The Critical "Languages" of Graphic Design

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This paper addresses the history of attitudes towards criticism in design within 19th and 20th century intellectual contexts and looks to the contemporary condition of design in electronic formats and platforms as a way of asking the question, "How are we to conceptualize what is *graphic* about graphic design?" This question is a subset of the larger inquiry that begs illumination, even in the early 21st century – how to establish a foundation for graphesis, or visual representation as a field of knowledge? And what are the critical and theoretical approaches appropriate to it?

Theoretical and critical approaches to graphic design rely heavily—and paradoxically—upon analogies between visual forms and language. The phrase "languages of design" inscribes that analogy in such familiar terms that the assumptions underlying it almost disappear. The paradox results from the fact that the fundamental *visuality* of graphic design is sacrificed when its specificity is subsumed within a critical framework premised on concepts of language.

The censored form of a 1898 poster by French artist Alfred Choubrac makes this paradox apparent. When informed that his can-can dancer was apparently displaying too much of her lace underclothing for so public an image, rather than redraw the image, Choubrac reworked the poster with a banner over the offending portion that proclaimed, "This part of the image is banned." A text thus stands in for that segment of the image that is not to be viewed. Read another way, this statement makes clear that the function of text is not only to cover what can't be seen, but that in doing so, text covers and conceals visual form. What is always rhetorically the case in critical writing about design is here demonstrated graphically. Critical writing substitutes language for image, basically swapping out text for visual elements in exactly the manner Choubrac's redrawn image made explicit. The special case of the censored poster is in fact a demonstration of the general case of critical language in its relation to images.

Much graphic design criticism not only attempts to use language for discussion of visual form, but also pushes the use of linguistic analogies. In so doing, it engages in a sleight of discourse, substituting not only a word for an image, but a linguistic premise for a visual one. Graphesis, the idea that knowledge can be represented in visual form as a distinct mode of symbolic communication with its own rules and systems, is always at a disadvantage because criticism functions most effectively and familiarly in language. These analogies between "languages" of visual communication and language as a system of verbal communication have repeatedly reinforced the perception that this is a useful, logical, and even truthful way to understand graphic design from a critical perspective. But is it?

The phrase "the language of graphic design" is part of a very specific history of approaches to graphic form. It conjures associations of systematic principles ordering visual elements with maximum effectiveness and streamlined elegance. This is classic 20th-century modernism, the international style of mid-century, in which the lucid presentation of visual material was organized to seem like the natural order of communication. Exemplary—even emblematic—of such work is the well-known 1950 publication, *Sweet's Catalogue Design Progress* by Ladislav Sutnar and K. Lundberg-Holm. The striking project that forms the center of this piece is their graphic redesign of the *Techron* catalogue. Through

an integration of content analysis and graphic presentation, their work epitomizes this rational sensibility and its communicative efficacy. Starting with a catch-all, randomly sequenced arrangement of time-pieces, text, and jumbled page layout designed half a century earlier, Sutnar and Holm developed an approach to design that was systematic and generalizable rather than project specific. Though they linked their concept of systematicity to an image of traffic and information flow, the more fundamental idea of ordered rules functioning as a "grammar" of design underlies their text.

The use of the analogy between language and visual forms in graphic design, or in discussions of pattern and visual art, has precedents in the 19th century (earlier in architecture). This analogy is suggested by the title of the monumental volume by Owen Jones published in 1856, *The Grammar of Ornament*, another significant landmark in the field of design history. The use of this analogy between language and visual forms in graphic design participates in broader attempts to formalize and systematize areas of human knowledge and their representation. Such efforts are the product of nineteenth-century attempts to rationalize areas of humanistic inquiry aligning them with the perception that scientific knowledge has greater truth value and thus greater cultural authority than humanistic disciplines whose methodologies are largely descriptive and subjective, qualifiable rather than quantifiable. Scientific thought provided models for rational order as a governing principle of the natural world. The cultural authority that attends to such disambiguating methods continues to predominate in our contemporary culture. Though the elusive dream of a systematic approach to graphic design, grounded in principles that function according to an analogy with language, now bears a nostalgic stigma, the primacy of language has been reinforced by another type of authority, that of formal languages in digital technology.

In the 20th century the concept of the "languages of design" and its parallel formation, "theories of visual communication" became a commonplace notion that circulated widely through the profession and its training ground in curricula and textbooks for the graphic designer. The approach had many assumptions in common with those of modernism in the visual arts, in particular, a drive to articulate a set of universals that would always hold true within formal, visual expressions. The attempt at creation of a rigorous visual system, such as that developed in the Bauhaus curriculum through the work of, among others, the influential figure Josef Albers, was an almost unquestioned desideratum of the design world in its moves towards definition and professionalization. The systematic approach was premised on the belief that a formal system of rules for effective design could transcend historical circumstance. The principles of formal relations were conceived to be absolutes, governing visual elements in a scheme that had parallels in the project of formalization of natural languages in many fields. The influence of analytic philosophy, mathematics, and formal logic in the early decades of the 20th century established a foundation for asserting the benefits of formal methodologies for the *production* of works of visual art and graphic design as well as for the critical analysis of visual art. After mid-century, these principles bore mature fruit in the visual form, organizing principles, and international influence of Swiss design, on the work of Josef Muller-Brockman, Anton Stankowski, Paul Rand and legions of others.

These systematic approaches and their basis in formalist methodologies, as well as their attendant ideological baggage, came under attack in the 1970s. Feminist theory, cultural studies, the principles of deconstructionist criticism and post-structuralist analyses called attention to the complicity between claims to universal truth-values within objective-seeming formal systems and the institutionalization of power relations in social and cultural institutions. Perversely, in this same decade, the effect of semiotics on many humanistic fields – including graphic design—was to conceive of every available artifact (visual, aural, material etc.) as a "text." The overwhelming

projection of the linguistic paradigm onto every area of symbolic discourse went forward at the same time as deconstructionist attacks were aimed at the "logocentric" premises of western philosophy.

By the 1980s, erosion of such predominant models was in part effected through the capabilities of new technology. Digital media encourages an easy blurring of the boundaries of image / text through production methods that are radically different from those of more traditional/ conventional production methods grounded in hot type, mechanical/darkroom photography, and photomechanical methods of production. The emergence of an aesthetic of "illegibility" – the famously unreadable work of designers like David Carson or P.Scott Makela in the late 1980s and early 1990s – seems an utterly consistent expression of a moment in which the authority of language is undermined through theoretical attacks on logocentrism that coincide with the exuberant exploitation of the hybrid capabilities of digital media. The celebration of simulacral modes coincided with the simultaneous erosion of the legibility and credibility of language in an apparent undercutting of its critical authority. But critical approaches within the context of Cranbrook and the McCoys, for example, or Lorraine Wilde before and after her move to Cal Arts, and the important work of Ellen Lupton and J. Abbott Miller relied heavily on semiotic and linguistic theory in their attempts to grapple with the problems of visual graphic form. Meanwhile, lurking in the wings was a yet another incarnation of the persistent trope of formal systematicity – now in the form of the mathematical underpinnings of digital media. If natural language, with all its flawed idiosyncrasy, had been held up for generations as the model of potentially systematic representation of thought within human expression, then formal language, logic-based, computational, and unambiguous, would present the most extreme version of this promise. But is it a promise fulfilled? Would we wish it to be?

There are unexamined premises within this inquiry that require another backtrack through the historiography of graphic design history before they can be addressed, one that looks at the connections between the stylistic rhetorics within design discourse and the critical rhetorics that establish criteria of their success. Cultural authority resides within that set of connections – between the rhetorical expectations of design and the terms on which it is assessed. The cultural authority that attends to design in our current moment is grounded in very specific values, familiarized to the point of invisibility. The process of defamiliarizing these premises puts them into relation with a longer, historical perspective – in which this is merely one moment in the history of graphic design and its critical discourses.

A very brief, almost telegraphic overview of earlier moments in design history will have to serve to invoke these various points within the modern history of graphic design before concluding with a return glance at the opening questions about the critical frameworks that address the graphic character of design.

Manuals for the printing trade served as the sole repository of written information about design up until the late 19th century. Precious little self-conscious discussion of design found its way into these publications, which were meant to provide technical instruction to the production staff in a print shop. The emphasis in such texts was on efficiency, and suggestions to create sketches or mock-ups on paper in advance of actual setting of type were supported largely by an argument that such preparation could spare the compositor the time and effort of resetting. Considerations such as spacing, choice of display or body type, were dictated almost entirely by availability. The structure of public notices, title pages, book and page layout proceeded according to classical rules of proportion, largely absorbed as habit and convention rather than as articulated precepts. Publications like *The Inland Printer* introduced aesthetic considerations chiefly on the grounds of efficiency and

communicative efficacy. Semantically driven hierarchy, which would appear to be a commonsense, nonetheless took time to come to the fore as a design consideration. Little or no design "discourse" to be found even reading between the lines of these instrumentally oriented manuals. The field remained as flat, as literal in its approach, as the relation of relief surface to paper in the transfer of ink.

While pragmatism dominated the trade publications, a concept of aesthetic design emerged slowly within the world of book and poster activity that synthesized principles from such major movements as Impressionism and Post-Impressionism in France, the Arts and Crafts movement in Scotland, England, and the United States, as these intersected with work in commercial venues. Graphic design and book production, particularly fine print work, are quite different zones of activity. But attention to the qualities of composition, organization, and formal features of presentation in practice and its discussion found considerable support in the precepts of late 19th century aestheticism. The influence of Thomas Cobden-Sanderson on William Morris and in turn on Will Bradley were not without impact in the broader commercial field. The rhetoric of such productions was pitched against the numbing effects of industrialization, the components of hand-made or crafted form, though often put at the service of mass-produced items (print publications, shoes, light bulbs, soap and so on), suggested aesthetics were an alternative to industrial mechanization. But aesthetics was and would continue to be a secondary consideration in the advertising realm where the link between communication and marketing was paramount. No trade manual or codification of the design profession would have been likely to pose its production as an opposition to the forces of mass-produced commercial activity. Likewise, aesthetes isolated their ideas from mass-market concerns. Walter Crane's *Line and Form*, for instance, made no reference to "communication" in the commercial sense, focusing instead on concepts closer to the principles of classical architecture such as proportion, or to the musical analogies dear to the sensibility of 19th century symbolism and its aesthetic precepts. Thus the sinewy organic lines, elegant earth-toned colors, and finely drawn images that show up in the work of the Beggarstaffs, on the pages of *Ver Sacrum*, or in the advertising imagery of Lucien Bernhard have a common root in the visual order according to which the natural world is set apart for distinction from the industrial underpinnings on which such productions operate and whose interests they actually serve.

In the early 20th century the evangelical tone of reform movements and socially progressive campaigns produced a righteous promotional approach to consumer culture. A work like *Jesus was an Ad-Man*, its title meant un-ironically, exhibits the curious combination of faith and capitalist zeal as a foundation for advertising rhetoric. Increased capacities for production brought about a need for increased consumption, and the creation of artificial (or at least, enhanced) desire found itself in lockstep with the development of scientific methods for advertising design. Graphic design received a boost from the world of commercial advertising that differentiated it from the craft of book production and from the aesthetic attention lavished on artist-drawn posters. The American advertising professional, no longer an "artist," focused on sales in the name of moral "uplift" while design rode a wave of production and prosperity cycles in the 1910s and 1920s. Civic and moral virtue went hand in hand with hard work and honest consumption in this rhetoric. And the graphic style that accompanied such ideals was declamatory and directly promotional.

While American design stressed marketing, with organization and legibility, brand name recognition and standardization as its hallmarks, Soviet and European designers established some of the first systematic curricula for the teaching of graphic design. With the establishment of the Bauhaus, as well as parallel institutions within the newly formed Soviet Union, a shift occurred that had major implications for the design profession as we know it today. Drawing on the radical use of abstract

forms in visual art that had been one of the signature elements of the avant-garde, Herbert Bayer, Lazar El Lissitzky, Joost Schmidt, and their counterparts in the Soviet context, developed a concept of design grounded in principles of visual order and systematic precepts. The explosion and then taming of avant-garde innovation, coinciding as it did with a self-conscious search for "languages" of abstraction in visual fine art, created the first rationalized foundation for design as a discourse with its own rules. Building on such works as Kandinsky's *Point and Line to Plane*, educator-designers such as Georgy Kepes and Laszlo Moholy-Nagy created manuals that outlined organized principles of communication. Pragmatism and moralizing ceded to clean efficiency and systematic organization. These formal "languages" of design would dominate the graphic field and its critical self-conception throughout the rest of the 20th century. The emphasis on formal properties within such systematic discussions allowed them to lay claim to an ahistorical universality while establishing a stylistic basis for the modernism that linked avant-garde abstraction to corporate identity systems.

American design in the 1930s, still fraught with moral and reform sensibilities, engaged another set of concerns that would last through the Depression years, WWII, and into the 1950s—an emphasis on normative imagery in vignettes and scenarios of family and civic life. By embedding products within illustrations or photographs that communicated a narrative of everyday dependability for the average, and increasingly, upwardly mobile American family, advertisers knit the public and private spheres of business and domestic life into a finely wrought fabric whose pattern justified spending on the basis of hygiene, independence, security, and style. Design publications specialized along lines that reflected segments of a market – outdoor advertising, print campaigns, and, eventually, television spots. Public service campaigns, such as the famous series of posters for Rural Electrification, produced by Lester Beall, had much in common with those of their European and Soviet counterparts in the field of propaganda campaigns. Exceptions to this abound, of course, and the highly stylized and elegant work of designers like McKnight Kauffer or Adolphe Cassandre borrowed heavily on the fine art traditions of modernism to promote goods and services in quotidian as well as luxury markets. As a profession, graphic design came into its own, intent upon aesthetic validation as well as integrity, and the two reinforced each other's legitimacy.

The hiatus in normal activity caused by the second World War, accompanied as it was by a massive intensification of production in all sectors, left a legacy of infrastructure and affluence. Propaganda, recruitment, war bond campaigns and other graphics associated with the war gave way in peacetime to an unprecedented level of professionalism in graphic design. The full-blown development of an international style, associated with Swiss design, matured in the 1950s, carrying in its abstract and geometric minimal codes all the signs of a neutral aesthetic. Organization, legibility, elegance—these were all characteristics of a "cool" modernism, with its unfussy sans-serif typography, its semantically neutral seeming forms with templates and grids conspicuously grounded in rational aesthetics. Design took on the aura of a profession closer to architecture and engineering than drawing and painting. The rhetoric that came to the fore in this period became the stock in trade of design schools and organizations. The predominance of a publication like *Graphis*, the awarding of prizes in professional arenas, the integration of corporate and cultural sensibilities – all sustained an integrated approach to systematic design style, unremittingly self-serious, important as an aspect of the international, "one-dimensional" (to use Herbert Marcuse's apt contemporary term) culture it served.

1960s self-consciousness introduced a critical reflection into the design world. Cuteness, playfulness, an awareness of the "pop" function of advertising art and of its impact twisted the solid international style rhetoric on its edge. Though the grinding out of textbooks for "communications" programs continued (and to some significant extent, still does) to use the rhetoric of "visual

language" as a dominant, if unexamined, motif the practice of design shifted gears through introduction of a certain clever irony. Taking the system less than seriously, the work of designers like Quentin Fiore (in his work with Marshall McLuhan) or prominent and very successful firms such as Doyle, Dane, and Bernbach, demonstrated the viability of undercutting the systematic "language" of design with quips, quotes, and asides with a nod to a knowing audience. The incorporation of this audience, an admission of complicity with the consumer/viewer, broke the purely formal frame that had been a premise of visual organization throughout the earlier decades of the 20th century .The acknowledged "textuality" of visual images came under semiotic investigation in the 1960s as well, with the critical contributions of Roland Barthes, as well as McLuhn, so that a critical case for "reading" images took its place beside the use of "languages of design" as the basis of production.

The other legacy of the 1960s was a political counterculture, alternative and aggressive, and focused on control of symbolic systems as a crucial site of strategic intervention into mainstream venues. The consumerism of the 1970s, somewhat chastened by contrast to 60s exuberance (and Viet Nam era affluence), was in continual dialogue with the identity politics issues raised by the Civil Rights and Women's movements. Semiotics became increasingly popular as a way of decoding the ideology of style, and the concepts of structuralism informed design and visual art through their connection to academic critical theory. The cost-effective, bottom-line, graphics of the 1970s, with their rather bland corporate identity campaigns and somewhat diluted international style sensibility, began to show the influence of photographic systems for typesetting. Though desktop publishing didn't prevail until the mid-1980s generations of Macintosh computers made equipment widely available and economically accessible, the automation of aspects of book production, distribution, management and conceptualization industry reoriented the industry towards an information systems approach to design and away from graphic display or its aesthetics. The proto-deconstructionist impulses of Neville Brody, for instance, fueled design's self-conscious self-examination from within even as the edge of the digital technology began to appear on the horizon of the aesthetic field.

As cultural studies forged one active area of 1980s design discourse, pushing concerns about identity, AIDS, activism, and subcultures to the fore, another powerful force undercut the old formal paradigms of graphic design in the name of deconstruction. By demonstrating the alignment between hegemonic forces and an international style, critics of design revealed the complicity between modern design and systems of power whose repressive agendas could not be wished away. Even as firms like Chermayeff and Geisman might push their "daring" and "innovative" facility to create logo designs and elaborate corporate identity systems, the street graphics industry worked to promote AIDS awareness through direct, smart, campaigns aimed at communication and self-empowerment. The development of a cult of illegibility within various subcultural environments, such as RayGun, and the archly self-conscious always inventive and re-inventive publication Emigr , exhibited a clear desire to "diss" the established tenets of graphic design. Design theory became a trendy field of study, and the semiotic disease broke out among the students and faculty of major institutions. Theory proved to be a hungry beast, and a rapid succession of intellectual frameworks was required to keep its insatiable cravings at bay. The effect of such work on graphic design was more academic than practical, with a sub-industry of critical writing and languages working feverishly to deconstruct the logocentric premises of symbolic practices while at the same time aggressively promoting the need for critico-theoretical discourse. Why? Graphic design seemed disadvantaged without some kind of scaffolding to support its productions. There was a sense that the profession no longer simply needed organizations and awards for fine, slick, clever, or successful campaigns, but needed a metalanguage of self-conscious critique in order to decode its complicity and contradictions as another among many simulacral artifacts in contemporary life. April Greiman, the McCoys, Cranbrook, CalArts, and

other nodal points of critical activity epitomized the complex factors of postmodern design in its first theoretical and practical formations.

The rise of the celebrity designer in the 1990s, coinciding with a major boom cycle in American consumer industries fueled, at least in the public imagination, by the dot.com phenomenon deposed the critical languages focused on "display" and simulation with a new vocabulary of interactivity and interface. Illegible, provocative work by David Carson promoted him to star status while writing about his work created new expectations at the intersection of style, celebrity, and design. The aesthetic of digital manipulation became riddled with the hybrid, morphing manipulations that eroded all boundaries between media of input. Specificity of tool and media – pen, pencil, brush, paint, stroke, or water-based pigment – no longer held. Nor did the age-old distinction between text and image. Medium-enforced but more deeply distinguished in aesthetics, philosophy, and other systems of belief, this distinction had enabled a phrase like "languages of design" to resonate with meaning generations earlier –when language held the upper hand in appearing systematizable, stable, and ordered according to rules of grammar. Syntax and semantics, formal and meaning-based registers, seemed to exist as a paradigmatic condition of language, extractable as a system of principles that might be usefully applied to visual elements in graphic design. Such premises were hard to sustain in a moment when the fungible character of all data leveled their identity in a digital environment. Enacted stylistically by Carson and others as an exercise in illegible form, this elision of categories at the level of display produced other anxieties about the need or possibility of ever communicating effectively in a noise-filled environment.

Theory-speak also created tensions of its own, alienating professionals from their academic counterparts, inventing a critical elite, and seeming to elevate obscurantism to the level of insight. Too bad, since what was lost in this debate was what was at stake in a politics of public discourse – one that might have at least introduced some level of discomfort into the engines of complicity that were driving the publicity machine of celebrity orientation so relentlessly into the design field. Theory, after all, did have the tools to reveal very basic aspects of the design field and the designer's condition. Whose interests were being served? How was the most "naturalized" imagery culturally loaded? And how were surface rhetorics concealing or enabling values other than those they appeared to espouse? What are the ideological underpinnings of any particular discursive formation? How are they to be named? How are they put into operation? How are we complicit with them? These are crucial aspects of any representational activity (which, by definition, is ALL of human activity). But in a mad rush to professionalize theory as an aspect of design curricula, these basic issues seemed – at least momentarily – to be lost. The languages of design as a set of formally based premises for production have potential to become clearly stated-- but as languages of insight about design, and about the function and performance of visual forms as a cultural system.

To that end, the current condition of graphic design deserves its moment of attention here at the end. For the critical languages that encode new observations and prescriptions for the role of the designer within electronic media also has its tropes and metaphors, as well as concealing certain agendas under yet another naturalizing set of terms. Only now these are the terms of informatics. No longer interested merely in finding rules for predictable effects in relations of visual elements, the theory of design practice will now necessarily grapple with such issues as content analysis, information architecture, and the design of interactive processes such as navigation. Dynamic data sets, files that have real-time parameters in them, multi-authored and browser-specific environments – these all introduce variables that cannot be controlled in the same way that type on a page or layout in a page sequence can. And after all, even that, simpler seeming task, turned out to elude the disciplinary legislation of a set of "rules"—even if fundamental parameters for legible and pleasing aesthetics were

generaliable into principles. Design, like any other form of human expression, turns out to partake of universals only to the extent that any historical moment of its manifestation is part of a larger pattern of symbolic communication. The specificity of any expression is precisely proportional to its capacity to serve as an index to that set of conditions that participate in its production – and to which it returns its meaning as effect. Any universal "language" will always stop just short of where real communication begins—in difference, deviation, and distinction.

In summary: the analogy between language and visual form became a commonplace in 20th-century criticism and design curricula. The term comes into common currency in visual art and graphic design in the early decades of the twentieth century—most specifically within the context of those now historic efforts to establish systematic premises for the use and understanding of visible forms. Such concepts have their precedents, within earlier attempts to perceive, or create, systematic structures within architectural, visual, or decorative forms. And they have their glorious triumphant moments in 20th century activity —when a rhetoric of scientificity permeated all manner of humanistic and aesthetic disciplines – all of which aspired to the condition of authority that had come to attend to the natural, physical sciences in that era. Highest on the truth chain, such disciplines appeared to reveal transcendent, rather than contingent facts. Visual artists took up inquiries that mimicked those of their contemporaries in the lab, struggling to research the laws that might govern composition according to an inviolable and absolute set of design principles. Later, these principles became a garden variety of terms and approaches to design, not necessarily incorrect, but oddly quaint—seeming to our contemporary sensibility – as court decorum, though adorable in small doses, hardly suffices for our daily communications or behaviors. Such extremes of formalism had in them a utopian aspiration that has not only been abandoned, but whose precepts no longer seem either necessary or desirable as goals – the establishment of absolute terms for successful design. Such activity had been a manifestation of rationalized aesthetics, of a "logic" that did not see itself as a rhetoric, but as an articulatable system of fixed parameters of graphic production.

And now? A whole new world of possibilities, in the simplest creative sense, but also, a change of heart and a change of technological possibility. The meta-data metalanguage of design, program and display, code and data, the relation of style sheets and xml-tagged artifacts, of DTDs and mark-up borrows heavily from the world of computer science. Computational methods, grounded in formal logic and its constraints, carries its own ideological baggage. The cultural authority that attends to such methods is weighted heavily by the validation accorded to scientific discourses, and their supposed foundation on quantifiable and therefore unambiguous (read "truthful") grounds. Natural language, once subject to the rational regimes of a science-oriented linguistics has been replaced in the critical hierarchy with formal languages and their logic-based orientation. Should the old trope of the "languages" of design be revived now, it would require a whole new set of caveats and cautions – lest we fall into an even more absolute -seeming trap with yet another layer of authority attendant upon it.

The critical languages that have accompanied the development of graphic design as a field will, no doubt, continue to refine themselves in concert with the development of new tasks and structures, new stylistic manifestations and their underpinnings. What is "graphic" about graphic design continues to need elucidation – as the evolution of whole new realms of information visualization and visual interfaces to the management and organization of information are integrated into our functions of daily life in entertainment, business, and education. The denaturalization of these as truth-functions will require the same critical attention as did those earlier forms of display – and we ignore the visual characteristics by which these forms communicate only at peril of a profound ignorance and blindness— since it is through their visuality that they communicate. This paper has

examined the search for a set of systematic precepts as a foundation for an aesthetic of display, but it has barely touched on the question of the way this concept both benefited and constrained the exploration of visuality. Perhaps now, as greater fluency develops in the broad population for visual symbol making and manipulation, an era in which a significant fluency for grasping the bases of meaning production in graphic design will emerge.

Note: The interested reader is referred to the work of Estelle Jussim, NeilHarris, Michelle Bogart, Victor Margolin, Herbert Spencer, Mike Mills, Roland Marchand, Maud Lavin, Ellen Lupton, Lorraine Wilde, Anne Burdick, Dan Friedman, Jessica Helfand, *Emigr* , Steve Heller, the *Looking Closer* volumes and other publications of Allworth Press for further reading.