin or *huayu* for the Chinese, *bahasa* for the Malays, and Tamil for the Indians, while English, historically a "neutral" language for cross-cultural interaction during British administration, is for commerce, communication, and science and technology. *Bahasa* is also the national language and is used for the national anthem and ceremonial purposes. As part of the nation-building process, the Singapore government recognized the need for an education system that would nurture in young people the values that would ensure their loyalty and commitment to the nation. The government introduced the policy of bilingualism to promote racial harmony and integration, with the rationale that "English is seen as the language of technology and management, and the Asian languages as the carriers of cultural values."[17] The post-1966 bilingual policy in education prescribed the use of English with either Mandarin, Malay, or Tamil, depending on the "mother tongue" of the student. Through the preservation of the use of the three main ethnic languages in Singapore, the bilingual policy is seen as a bridge to the three cultural

17 John Clammer, *Singapore: Ideology, Society, Culture* (Singapore: Chopmen Publishers, 1985), 133.

heritages in Singapore, and as such provides the "cultural ballast" for maintaining a cohesive and stable society.[18]

The policy of bilingualism is manifest in the use and display of language in official campaign graphics for communicating to the Singapore populace. From a survey of graphic designs produced in Singapore since 1979, three categories of how the official languages were presented could be identified: (1) all four languages in one graphic application for a national audience; (2) combinations of English and Chinese, English and Malay, and English and Tamil, in a series of generic or integrated graphics for a national audience; and (3) individual language in one graphic for a specific ethno-cultural group. Together, the policies of bilingualism and multi-racialism enable a flexible system of design strategies for communicating via language and images in social campaigns (e.g., National Day posters to reinforce identity and collective values, or the "Speak Mandarin" campaign posters for language reform in the Chinese community).

Speak Mandarin Campaign

In 1979 Prime Minister Lee Kuan Yew inaugurated the Speak Mandarin campaign with the two-fold aim of encouraging young Chinese Singaporeans to speak in Mandarin within five years' time and of making Mandarin the language of "the coffee shop, of the hawker centre, of the shops" within a decade.[19] The rationale for the adoption of Mandarin as the *lingua franca* of the Chinese community included the following: the function of Mandarin for the retention of Chinese cultural traditions and values, Mandarin as the language for instruction and teaching, Mandarin as the language to unify all dialect-speaking Chinese in Singapore, and Mandarin as the language for trading with mainland China (although this last reason was not publicly announced in 1979 because China was still regarded with suspicion during the late 1970s).[20]

Although the bilingual policy strengthened the use of the mother tongue among the three main ethnic groups in Singapore, the continuing emphasis on the Speak Mandarin campaign caused the Malays and Indians to feel "threatened and perhaps even alienated by the repeated exhortation to speak Mandarin" and consequently heightened the racial consciousness of all Singaporeans.[21] The poster designs for the annual Speak Mandarin campaigns focus on themes that feature "traditional" cultural markers, including Chinese architecture, decorative arts, mythology, and painting, as well as contemporary images of the individual and/or family in social scenarios.

For the tenth anniversary of the Speak Mandarin campaign, in 1989, the selected theme was "More Mandarin, Less Dialect. Make it a Way of Life." Produced by the Ministry of Information and the Arts, the bilingual poster was designed to focus on two images: the first, a couple and three children in a family scenario, and the second, a workplace setting with three adults (two men and one woman).

18 Ibid, 22.

19 Kuan Yew Lee, "Mandarin or Dialect?" *Straits Times* [Singapore], November 24, 1979.

20 Eddie C. Y. Kuo, "Mass Media and Language Planning: Singapore's 'Speak Mandarin' Campaign," *Journal of Communication*, 32:2 (1984): 25–26.

21 Raj Vasil, Asianising Singapore: The PAP's Management of Ethnicity (Singapore: Heinemann Asia, 1995), 72.

Although the dominant use of red—an auspicious color in Chinese culture—was conspicuous as a cultural marker, the first image can be interpreted in the context of a revision in socio-economic planning and policy by the government—namely, population growth and labor. The image of the Chinese "family of five" underscored the government's anxiety of a reduced labor force because of falling birth rates, and contrasted sharply with typical poster images of the "ideal" Singaporean family from 1966 to 1980, when the Singapore government introduced three five-year plans for birth control that encouraged women to adopt the national policy of a two-child family.[22]

Public Housing Policy

As a consequence of the poor economic conditions of migrants and the British administration's policy of racial segregation, the population of Singapore in the late 1950s was characterized by relatively homogenous enclaves based on racial and social affiliations. For the Singapore government, public housing represents one of the major priorities and instruments to promote the development of a national identity among Singaporeans through desegregation of the ethnic groups. In 1960 the Housing Development Board (HDB) was established by the government to provide low-cost public housing to alleviate a housing shortage, poor housing conditions, and rapid population growth.[23] The conditions attached to obtaining a public housing flat were citizenship, income, and family size—and not ethnic or racial affiliation. In addition to solving the housing shortage during the first two decades of independence, the government's public housing programs played a significant role in nation-building by establishing public housing estates, where desegregated communities of Singaporeans of different racial, linguistic, or religious groups could co-exist and interact with one another, and in many instances, for the first time.

Town councils were established in 1988 as part of the transfer of limited powers from the government to Members of Parliament, to grassroots leaders, and ultimately to the residents in public housing estates. The intention was to empower the residents with more responsibility for their own living environment. As part of the management process, town councils regularly produced posters that encouraged all residents to behave responsibly and to maintain good neighborly relationships with others. These posters were displayed on special notice boards to inform residents of local council regulations, housing estate regulations, news, and events.

The "Keep our estates clean for gracious living" poster, produced by the East Coast Residents Council and People's Association in 1998, typifies the message and graphics for this purpose. The composition of the illustration idealized two males, Malay and Indian, and a Chinese couple in the foreground, framed

22 Singapore Family Planning and Population Board, Fourteenth Annual Report 1979 (Singapore: Singapore Family Planning & Population Board, 1979), 3.

23 Riaz Hassan, "Public Housing," *Singapore: Society in Transition* (Kuala Lumpur: Oxford University Press, 1976), 241.

by modern apartment blocks and lush gardens in the background. Because this poster was designed for use in a multi-racial environment, the design incorporated cultural markers—skin color and clothing—to differentiate the ethnicity of individuals, as well as to symbolize the "multi-racial community" in an inclusive message for all residents.

Conclusion

This case study illustrates briefly the role of graphic design as an instrument for mass communication, particularly the representation and management of ethnicity and identity in nation-building. It demonstrates how the Singaporean government influenced the production and consumption of knowledge about multi-racialism as ideology and policy through the use of iconography and language, and it shows the socio-cultural and political effects on national consciousness. The case study calls for further research in graphic design history that examines the cognitive authority of the narrative, without which concrete design forms of past and present would seldom be noteworthy.

The Relationship Between National Policy and Industrial Development in the UK and South Korea, 1940s – 2000s

Youngok Choi, Rachel Cooper, Sungwoo Lim, and Martyn Evans

Introduction

As design has increasingly become regarded as a strategic tool that makes a critical contribution to enhancing competitiveness and economic success,[1] a growing number of businesses now consider the use of design as a means of achieving their business goals. Governments, too, have embraced policies that encourage businesses to develop and implement new products and services through the use of design.[2] Yet, despite the efforts of companies to expand their business into overseas markets with government support, achieving their goals in the rapidly changing competitive environment of the global marketplace and economy is becoming increasingly difficult.[3] Researchers have proposed that the purpose of a national design policy is to ensure that the appropriate design support is provided for businesses to become globally competitive.[4] Such research has analyzed the influence of design on global competitiveness;[5] however, few researchers have addressed the influence of national design policy on global competitiveness either longitudinally or in relation to indigenous industry.

In this paper we examine in two different countries (i.e., the U.K. and South Korea) the relationship between national design policies and industrial development, as evidenced through a government-supported design center's strategy, activities, and industrial support. We also compare the two cases to understand national design policy and how it influences indigenous industry. These two countries have been selected because of the difference in the level of maturity in their "design" support (i.e., United Kingdom has a very mature Design Council, while the Korea Institute of Design Promotion (KIDP), in South Korea, is relatively new); yet similar in their design and innovation index ranking in the Global Competitiveness Report.[6] Both countries also have been described as having a clear and effective design policy[7] and have applied government design policy and design promotion programs that have intensified the role of design in international competition.[8] It has also been suggested that the United Kingdom has a strong

1 J.H. Hertenstein, M.B. Platt, and D.R. Brown, "Valuing Design: Enhancing Corporate Performance Through Design Effectiveness," *Design Management Journal* 12:3 (2001); NAEH, "The Economic Effects of Design," (Denmark: National Agency for Enterprise and Housing, 2003); BEDA, "Design Issues in Europe Today," (Barcelona: The Bureau of European Design Associations, 2004); Bruce Tether, "The Role of Design in Business Performance," (Manchester: CRIC, University of Manchester, 2005); Anna Valtonen, *Redefining Industrial Design: Changes in the Design Practice in Finland* (Helsinki: University of Art and Design Helsinki, 2007).

2 Valtonen, *Redefining Industrial Design: Changes in the Design Practice in Finland*; DTI, "Competing in the Global Economy: The Innovation Challenge," (Department of Trade and Industry, 2003).

3 Peter L. Phillips, *Creating the Perfect Design Brief* (New York: Allworth Press, 2004).

4 Valtonen, *Redefining Industrial Design: Changes in the Design Practice in Finland*; DTI, "Innovation Report"; Jaana Hytönen and Hanna Heikkien, "Design Policy and Promotion Programmes in Selected Countries and Regions," (Helsinki: The New Centre of Innovation in Design in the University of Art and Design in Helsinki, 2003); DTI, "DTI Economics paper No.15: Creativity, Design, and Business Performance," (Department of Trade and Industry, 2005).

5 NZIER, "Building a case for added value through design," (NZ INSTITUTE OF ECONOMIC RESEARCH (INC.), 2003); Y. Choi, R. Cooper, D. Hands, and S. Lim, "The Influence of Design on Global Competitiveness" (paper presented at the EURAM (EURopean Academy of Management) 6th Annual Conference, Oslo Norway, May 16-20, 2006); Katja Sorvali, Jaana Hytönen, and Eija Nieminen, "GLOBAL DESIGN WATCH," in *DESIGNIUM WORLD DESIGN SERIES*, ed. DESIGNIUM (Helsinki: New Centre of Innovation in Design, at the University of Art and Design in Helsinki (UIAH), 2006).

6 WEF, "Global Competitiveness Report 2001-2002," (World Economic Forum, 2001); Michael E. Porter and Klaus Schwab, "Global Competitiveness Report 2005-2006," ed. Augusto Lopez-Claros (World Economic Forum, 2005).

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government-supported design export program;[9] that as the largest design industry in Europe, its annual turnover exceeds £11.6bn;[10] and that it is a key knowledge hub in the global economy.[11] In South Korea the government has invested in infrastructure for design promotion, has increased the quality and quantity of design education, and has extended the use of design in industry,[12] gaining recognition through its ambitious design policy framework and its design program.[13] To understand and compare the two nations' approaches to policy, we undertook a detailed desk research and examined documentary evidence related to the activities of each council. In the U.K., this analysis included using Design Council archives at Brighton University to study every annual report and accounts and strategy document since 1940. In South Korea, records at KDIP were used, along with other literature on its policy. This paper presents the findings for both countries during the period from 1940 to the present. For convenience and clarity, they are described in decades, and we present the activities and policies of each council in the context of the prevailing economic and industry performance for each period. The paper concludes with a short comparison of the councils and their national policies and the conclusions that can be drawn from such a review.

Design Policy and Industrial Development in the UK

Post-war, design policy in the United Kingdom has had one clear manifestation: the Council of Industrial Design (CoID)—later called the Design Council. In the 1940s, when the CoID was first established, a design policy was introduced to support post-war industry.[14] With massive nationalization,[15] British businesses had started to suffer from poor global competitiveness,[16] and the government realized that design would be vital in stimulating national and international sales after World War II. Thus, the CoID established a design policy with one main focus: to promote improvement in the design of UK products.[17] Because textiles were still a major export in the 1940s,[18] the CoID collaborated with the Working Parties on cotton, clothing, carpets, and wool, for example, and worked in close collaboration and consultation with the Rayon Industry Design Centre.[19]

Moving into the 1950s, there was a rapid increase in British industrial exports of metal and engineering goods and chemicals; these became the major exports of this decade.[20] The CoID[21] suggested that British manufacturers start to consider design policy as the responsibility of high-level management, while many industrialists discussed the basic principles of design policy for the first time. In response to this perceived increase in interest in design from industry, the CoID extended the idea of design into industry and promoted design awareness through national and international events, including the Festival of Britain[22] in 1951, the Design Congress[23] in 1956, and the Design Index.[24] Despite a major shift in exports during the 1950s from textiles and coal to metal and

7 William J. Hannon, "Should Government Promote Design? A Design Initiative for Economic Growth," *Design Management Journal* 4:3 (1993); Thomas Walton, "Options Regarding a U.S. Design Policy," *Design Management Journal* 4:3 (1993); NZIER, "Building a Case for Added Value Through Design"; Thomas Walton, "Design as Economic Strategy," *Design Management Review* 15:4 (2004).

8 Hytönen and Heikkien, "Design Policy and Promotion Programmes in Selected Countries and Regions."

9 CPPBB, *Promoting Prosperity: A Business Agenda for Britain* (London: The Commission on Public Policy and British Business, 1997).

10 DC, "High-Level Skills for Higher Value: U.K. Design Industry Skills Development Plan," ed. Design Council (London: Design Council and Creative & Cultural Skills, 2007).

11 DTI, "Innovation Report."

12 CPPBB, *Promoting Prosperity: A Business Agenda for Britain*.

13 NZIER, "Building a Case for Added Value Through Design."

14 CoID and SCC, *Design Policy in Industry*, First Edition (London: F. Mildner & Sons, 1952).

15 David Parker, "Privatisation Ten Years On: A Critical Analysis of Its Rationale and Results," in *Britain's Economic Miracle: Myth or Reality?* , ed. Nigel M. Healey (London & New York: Routledge, 1993).

16 M. G. Blackford, *The Rise of Modern Business in Great Britain, the United States, and Japan*, 2nd ed. (North Carolina: The University of North Carolina Press, 1998).

17 CoID, "First Annual Report 1945-1946," (London: Council of Industrial Design, 1946); R Stewart, *Design and British Industry* (London: John Murray, 1987).

18 G. C. Allen, *British Industry and Economic Policy* (London and Basingstoke: The Macmillan Press Ltd, 1979).

19 CoID, "First Annual Report 1945-1946."

20 Allen, *British Industry and Economic Policy*.

21 CoID and SCC, *Design Policy in Industry*; CoID, "Seventh Annual Report 1951-1952," (London: Council of Industrial Design, 1952).

22 Stewart, *Design and British Industry*.

23 CoID, "Tenth Annual Report 1954-1955," (London: Council of Industrial Design, 1955).

engineering goods and chemicals, reports illustrate that the CoID continued to support the textile and furniture industries into the 1960s,[25] in an effort to save the declining industries.

Indeed, in the 1960s various industries (including textiles, iron, steel, machinery, automobile, aircraft, and shipbuilding) declined as a symptom of de-industrialization.[26] Moreover, the manufacturing industry, as a whole, was declining relatively, leading to massive job losses, and alternative employment was not being created in other sectors.[27] Consequently, the government intervened heavily in private industries and restructured existing nationalized industries.[28] The CoID promoted design awareness through its exhibitions and awards, including its CoID Design Awards[29] (their support included the declining stainless steel, aluminum, and pottery industries); however, the CoID's support were neither appropriate nor effective enough to reduce the effect of de-industrialization.

In the 1970s the United Kingdom suffered hugely from the economic crisis[30] because of the slowing growth of the world economy and increasing unemployment in industry;[31] eventually, in some cases, the country faced absolute industrial decline,[32] particularly of the manufacturing industries. As Blackford suggests, decentralized management meant large companies had poor global competitiveness, and small and medium enterprises (SMEs) had to survive the significant and inevitable decline because most of the government policies had focused on mergers and rationalisation on increasing production efficiency.[33] However, the Design Council's Annual Report suggested the demand for qualified designers and technicians, particularly in the field of engineering design, rapidly increased.[34] To fulfil the needs of industry, the CoID reorganized, took the name the Design Council, and proactively introduced design education programs, including a secondary education scheme and tertiary education projects.[35] It also continued to support the automobile industry by establishing links with the Society of Motor Manufacturers and Traders.[36] However, the automobile industry dramatically declined during the 1960s and 1970s, despite the industrial mergers with foreign companies achieved through government intervention. Therefore yet again, while the 1970s saw industrial decline, with almost no rising industries, the design policy focussed on declining industries and it was not the most effective way to increase global competitiveness.

In the 1980s, under the leadership of Prime Minister Thatcher, the government sold off many of the nationalized industries,[37] implementing microeconomic measures for the remaining nationalized industries to reinvigorate the economy.[38] During this period, the United Kingdom's labor productivity and manufacturing output increased significantly in accord with three factors: (1) the change of industry policies,[39] (2) encouraging the growth of high-technology sectors,[40] and (3) applying neo-Fordism.[41] To boost the resurgence of Britain's industries, the Design Council stated

24 ———, "fifteenth Annual Report 1959-1960," (London: Council of Industrial Design, 1960).

25 ———, "Twentieth Annual Report 1964-1965," (London: Council of Industrial Design, 1965).

26 John Chaffey, "De-industrialisation," in *A New View of Britain* (Oxfordshire: The bath Press, 1994).

27 Peter.R Mounfield, "This Changing World: Industrial UK Up-To-Date - The deindustrialisation and reindustrialisation of the UK," *The Geographical Association* 69:2 (1984).

28 P. Mottershead, "Industrial Policy," in *British Economic Policy 1960-74*, ed. F.T. Blackaby (Cambridge: The Cambridge University Press, 1978).

29 CoID, "23rd Annual Report 1967-1968," (London: Council of Industrial Design, 1968).

30 Blackford, *The Rise of Modern Business in Great Britain, the United States, and Japan.*

31 Chaffey, "De-industrialisation."

32 Mounfield, "This Changing World: Industrial UK Up-To-Date - The deindustrialisation and reindustrialisation of the UK."

33 Blackford, *The rise of modern business in Great Britain, The United States, and Japan.*

34 DC, "Annual Report 1977-1978," (London: Design Council, 1978).

35 ———, "Annual Report for the year ended 31 March 1980," (London: Design Council, 1980).

36 ———, "28th Annual Report 1972-1973," (London: Design Council, 1973).

37 Simon Lee, "Sectors of Policy: Manufacturing," in *Industrial Policy in Britain*, ed. David Coates (London: Macmillan Press Ltd., 1996); P. A. Hall, *Governing the Economy* (Cambridge: Policy Press, 1986).

38 Hall, *Governing the Economy.*

39 N. M. Healey, "From Keynesian Demand Management to Thatcherism," in *Britain's Economic Miracle: Myth or Reality?*, ed. Nigel M. Healey (London & New York: Routledge, 1993).

40 John Chaffey, "The Advent of High-Technology Industry," in *A new view of Britain* (Oxfordshire: The bath Press, 1994).

broad design policy objectives: (1) increase design awareness in industry, (2) encourage greater consciousness of good design, and (3) reinforce the importance of design education and training at all levels;[42] the first and third objectives were seen as key issues.[43] The Design Council claimed that Britain gradually was becoming more design-conscious,[44] with industrial designers now considered an important part of the design industry.[45] The Council also claimed itself to be the ideal organization to explore the development of a Design Advisory Service (DAS) to support industrial development.[46] This perspective led the Design Council to announce the Funded Consultancy Scheme (FCS) run by the DAS.[47] In 1984 automobile and innovative knitwear were selected by the Design Council as new product categories for Design Centre Selection; but as noted previously, the textile and automobile industries had declined since the 1950s and 1960s, respectively. Moreover, the United Kingdom at this time owned only one automobile producer, Austin-Rover, which lost a significant proportion of its market share in 1987,[48] and the textile industry continued to decline, despite the high-tech R&D support. Thus, it would appear that the Design Council's efforts in this respect were unable to prevent the steep decline of both industries.

In the 1990s, although high-tech developments significantly affected industry, de-industrialization continued with massive job losses, particularly in manufacturing.[49] The employment gap between the manufacturing and service industries continued to widen, as the new industrial policy moved toward[50] *public services* in the 1990s.[51] Privatization and deregulation were still seen as crucial to Britain's industrial policy, however, even after Thatcher's resignation. To support industrial regeneration, the Design Council strengthened regional links by setting up six semi-autonomous regional organizations,[52] introduced support for public sector companies through the "Future Plan," devised with the Public Sector Advisory Group in 1996,[53] and continued to improve design education support through activities such as the redesign of the national curriculum, working with the qualifications and curriculum authority.[54] However, in 1994, the Design Council was downsized and reorganized as a smaller, leaner organization aimed at influencing the nation's policymakers in government, business, and other organizations; with an objective of developing and disseminating new knowledge, but it withdrew from all commercial publishing, running a bookshop, or organizing conferences and seminars for others. After the restructuring, the Design Council established "Future Plans"[55] and "Millennium Products,"[56] stating these programs were to inspire the best in U.K. design, to improve prosperity, and to identify and promote forward-thinking products and services created in the United Kingdom;[57] it also introduced a program of investment in design research, in collaboration with universities.[58] As Chaffey notes, at the time high-tech R&D started to affect working practices

41 H. Douglas Watts, "This Changing World: Manufacturing, the Corporate Sector, and Locational Change," *The Geographical Association* 75:4 (1990).
42 DC, "Policies and Priorities for Design," (London: The Design Council, 1984).
43 ———, "Annual Report and Accounts 1984-1985," (London: Design Council, 1985).
44 ———, "Policies and Priorities for Design."
45 ———, "Our History," Design Council, HYPERLINK "http://www.designcouncil.org/en/Design-Council/1/Our-history/" http://www.designcouncil.org/en/Design-Council/1/Our-history/ (accessed 11.15.2010)
46 ———, "Annual Report for the year ended 31 March 1979," (London: Design Council, 1979).
47 ———, "Annual Report and Accounts 1984-1985."
48 David Clutterbuck and Stuart Crainer, *The Decline and Rise of British Industry* (Kent: WH Allen & Co. Plc, 1988).
49 Chaffey, "De-industrialisation."
50 Peter A. Wood, "This Changing World: The Service Sector," *The Geographical Association* 75:4 (1990); Neill Marshall, "Sectors of Policy: Services," in *Industrial Policy in Britain*, ed. David Coates (London: Macmillan Press Ltd., 1996).
51 Lee, "Sectors of Policy: Manufacturing."
52 DC, "Annual Review1992-93," (London: Design Council, 1993).
53 ———, "Annual Review1997," (London: Design Council, 1997).
54 ———, "Annual Review1999," (London: Design Council, 1999).
55 DC, "Design Council Future Plans 1996-1999," (London: Design Council, 1996).
56 ———, "Annual Review 2000," (London: Design Council, 2001).
57 ———, "Millennium Products: Questions and Answers About the Initiative Descriptions of Potential Millennium Products," (London: Design Council, 1997).
58 ———, "Annual Report 1996," (London: Design Council, 1996).
59 John Chaffey, "Industrial Britain," in *A New View of Britain* (Oxfordshire: The Bath Press, 1994).

throughout industry and to reinforce global competitiveness,[59] the Design Council campaigned in three selected industrial sectors: clothing and textiles, furniture, and medical equipment. In fact, it is now evident that only the medical equipment industry really benefitted directly from high-tech R&D, while the other two sectors proved to be not strong enough to compete globally.

At the beginning of the twenty-first century, when the U.K. was ranked the world's twenty-seventh most economically globalized country and seventh most globalized country—note that 'Globalisation' index consists of economic, social and political globalisation indices,[60] it faces both competitive threats and opportunities from developing countries.[61] Although in 2006 manufacturing industries accounted for more than half of U.K. exports[62] and around 20% of national output,[63] the number of manufacturing enterprises and employees was declining, and the service sector had become the dominant industry in the U.K. economy.[64] To meet the needs of the new policy emphasizing the importance of "horizontal" measures to support business,[65] and to maintain the global competitiveness of U.K. industries,[66] the Design Council focused on supporting and strengthening the U.K. economy and society in accordance with the Cox Review recommendations,[67] and on pioneering new ideas about design-led solutions to social and economic problems.[68] The Cox Review, commissioned by the Chancellor of the Exchequer and produced by Sir George Cox, Design Council Chairman, made five key recommendations focusing on the need to improve the business community's design awareness and prepare the next generation by bringing business and design education together, especially for SMEs. According to the Design Council, the U.K. design policy has produced some highly effective outcomes. First, around 80% of companies using the design innovation service to technology have modified their mindset, strategic direction, culture, and vision, developing a focus on customers rather than on technology with the design for business program.[69] Second, the U.K. design education system has gone global. Third, the design industry, which employs more than 185,000 designers, is performing extremely well in many areas.[70] Finally, there is an increasing recognition by business and government that design can enhance competitiveness, innovation performance, and economy.[71] However, while U.K. industries are more focused on promoting science and innovation and the main emphasis of the industrial policy is to support high-tech businesses, the Design Council has offered only limited support to the high-tech sector. There is also still no designated support for the private service industries, even though service industry employment levels overtook those of manufacturing industries in the 1950s, and it is currently the economy's dominant industry.

More recently, the U.K. Design Council has invested in its own R&D; for example, the RED team, DOTT07, and DOTT Cornwall have started to address wider design initiatives, such as social change and environmental sustainability, encouraging the use of design in the

60 KOF. 2008. KOF Index of Globalization (Online). Zurich: KOF. Available: http://globalisation.kof.ethz.ch/ (Accessed 20 March 2008).

61 HMT, "Cox Review of Creativity in Business: Building on the UK's strengths," (London: HM Treasury, 2005).

62 DTI, "Review of the Government's Manufacturing Strategy," (London: DTI, 2004).

63 SBS, "SME Statistics 2006: Small and Medium Enterprise Statistics for the UK and Regions" in *SME Statistics*, ed. Small Business Service (London: Enterprise Directorate of the Department for Business, Enterprise & Regulatory Reform (Department for Business), 2006).

64 ONS, "First Release: Business Investment, Revised Results Q1 2005," (UK: National Statistics, 2005).

65 DC, "Annual Review 2005/6," (London: Design Council, 2006).

66 TUC, "An Industrial Strategy for the United Kingdom," (UK: Trade Union Congress Economic and Social Affairs Department, 2005).

67 HMT, "Cox Review of Creativity in Business: Building on the UK's Strengths."

68 DC, "Annual Review 2005/6."

69 HMT, "Cox Review of Creativity in Business: Building on the UK's Strengths."

70 DC, "Design a New Design Industry: Design Skills Consultation," ed. Design Council (London: Design Council and Creative & Cultural Skills, 2006).

71 ———, "High-Level Skills for Higher Value: UK Design Industry Skills Development Plan."

community and outside specific business support programs. The council has also further developed design in the public sector, such as design against crime and design for patient safety. The degree to which this role is sustainable in a more challenging fiscal environment remains to be seen.

Discussion

The factors analyzed over the lifetime of the Design Council since its inception in the 1940s (Figure 1) indicate several issues. First, the industry sectors supported by the Design Council have not always mirrored industrial trends, leading to anachronistic support of declining industries and lagging behind industrial trends, even though the Design Council's design policy was developed in close collaboration with emerging industrial policy and demands. Second, the Design Council might not always have been sufficiently rigorous in its research of changes in industrial developmental and therefore has been less effective in informing the development of policy. Although the Design Council frequently decided (on the basis of its research and with government backing) to support declining (or failed) industrial sectors, it is still questionable whether this approach could adjust the rapidly changing situation of global industry policy, simply through design intervention. In such cases, as cited in the Geddes Report,[72] it would perhaps be better to let the industry decline. Finally, the data suggest the Design Council has lagged in its proactive support for emerging industries (e.g., the private service sector and high-tech industry). While these results indicate that the Design Council acts as the implementer of national design policy, it has nevertheless tended to be a reactive follower rather than a proactive leader; this outcome might result from its dependency on government support, both financially and strategically.

The Relationship Between Design Policy and Industrial Development in South Korea

In the 1950s, the Korean War (just after the liberation from Japan) caused massive damage and social chaos. There was no proactive intervention policy to support industrial structures and development; meanwhile, private companies, including Gold Star (now known as LG), set up an industrial design team and started to develop their own design.[73] U.S. aid was an important factor in the rehabilitation of the ruined economy, and the establishment in 1958 of Korea Handicraft Demonstration Centre (KHDC) was a typical example of that aid.[74] Although it was believed that KHDC's performance had a positive effect,[75] its activities did not improve industrial design: It did not introduce new products or new design because it focused on promoting and improving handicrafts,[76] which were seen as more important to increasing exports in the weak industrial conditions after the Korean War.[77]

72 Mottershead, "Industrial policy."

73 KIDP, "Korea Design History," (Korea Institute of Design Promotion, 2005).

74 A. Park, "History of Korea Design Promotion for 30 Years," (Sungnam: Korea Institute of Design Promotion, 2002).

75 Ibid; J. Kim, "The Activities and Accomplishments of the KHDC from 1957 to 1959," *Korean Society of Design Science* 20:1 (2007).

76 KIDP, "Korea Design History."

77 Park, "History of Korea Design Promotion for 30 Years."

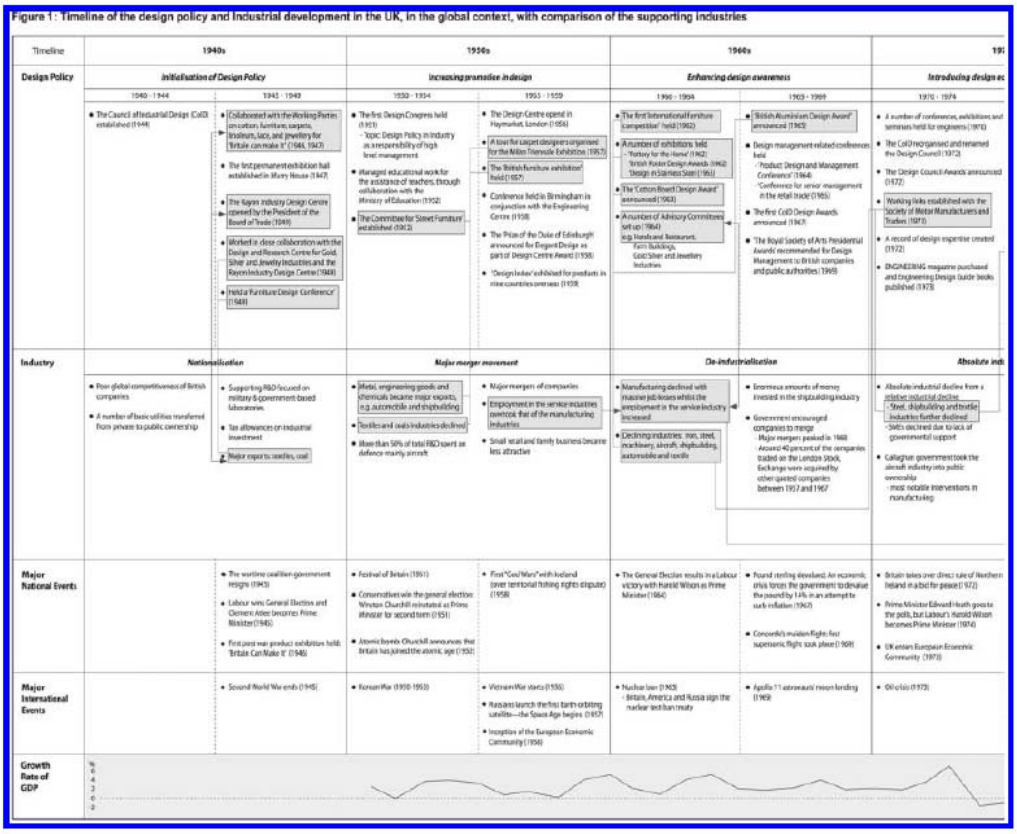


Figure 1
Timeline of the design policy and industrial development in the UK, in the global context, with comparison of the supporting industries.

In the 1960s, the Korean government devised the "Five-Year Economic Development Plan" to improve Korean industry, adopting the slogan "Export-led country."[78] The plan focused chiefly on light industry, which was recognized as being competitive in the global market.[79] At the same time the structure of industrial production changed to focus on consumer goods and mass-produced goods, and the need for competitive design was stressed as a means to maximize exports, even though the word "design" was not yet in general use.[80] The government began to consider design and packaging an important element for exports and for competing globally and, as a result, established the Korea Export Design Centre (KEDC) in 1969.[81] Through this effort, the government tried to develop and support design to increase exports and global competitiveness; however, design in this case was primarily focused on styling products and packaging,[82] rather than attending to deeper design considerations or researching consumer needs in overseas markets, so its efforts were criticized by industry players.

During the 1970s, the export-led industrial policy of the 1960s came to fruition and led to export expansion, with a strategy for

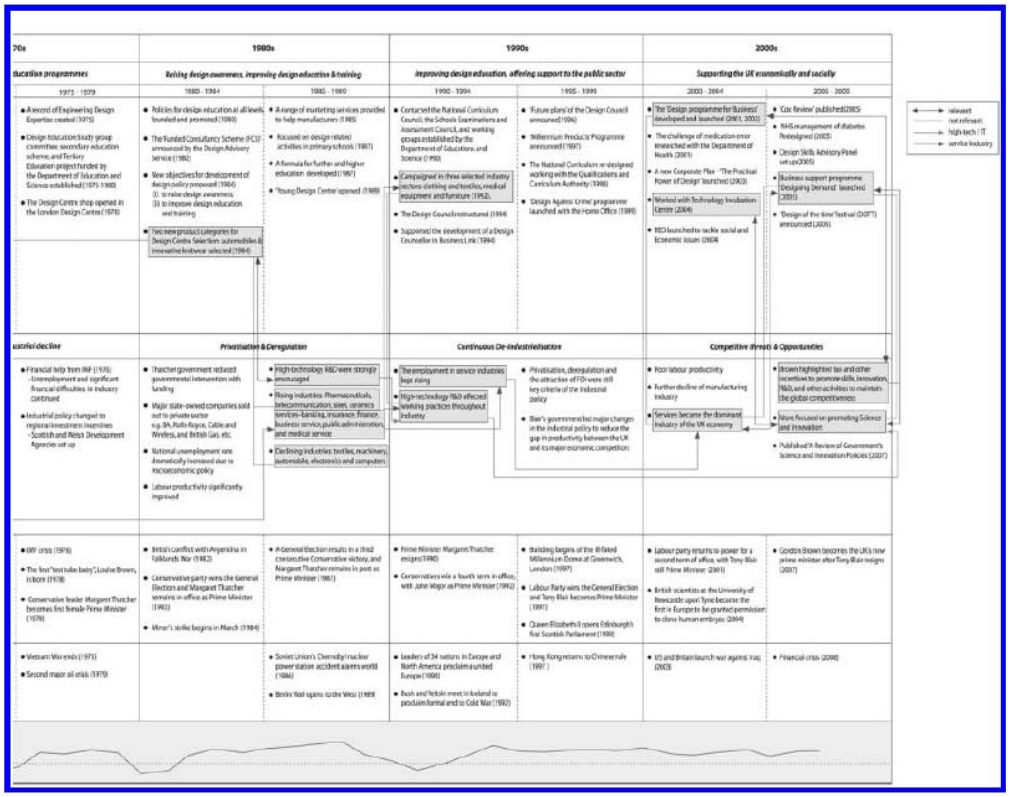
78 SERI, "Fifty years after national foundation – The history and challenge of the economy of South Korea," in *CEO Information* (Seoul: Samsung Economic Research Institute, 1998).

79 Park, "History of Korea Design Promotion for 30 Years."

80 KDPC, "History of Korea Design & Packaging Centre for 20 years," (Korea: Korea Design & Packaging Centre, 1990).

81 KIDP, "Korea Design History."

82 Park, "History of Korea Design Promotion for 30 Years."



industrialization at a global level. This policy expansion affected the entire industrial structure; consequently, the 1970s saw trade and economy enter a period of rapid growth.[83] The Park government particularly emphasized the export policy and encouraged exporters to develop design and packaging,[84] which had been considered Korea's major weakness; this led to the establishment of the Korea Design & Packaging Centre (KDPC).[85] The establishment of a number of domestic electronics companies made a significant contribution to domestic product design from the mid-1970s onward.[86]

Although the KDPC tried various approaches to developing design and packaging, it did not support any specific industry, and there were fundamental problems with how the organization was established. First, industrial design awareness at the government level still focused mainly on packaging and style in the attempt to increase global competitiveness.[87] Thus, the core strategy of industrial design in this decade was mimicry, and promotion and support were not yet integral to industrial policy. Second, the KDPC had to support two different areas, design (style) and packaging design,[88] and expected synergetic effects by unifying organizations;[89] meanwhile,

83 BOK, "The Korean Economy: Performance and Prospects," (Seoul: The Bank of Korea, 1977).

84 Jaeho Lee, Youngok Choi, Haewon Kim, and Mingu Hue, "Development of Portfolio for National Design Policy in South Korea," (Seoul: Intergen Consulting, KIDP, 2006).

85 Park, "History of Korea Design Promotion for 30 Years."

86 Ibid.

87 H. Kang, S. Kim, Y. Kim, and H. Park, *Design in Korea - Industry, Culture, History* (Seoul: Sizirak, 2005).

88 Park, "History of Korea Design Promotion for 30 Years."

those involved in the design and packaging industry opposed this idea.

The 1980s saw a proactive, export-led government policy that meant businesses emphasized cost-competitive products and quantity over quality, leading inevitably to poorly designed export goods.[90] This focus resulted in South Korea's acquiring a reputation for producing cheap, i.e., low-quality products. To dispel this perception and increase global competitiveness, the government gave more weight to the restructuring and rationalization of industrial structures;[91] the localization of components, materials, and machinery;[92] and the introduction of high-tech industries focusing on specific products,[93] including G7 products.[94] The KDPC, however, was still focused on improving the quality of packaging rather than design.[95] International events, including the 1986 Asian Games and the 1988 Seoul Olympics, positively influenced the design industry by dramatically raising awareness of the importance of design, and the KDPC became aware of the need to support both design and packaging. As a result, it ran training programs for designers and provided information about design[96] with the hope of increasing exports. The KDPC had not supported any specific industry in the 1970s, and it continued to pay little attention to the changing industrial structure; through the 1980s it thus failed to support rising industries, such as the high-tech industries.

In the 1990s, the world economy faced dramatic changes through the substitution of the World Trade Organization (WTO) for the General Agreement of Tariffs and Trade (GATT).[97] Domestic and global markets subsequently had to accept a fully open market structure,[98] and South Korea's economy struggled with the lack of global competitiveness among its domestic companies.[99] To revive the stagnating economy, the government developed a "five-year plan for a new economy" and implemented various policies to increase industrial competitiveness. It also set up three "five-year plans for industrial design promotion" as a part of the new wider economic plan.[100] In 1997 the KDPC changed its name to Korean Institute of Industrial Promotion (KIDP). Its role was changed to promote design exclusively, while packaging-related affairs were transferred to a private organization.[101] In addition, industry started to invest in design for manufacturing, while the KIDP and the Ministry of Commerce Industry & Energy (MOCIE) (now known as the Ministry of Knowledge Economy (MKE)), the primary industrial and design policy maker, held various events to raise industrial design awareness, enhance the position of designers, and unite the design industry.[102] This national design center still did not focus on any particular industry, while high-tech industries were in a hyper-growth stage.

By the twenty-first century, even though South Korea had faced the IMF economic crisis in 1997, most industries had achieved notable growth after the painful restructuring and rationalization

89 KIDP, "Korea Design History."
90 Park, "History of Korea Design Promotion for 30 Years."
91 Jihong Kim, "An Implementation Plan of Market Penetration and the Law of Industry Development," Korea Development Study 11:2 (1989).
92 Gyun Klm, "The Policy for Industrial Restructuring in the 1980s," in An Analysis of the Capitalism of Korea (Seoul: IL-Bit, 1991).
93 Kang, Kim, Kim, and Park, *Design in Korea - industry, Culture, History.*
94 KIST, "Science and Technology Annual Report," (Seoul: Korea Institute of Science and Technology, 1992).
95 KDPC, "History of Korea Design & Packaging Centre for 20 Years."
96 Ibid.
97 Park, "History of Korea Design Promotion for 30 Years."
98 BOK, "Economic Statistics Year Book," (Seoul: The Bank of Korea, 2006).
99 K. Kim, C. Kim, and J. Song, *Understanding Korean Industry*, 2nd ed. (UK: Korea National Open University, 2006).
100 KIDP, "Korea Design History."; Lee, Choi, Kim, and Hue, "Development of Portfolio for National Design Policy in South Korea."
101 KIDP, "Korea Design History."
102 ———, "Internal Manual of Current Supporting Programmes," (Seoul: Korea Institute of Design Promotion, 2006).

process.[103] The government considered improving the design industry further to increase exports for the recovering economy and therefore supported design for businesses at national level.[104] The heavy chemical industry (i.e., semiconductors, computers, new materials) and information technology are the primary industries for the twenty-first century.[105] The KIDP ran various design support programs for SMEs and has more recently emphasized support of high-tech–based products to enhance global competitiveness.[106] The MOCIE and KIDP claim that South Korea's design policy has subsequently achieved a number of notable outcomes. They cite evidence such as the design market's rapid growth,; more public and business awareness and use of design; more support for design education and training;[107] and various business support programs in design.[108] However, there is one major gap. The service industry has contributed greatly to South Korea's economy, employing around 70% of the total workforce, with turnover accounting for 51% of GDP.[109] The KIDP has recently started to provide funding support for the public service sector, but there is still no clear evidence that the government has seriously considered the importance of the service industry, and the KIDP still offers no design support to the private service industry.

Discussion

Looking at South Korea through the decades since the 1950s (Figure 2) raises the following issues. First, the national design center in its various forms supported industry under the control of the government department MOCIE and was thus unable to react independently and proactively to industrial changes and developments. The role of the national design center has undergone continuous change, including several changes of name, because of the initial perceived importance of packaging for exports, and its support for design generally (rather than packaging design) began only in 1997. Second, the industry sectors supported by the national design center have often been ill-matched to industrial trends and exports, although the design center was established expressly to support exports in an export-led industrial policy, and later the KIDP supported some declining industries. Third, the KIDP's main achievement since 2001 has been the establishment of infrastructure for design promotion, (e.g., the Korea Design Centre (KDC), the Regional Design Centre (RDC), and the Design Innovation Centre (DIC)). Almost half the KIDP's annual budget was invested in establishing the RDC and DIC, but so far no notable outcomes have been reported from that investment, according to interviewees at the KIDP, businesses, and design agencies in 2006. It is therefore debatable as to the value of infrastructure over support programs and campaigns. Finally, the KIDP has yet to adequately support emerging industries. Only in the past decade has the KIDP launched a support program for specific business sectors; meanwhile, the high-tech industry was supported by the government as early as

103 BOK, "Annual Report 2006," (Seoul: The Bank of Korea, 2007).

104 KIDP, "Korea Design History."; Lee, Choi, Kim, and Hue, "Development of Portfolio for National Design Policy in South Korea."

105 Kang, Kim, Kim, and Park, Design in Korea - Industry, Culture, History; Kim, Kim, and Song, Understanding Korean Industry.

106 MOCIE, "Guide for Development Programmes in Industrial Design in 2007: including design promotion and education," (Gwacheon: Ministry of Commerce Industry and Energy & Korean Institute of Design Promotion, Korean Institute of Design Promotion, 2007).

107 ———, "Plan for the Development Strategy of the Design Industry - for National Competitiveness and Quality of Life," (Gwacheon: Ministry of Commerce Industry and Energy & Korea Institute of Design Promotion 2007).

108 KIDP, "Internal Manual of Current Supporting Programmes."

109 SERI, "Trends of Service Industry and the Prospects for the Future - The Role of Service Industry for Economic Recovery," (Seoul: Samsung Economic Research Institute, 2001).

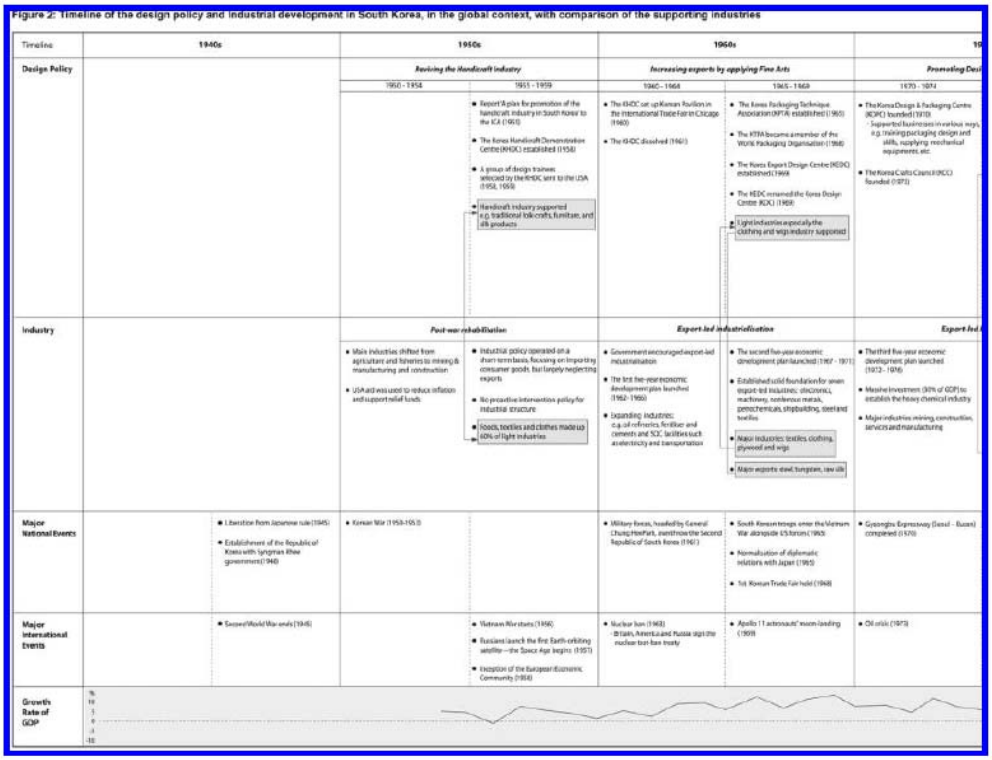
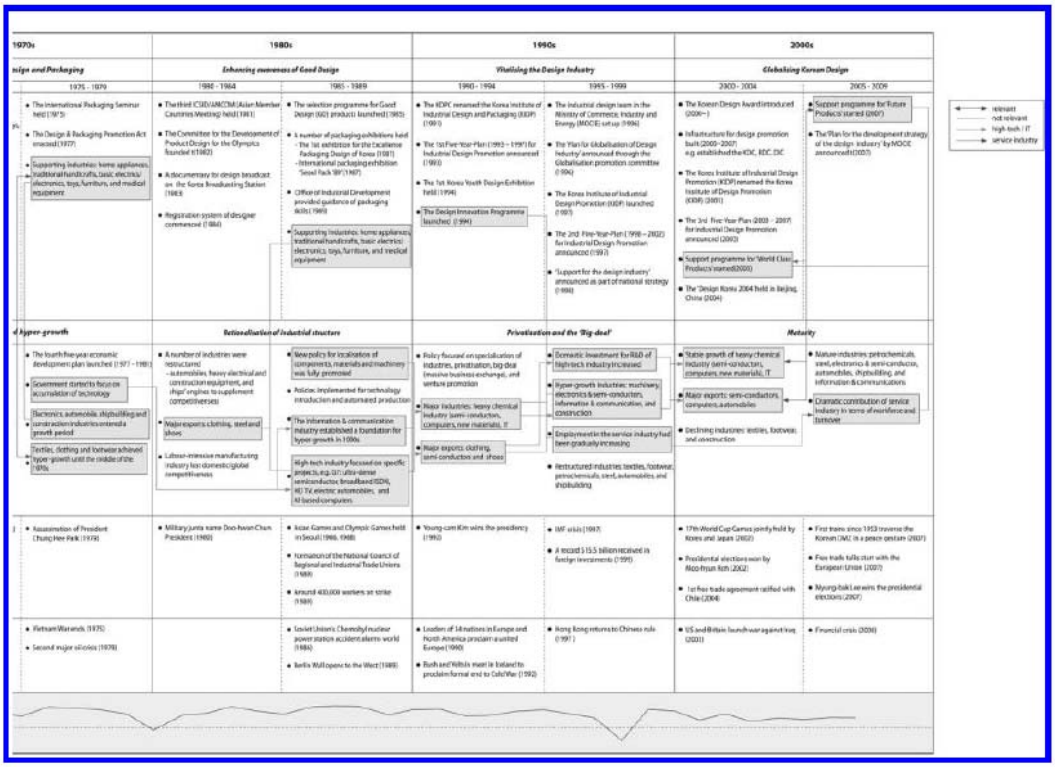


Figure 2
Timeline of the design policy and industrial development in South Korea, in the global context, with comparison of the supporting industries.

the 1980s. Moreover, while the service industry has grown continuously, contributing greatly to South Korea's economy, the KIDP has not provided the private service sector with any support. Indeed, this analysis reveals that the KIDP's role is restricted at present to that of delivering design policy but not developing design policy; all decisions about developing and implementing design policy are made by the government department MOCIE

A Comparison of the Relationships of Both Countries

If we look at the time lines of policy and economic and industrial development, there are some similarities in how both countries have developed and implemented design policy. Since both national design centers were established, the national design policy in both countries clearly has been intended to help industries improve, contribute to growing the economy, and increase global competitiveness through design. In both cases, it would appear that their work has undoubtedly had a positive influence on national awareness of design. However, this study indicates that both countries face critical issues with regard to the role of the national design center and its support for industry that need to be considered.



The United Kingdom and South Korea established their national design centers with the primary focus of improving product design to encourage competitiveness and improve the economy. However, the role of design has expanded to tackle economic, social, and cultural changes, and both design centers now need to support a wider range of sectors, including business and the public sectors, design education and knowledge application. They need to do so by developing an integrated approach, encompassing both the development and implementation of design policy. Although both national design centers have supported various sectors to improve prosperity and well-being, the results of this study indicate that a consequence of being directly responsible to government departments is that the national design centers' activities in both nations are open to criticism as they react to policy directions and changes, rather than proactively contributing to making or changing policy and driving change by implementing policy.

With regard to the national design centers' support for industry, the results of this research indicate that the Design Council's support has not been universally well matched with the industrial situation, leading to anachronistic support of declining industries and a lag behind global industrial trends. The 'Design Council' in

each case either did not conduct sufficiently rigorous research of the developments and changes of the industry, taking the findings into account when developing policy or, because of the politics of its dependence on government funding and support, followed the government's direction rather than making its own decisions.

The two design centers have yet to be recognized and resourced as an engine of change through design; nor have they found the most effective means of doing it. Recently, they have supported businesses across industries and responded to industrial trends by supporting dominant industries in line with industrial policy and demand (e.g., supporting high-tech industry). However, each respective national design center's design support for emerging industries could still be considered inadequate—in particular, for the private service sector in both countries. It should be noted, however, that both countries have in recent years focused on design. In the United Kingdom, we have London Design Week, while in South Korea there has been more activity and investment in Seoul design, including the Seoul Design Olympics, Seoul Design Festival, and the creation of a deputy mayor for Design. These interventions have been somewhat independent of the design centers.

The findings of this study indicate that both national design centers act as the implementer of national design policy, although each has tended to be a reactive follower rather than a proactive leader because of its dependency on government and/or government funding and a lack of full autonomy (moreso in the case of the KIDP in South Korea than with the Design Council in the United Kingdom). This field of research would benefit from further studies of national design policy, especially of the relationship between design policy and industrial development. There is a need to seek appropriate approaches for government to support design, with specific consideration of the critical issues in government intervention that have been identified. How can national design centers be proactive and innovative in enabling design to contribute to or drive emerging industrial activities and thus national competitiveness? How can design policy support and encourage a wider perspective on design in relation to the social and environmental responsibilities to be addressed by design and thus take on the role of promoting ethical stewardship through design?

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