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When I think of the undercurrents that shape my graphic design, I think of ideas about language and form. Ideas about coding and reading visual form, about challenging the viewer to construct interpretations, about layers of form and layers of meaning. These are at the forefront of my mind, but behind that lie other deeper and older concerns that go back to my earliest years of design. Perhaps these are what could be called a philosophy or an ethic, a personal set of values and criteria, a thread that winds through the lifetime of work and sustains its rigor, the continuity in the cycles of change.

Undergraduate school in industrial design was a very idealistic time. The strong emphasis on problem-solving and a form follows functionalism struck a resonance with my personal approach toward the opportunities and problems of daily life.

As a college junior, I enthusiastically embraced the rationalism of the Museum of Modern Art’s Permanent Design Collection, abandoning the ambiguously intuitive territory of fine art. This somewhat vague midwestern American Modernist ethic had its roots in the Bauhaus, and our group of students gained a dim understanding of its application by the Ulm School of Germany. Added to this was a reverence for the insights of George Nelson, Marshall McLuhan and Buckminster Fuller. In hindsight I continue to appreciate the foundation built by those years of industrial design training. At that time, in the middle 1960s, even the best American education in graphic design would not have gone much further than an intuitive ‘ah ha’ method of conceptualizing design solutions and an emulation of the design masters of the moment.
For me, there seems to be a habit of functionalism that shapes my process at the beginning of every design project, the rational analysis of the message and the audience, the objective structuring of the text. Each cycle of change during the passing years seems to have added another visual or conceptual layer laid upon that foundation of functionalism, but inside of every project it is always there. Although this emphasis on rationalism would seem to be at odds with recent experimentation at Cranbrook, in fact it has been the provocation to question accepted norms in graphic design, stimulating the search for new communications theories and visual languages. I have never lost my faith in rational functionalism, in spite of appearances to the contrary. The only thing lost was an absolute dedication to minimalist form, which is a completely different issue from rationalist process.

Part of this ethic is a strong conviction and enthusiasm that design is important, that it matters in life, not just mine, but in the lives of our audiences and users of designed communications. Graphic design can be a contribution to our audiences. It can enrich as it informs and communicates. And there is a faith in not only the possibility, but the necessity for advancement and growth in our field, an imperative for change. That only through change can we continue to push ahead in knowledge and expertise, theory and expression, continually building our collective knowledge of the process of communication. These convictions were formed early and sustain me today.

This faith in rational functionalism (and not a polished portfolio) found me my first job, at Unimark International, then the American missionary for European Modernism, the graphic heir of the Bauhaus. There I had the opportunity to learn design from “real” Swiss and to have my junior design work critiqued by Massimo Vignelli, the greatest missionary of them all, the master of Helvetica and the grid. Our ethic then was one of discipline, clarity and cleanliness. The highest praise for a piece of graphic design was, “This is really clean.” We saw ourselves as sweeping away the clutter and confusion of American advertising design with a professional rationality and objectivity that would define a new American design. This approach was fairly foreign to American clients and in 1968 it was remarkably difficult to convince corporate clients that a grid-ordered page with two weights of Helvetica was appropriate to their needs. Now, of course, one can hardly persuade them to let give up their hold on “Swiss”, so completely has the corporate world embraced rationalist Modernism in graphic design.

But after a few years of striving to design as “purely” as possible, employing a minimalist typographic vocabulary, strongly gridded page structures and contrast in scale for visual interest, I came to view this desire for “cleanliness” as not much more than housekeeping. A number of us, mainly graphic designers in the “Swiss” method, began to search for a more expressive design, paralleling a similar movement in architecture now known as Post Modernism. Eventually what came to be called “New Wave”, for lack of a better term, emerged in the 1970s as a new operating mode of graphic design. This included a new permission to employ historical and vernacular elements, something prohibited by “Swiss”Modernism.

Then in the mid 1980s at Cranbrook we found a new interest in verbal language in graphic design, as well as fine art. Text can be animated with voices and images can be read, as well as seen, with an emphasis on audience interpretation and participation in the construction of meaning. But now, as the cycles of change continue, Modernism may be reemerging somewhat, a renewed minimalism that is calming down the visual outburst of activity of the past fifteen years. Through these years of continual change and new possibilities, where does the ethic lie? Does not the idea of ethic imply some sort of unshakable bedrock impervious to the winds of change?
The recent history of graphic design in the U.S. reveals a series of actions and reactions. The fifties saw the flowering of U.S. graphic design in the New York School. This copy-concept and image oriented direction was challenged in the sixties by the importation of Swiss minimalism, a structural and typographic system that forced a split between graphic design and advertising. Predictably, designers in the next decade rebelled against Helvetica and the grid system that had become the official American corporate style.

In the early seventies, Robert Venturi’s Complexity and Contradiction in Architecture emerged alongside the study of graphic design history as influences on American graphic design students. Simultaneously, Switzerland’s Basel school was transformed by Wolfgang Weingart’s syntactical experimentation, an enthusiasm that quickly spread to U.S. schools. Academia’s rediscovery of early 20th century Modernism, the appearance of historicized and vernacular architectural postmodernism and the spread of Weingartian structural expressionism all came together in the graphic explosion labeled as New Wave.

Shattering the constraints of minimalism was exhilarating and far more fun than the antiseptic discipline of the classical Swiss school. After a brief flurry of diatribes in the graphic design press, this permissive new approach quickly moved into the professional mainstream. Today, however, the maverick has been tamed, codified into a formalistic style that fills our design annuals with endlessly sophisticated renditions. What was originally a revolution is now an institution, as predictable as Beaux Arts architecture. It is the new status quo, the New Academy, as Meggs calls it.
Sources for much current experimentation can be traced to recent fine art and photography, and to literary and art criticism. Influenced by French post-structuralism, critics and artists deconstruct verbal language as a filter or bias that inescapably manipulates the reader’s response. When this approach is applied to art and photography, form is treated as a visual language to be read as well as seen. Both the texts and the images are to be read in detail, their meanings decoded. Clearly, this intellectualized communication asks a lot of its audience; this is harder work than the formal pleasures of New Wave.

Much new typography is very quiet. Some of the most interesting, in fact, is impossible to show here because of its radically modest scale or its subtle development through a sequence of pages. Some is bold in scale but so matter-of-fact that it makes little in the way of a visual statement (One designer calls these strictly linguistic intentions “nonallusive” typography). Typefaces now range from the classics to banal, often industrial sans serifs. Copy is often treated as just that—undifferentiated blocks of words—without the mannered manipulations of New Wave, where sentences and words are playfully exploded to express their parts. Text is no longer the syntactic playground of Weingart’s descendants.

These cryptic, poker-faced juxtapositions of text and image do not always strive for elegance or refinement, although they may achieve it inadvertently. The focus now is on expression through semantic content, utilizing the intellectual software of visual language as well as the structural hardware and graphic grammar of Modernism. It is an interactive process that—as art always anticipates social evolution—heralds our emerging information economy, in which meanings are as important as materials.

Determining whether New Wave is postmodernism or just late Modernism is important in understanding new work today. New Wave extends the classical Swiss interest in structure to dissections and recombinations of graphic design’s grammar. Layered images and textures continue the collage aesthetic begun by Cubism, Constructivism, and Dada. But the addition of vernacular imagery and colors reflects postmodern architecture’s discovery of popular culture, and the reintroduction of the classic serif typefaces draws on pre-20th century history. Taken as a whole, however, New Wave’s complex arrangements are largely syntactical, abstracting type and images into baroquely Modern compositions.

The New Academy’s knowing, often slick iterations have left some graphic designers dissatisfied. As a result, long neglected design elements, such as semantic expression in form, text and imagery, are beginning to resurface. Much of this recent work steps outside the lineage of Bauhaus/Basel/New Wave, and not surprisingly, some of its practitioners come from fine art, photographic or literary backgrounds rather than graphic design training.

When one looks for experimental typography today, what one finds is not so much new typography, as new relationships between text and image. In fact, the typography so celebrated over the past ten years of structuralist dissection is disappearing. The look and structure of the letter is underplayed and verbal signification, interacting with imagery and symbols, is instead relied upon. The best new work is often informal and sometimes decidedly anti-formal, despite the presence of some New Wave elements. Reacting to the technical perfection of mainstream graphic design, refinement and mastery are frequently rejected in favor of the directness of unmannered, hand-drawn or vernacular forms—after all, technical expertise is hardly a revelation anymore. These designers value expression over style.

Here on the edges of graphic design, the presence of the designers sometimes so oblique that certain pieces would seem to spring directly from our popular culture. Reflecting current linguistic theory, the notion of “authorship” as a personal, formal vocabulary is less important than the dialogue between the graphic object and its audience; no longer are there one-way statements from designer. The layering of content, as opposed to New Wave’s formal layering of collage elements, is the key to this exchange. Objective communication is enhanced by deferred meanings, hidden stories and alternative interpretations.

“What was originally a revolution is now an institution”
The debate continues, is graphic design art, science, business, craft or language? Graphic design in the United States has operated under multiple identities since its inception with each of these identities dominant at one moment or another. And each may predominate from one project to the next in a designer’s practice today. Often, graphic design is defined as a duality, combing two of these definitions, such as craft/language or business/art. This identity crisis is confirmed by the lack of agreement on a name for the field. Graphic design, visual communications and visual design are all thoughtful names in current use. A variety of archaic terms persist including commercial art, layout and graphics design.

Unlike its venerable cousin architecture, graphic design is a very new design expression, a phenomena of the last hundred years. A spontaneous response to the communication needs of the industrial revolution, graphic design was invented to sell the fruits of mass production to growing consumer societies in Europe and North America in the late nineteenth and early twentieth centuries. Rapidly expanding reproduction technologies provided the means for graphic design’s participation in the vast economic, political, technological and social changes of that era. American graphic design’s roots lie in European type cutting and book printing.
This precursor to the profession was imported to early America as part of our European cultural inheritance. For literally centuries, from the invention of moveable type in the early Renaissance to the twentieth century, bookmaking, typesetting, and type design were an integrated craft and industry centered in publishing houses. This long tradition approached typography and book design as the visual presentation of verbal language, with a premium placed on clarity and legibility. Decisions in type design emphasized clarity rather than expression, relying on the words themselves for the expression of content. Typography was neutral to the message and made no attempt to be interpretive. Craft was highly valued and books developed increasing elegance and refinement as the years progressed, codifying this classical book approach into the standardized traditional text format that continues as the standard of book text today.

However artful the book design, the element of function relegated this activity to craft status rather than fine art. The predominance of text made this tradition largely a verbal language expression. Illustrational imagery was used sparingly in early books due to technical difficulty. When used, it represented literal phenomena and rarely mixed with the text or headline typography. Interpretive symbolic imagery was left to painting, or "high art". Through the centuries painters have employed whole vocabularies of visual nonverbal symbols to convey meaning to their audiences, who were able to decode meaning through learned associations, the result of shared cultural experience.

It was not until the early twentieth century that meaning was embedded in visual typographic form. The early Modern revolutionary artists of Futurism, Dada, Constructivism, and De Stijl turned their attention to text and visual communications as well as the more traditional areas of fine art, rejecting the traditional divisions between the fine arts, applied arts, and crafts. Functional expression was embraced as well as the "purer" self-expressive goals of high art-- function was not viewed as the enemy of art. In particular, the Russian Constructivists retained their artists' identities even as they took on the role of public communicators in the Russian Revolution. The Bauhaus unified art, craft and design in a coherent philosophy and sense of identity. Several early Modernists went on to execute some of the first serious "professional" graphic design, applying their early experiments to the pragmatic communications needs of manufacturing clients.

These revolutionaries explored new approaches to structuring language and imagery that were radical rejections the classical text tradition. Their highly visual poetry used typographic forms and composition to interpret and extend the words' meaning. One does not have to read Italian to gain an appreciation of the Futurists' energetic celebrations of industry and political confrontation. Typography finally became an expressive visual language as well as a verbal one.

This visual/verbal dichotomy can be understood through a simple diagram that charts the process (in the Western humanist tradition) of the acquisition of meaning. Seeing and reading are two modes through which we traditionally think of receiving messages. Image and text are two carriers of those messages. Typically we think of seeing as a visual process connected with images-- we see the landscape, we see a painting. This process is intuitive, emotional and simultaneous, experienced almost involuntarily. Upon encountering a vivid color photograph of a fire, a viewer might immediately sense fear and heat with little need to conceptualize. Or an image of a nude figure might stimulate sexual feelings instantly and involuntarily. Although associations gained through life experience influence this process, it is predominantly a direct experiential one, related to the theories of phenomenology.

On the other hand, the process of reading is typically connected with the verbal process of decoding text's written language signs-- letters. To do this, one must know the code. One must have learned to read the particular language of the message. This process is cerebral, rational, deliberate, and linear. If one does not carefully link the proper sequence of signs, one cannot decode the message. Linguistics, Structuralist philosophy and PostStructuralism deal with these language dynamics. In addition, there are two other linkages possible between seeing and reading and image and text. The early Modernists discovered that text can be seen as well as read, as the Futurists' experimental poetry proved. And images can be read. Neolithic cave painters at Lascaux knew this, as well as most painters until many Modernists rejected imagery in favor of abstraction. This process was reconfirmed by the Surrealists, by the emerging graphic designers of the 1930s and 1940s, by the New York school of advertising, and again by recent PostModern artists and photographers dealing with text/image relationships.

How an artist, designer or craftsman defines oneself has much to do with their use of these text/image processes. Nineteenth century book designer/printers dealt largely with the reading of text, and aligned themselves with the literary field of language. Many early Modernists dealt with all four modes and saw themselves as integrated creators of communications balancing the identities of artist, designer, businessman and craftsman.
American book designer/printers continued the European classical noninterpretive traditions with extremely literal presentations of both imagery and text. But with a public that was increasingly literate, the printer's activities broadened to include early manifestations of the mass media:

- political and commercial handbills in the late eighteenth century
- newspaper advertising
- popular magazines
- advertising cards
- posters in the late nineteenth century

These required headline-sized typefaces. By the Victorian yearsagreat multiplicity of ornamental faces had been born and American wood type was developed as an inexpensive and accessible means of embellishment for popular communications. This much more decorative expression spoke with a louder voice than the subtlety of traditional books, making the reader's experience far more visual. Yet this larger scale of typography contained no coding in its visual form; the process remained one of reading text.

The late nineteenth century's early advertising, magazines, and posters stimulated a new and growing field of illustration. These illustrators rendered highly artful literal depictions of objects, scenes and narratives with growing skill and rapidly evolving reproduction processes. But they employed little symbolism. And because they served the tainted world of commerce rather than practicing "serious" art, these first "commercial" artists were relegated to a class of servant, despite the large public following of many.

American graphic design was finally born out of two new factors. As the 20th century got underway, an explosion of new reproduction technologies stimulated specialization, separating conception and formgiving from the technical production activities of typesetting and printing. Simultaneously the United States received its first European Modernists emigres, the migration reaching its height in the 1930s. These men understood design as a balanced process involving the powerful multiple modes of seeing and reading, and sensed the possibility of theory and method as guiding the creative process-- the first rudimentary seeds of professionalism. These designers, including Bayer, Sutnar, Burtin, Moholy-Nagy, and Matter, brought with them Modernism's dual paths of ambiguity and objectivity. They shared an interest in ambiguity and the unconscious with new work in fine art, literature, and psychology. Interpretive typography and asymmetrical compositions seemed more appropriate in a new world where tradition was rapidly disappearing. Surrealism offered symbolic forms of conceptual communication that went beyond the power of the word.

On the other hand, these European designs believed that rationalism and objectivity were appropriate for a new world ordered by commerce and industry. They continued early Modernism's interest in abstraction and dynamic compositions. For the first time in the United States, they persuaded their clients to minimize copy into brief essential statements, rather than the text-heavy literal description favored in early American advertising. Rudimentary ideas of systematic problem solving and design compositions were offered by Ladislav Sutnar and Andrew Kner. The role of designer was defined as a highly skilled interpreter of messages, a far more authoritative stance than the hired hand following the dictates of an autocratic client. Interpretation was central to the idea of communication. Systematic rationalism drew on science, while inventive compositions and symbolic interpretation related to art, balancing this identity between art, science, craft and business. These emigres had a tremendous impact on a number of young American designers, such as Paul Rand and Bradbury Thompson. As they grew into matured in the 1950s these men developed new approaches to composition, photography and text/image relationships.

Many of their discoveries formed the basis of the "big idea" method of conceptualizing design solutions which placed a premium on the flash of intuition and the individual designer's creativity-- the ah ha! method of problem solving. Centered in New York of the 50s and 60s, this individualistic process idealized the creative genius, symbolized by the maverick designer in his garret studio. (Ralph Caplan has critiqued designers for their willingness to play this role-- what he calls the "exotic menial", the brilliant individual serving the needs of clients, but a servant nonetheless.)

The intuitive conceptual "big idea" method became a uniquely American visual communications expression, and was closely associated with the New York School of advertising of the 1950s and 1960s. Exemplified by Doyle Dane Bernbach's classic Volkswagen Beetle series, this advertising created intelligent and clever interplays between verbal and visual concepts. Short ironic conversational headlines were juxtaposed with provocative images, drawing on the lessons of Surrealism, and particularly Magritte. Unexpected combinations of images and/or contexts created ambiguity and surprise. This "picture is worth a thousand words" approach maximized the process of reading. Both text and image were to be decoded and read by the viewer, relying on semantic meaning with little interest in page structure or systematic organization. Unfortunately many designers today associate this powerful approach with advertising's commercialism and fail to take advantage on the power of the conceptual image/copy concept method.
As this highly successful form of advertising began to dominate American visual communications, the first wave of Swiss design thinking and forms arrived on the American scene. First transmitted in the early 1960s through a few design magazines and books—Graphis and the "bibles" by Muller-Brockmann, Karl Gerstner, Armin Hoffman and Emil Ruder—a few young American designers began to assimilate these ideas. Rudy DeHarak, the most notable of the American designers hungry for some structure, adopted the Swiss method on his own after seeing these influential examples in the design media. Then in the mid 1960s, several professional design offices began to practice these ideas to solve the needs of large corporate clients in Holland, England, Canada and the U.S. A number of corporations and institutions including Container Corporation, Ciba-Geigy, Herman Miller, IBM and Massachusetts Institute of Technology adopted this method and aesthetic. Eventually U.S. corporate culture adopted "Swiss" graphic design as the ideal corporate style. What was originally very difficult to sell to business clients is very difficult to avoid today. This graphic aesthetic and method was the second wave of European Modernism to influence the U.S. Essentially different from the "big idea" approach, it is based on an assumption of Modernist rational "method", a codified approach not so dependent on the individualistic inspiration and talent of the designer. This had a profoundly professionalizing influence in American graphic design, further replacing the commercial artist’s servant image with one of a disciplined, educated professional.

This classic "Swiss" method prescribed an ordered process rather than the genius of inspiration, and promised far more dependable, however predictable, results.

It assumed a rational systems process based on semi-scientific analysis and problem solving. The ideal was the objective (dead serious) presentation of information, rather than the subjective expression of an attitude, emotion or humor. "Swiss" was found to be more suitable for the corporation’s demand for factual accuracy— the perfect style for an annual report—while the big idea was more suitable for advertising’s persuasive goals. Swiss tended to rely on representational photography and minimalist typography, while the "big idea" was far more image-oriented, employing illustration and symbolic photography. "Swiss" graphic expression stressed the syntactic grammar of graphic design with structured grids and typographic relationships. This form of Modernism neglected some of early Modernism’s discoveries with visually expressive typography and surrealistic imagery. For the most part, classic Swiss typography was meant to be read and its imagery to be seen only in the conventional modes.

Swiss tended to rely on representational photography and minimalist typography, while the ‘big idea’ was far more image-oriented, employing illustration and symbolic photography.

As this method influenced the field, graphic design began to split apart from advertising design, a major division that remains today. This classic "Swiss" method prescribed an ordered process rather than the genius of inspiration, and promised far more dependable, however predictable, results.

The "big idea" originated in New York, an American synthesis. The visual symbolism owes some debts to surrealism, but the minimalist approach came from American wit and casual vernacular speech. Although "Swiss" found its first big growth in Chicago’s heartland, introduced by Container Corporation and Unimark International, it is an essentially northern European, or Germanic, sensibility, expression and paradigm. It’s importation to Chicago repeated the route followed by many of the Bauhaus emigres of the late 1930s—Mies, Bayer and Moholy-Nagy. This first wave of Swiss was strongly identified with the Swiss designers of Zurich, Muller-Brockmann and Gertsner, applying Bauhaus early Modernist ideals. Their strict minimalist codified expression of functional messages could be described as Classic Modernism. No sooner than the Zurich Swiss become established in the U.S., a second more mannered form of Swiss developed that could be called Late Modernism. Work from the Kunstgewerbeschule in Basel was a far more experimental and complex, adding many "nonfunctional" design forms. Coming from a school where students and faculty had the luxury of time and experimentation, many rules were broken and the time was taken to develop the sensibility to a high level of aesthetic refinement and complexity. The irreverent Wolfgang Weingart rebelled against the minimalism of his predecessor, Emil Ruder, in the late 1960s and initiated a body of work with his students that pushed early Modernism’s constructivist experiments to their logical extremes. Enlarging on the earlier Swiss issues of structure and composition, he explored increasingly complex grids and typography in experimental compositions that became quite painterly. Yet the typographic play was mainly about the grammar of typography, and neglected semantic expression. This highly formal work was not very conceptual and has been criticized as merely decorative in the final analysis. Depending on one’s critique, this movement could be labeled baroque, mannerist or even decadent Modernism.

As Massimo Vignelli has so often reminded us, theory as well as history and criticism are the essential trinity that distinguish a profession from a craft or trade.
The Basel school's faculty and graduates began to come to the U.S. in the mid 1960s, with a real impact realized in the early 1970s when young American graphic designers 'in the know' began to migrate to Basel for postgraduate training in graphic design. By the mid 1970s some of this complexity began to embellish basic American "Swiss" graphic design in the form of bars and rules and playful mixing of type sizes, weights and faces in an essentially formalist agenda.

As classical 'Swiss' discipline was gaining followers and even before Basel became an influence, Robert Venturi shook the U.S. cultural scene with his 1965 polemical treatise, Complexity and Contradiction in Architecture. Although most graphic designers remained unaware of his premises for many years-- and many may not yet realize his profound influence-- his challenges to Modernist dogma sent shock waves rippling throughout the architecture and design world, stimulating new work that came to be called "PostModern." His arguments in favor of historical pre-Modern architectural forms and crudely energetic commercial American vernaculars eventually contributed to a new phase of American graphic design.

The emergence of graphic design history in the 1970s dovetailed with Venturi's rediscovery of pre-Modern design. It was a definite sign of maturation when graphic design discovered that it had a history. Until then graphic designers felt they were still inventing the discipline. The field seemed completely new with no history, a premise supported by the Bauhaus Modern ideal of constant newness. The first books and conference on design history provided a banquet of historical forms for designers. The results ranged from historical homage, appropriation and quotation to eclecticism, imitation and outright cannibalism.

But Pushpin Studios of the 1960s, a stream paralleling American Swiss, already knew about the pleasures of history. This New York studio's popular eclectic celebrations revived, exploited, imitated and occasionally parodied decades of design styles, but with an essential difference of intention from this new more academic "PostModern" sensibility. Pushpin pursued a hedonistic "if it feels good, do it" free borrowing from history's nostalgia, essentially the same intention as the Victorian American eclecticism they so often imitated. PostModernism's historicism was a more intellectualized self-conscious critique on the meaning of history. Venturi, a professor as well as architect, applied a semiotic analysis to historical and vernacular style, interpreting form as language invested with cultural meaning. Buildings were signs meant to be read by their audiences.

Popular culture vernaculars, history and the Basel school's mannerist Modernism came together in the mid 1970s to create a new, highly formal expression most often called "PostModernism" or "New Wave" graphic design. Bored with the rigidity and minimalism of corporate American "Swiss", American designers, particularly certain educators associated with several of the better schools of graphic design, began to experiment. Working from a Modernist "Swiss" foundation, they began to dissect, multiply or ignore the grid and to explore new spacial compositions, introducing complexity and pattern, and frankly nonfunctional design elements. Hand-drawn gestures and vernacular bad taste were artfully introduced in highly aestheticized layered compositions. This phase could easily be labeled a baroque or decadent American Modernism rather than PostModernism. The expression was still strongly linked with Modernism's interest in syntax and structural expressionism, although by now it had become personal hedonistic formal celebrations rather than impersonal disciplined presentations of functional information. The typography shared Basel's visual complexity and was mainly expressive of itself with little semantically-encoded symbolic meaning. The use of American vernaculars was also mainly a formal, a borrowing of pop forms with little of Venturi's understanding of context or intention.

But it was a lot more fun than classical Swiss, and New Wave quickly spread across the U.S. to become an accepted graphic style. Just as Modernism's classic Swiss was accepted, this too became accepted in the business arena and persists today in a wide variety of corporate applications. In fact it is so accepted, one design historian, Philip Meggs, calls it the New Academy, as prescribed a method as the Beaux Arts school of 19th century French architecture.

New Wave's type of graphic PostModernism is essentially formalist with a rather minor involvement with content-- content being more a jumping off point for graphic celebrations of style than the core of the matter. Certainly the "big idea" school of earlier years was far more dedicated to the communication of content. In fine art, a more profound aspect of PostModernism has emerged as a body of self-conscious critical theory and expression. In fact, in much PostModern art, photography and music the central expression is a critique of our accumulated body of culture and symbol. Appropriation and pastiche recycle our experience in highly referential work that owes everything to what has gone before. All this has its roots in structuralist semiotics of the 1960s, as well as Venturi's ideas. Although semiotics never became a practical design method, it and Structuralism's successor, post-Structuralism, have recently provided a real method and expression in the visual arts and graphic design. Coming out of literary theory, visual phenomena are analyzed as language encoded for meaning. Meanings are deconstructed, exposing the dynamics of power and the manipulation of meaning.
PostStructuralism and recent fine art have influenced a promising new direction that is more truly PostModern. Graphic design is analyzed in linguistic terminology as a visual language. The audience is approached as readers as well as viewers. In the best of this new design, content is again at center stage. Images are to be read and interpreted, as well as seen; typography is to be seen as well as read. M & Co.’s provocative narratives exploit the power of familiar clichés, vernacular typography and closeknit text/image connections. Rick Valicenti’s auditory typography speaks with a tone of voice and mixes image and letter in rebus-like “sentences.” The connection of word and image is again as rich as the New York School’s, but with a visual compositional interaction as well as a conceptual verbal one. The best new work draws on the formal lessons of Basel and New Wave while drawing on all four seeing/reading/text/image modes simultaneously in powerful visual/verbal conceptual expressions. There are layers of meaning as well as layers of form.

This work has an intellectual rigor, demanding more of the audience, but also rewarding the audience with more content and autonomy. The focus is on the audience to make individual interpretations in graphic design that “decenters” the message. Pieces are a provocation to consider a range of interpretations, based on Deconstruction’s contention that meaning is inherently unstable and that objectivity is an impossibility, a myth maintained to control the audience. Graphic designers have become dissatisfied with obedient delivery of the client’s message. Influenced by recent fine art, many are taking the role of interpreter a giant step beyond the “problem-solving” tradition by authoring additional content and a self-conscious critique to the message, reviving roles associated with both art and literature. Gone are both the commercial artist’s servant role and the Swiss designer’s transparent neutrality. Wit, humor and irony are reappearing in irreverent and sometimes self-deprecating pieces that often speak directly to the reader in the second person plural, often with multiple voices. Venturi’s view of history and vernacular as symbolic languages is finally being explored. Stylistic forms are appropriated with a critical self-consciousness of their original content and context.

This new work is smart and cerebral, challenging its audience to slow down and read carefully in a world of fast forward and instant replay, USA Today and sound bites. The emphasis is on audience interpretation and the construction of meaning, beyond raw data to the reception of messages. This direction seems aligned to our times and technology, as we enter an era of communications revolution and complex global pluralism. Desktop publishing is placing the production of low end print communications in the hands of office workers and paraprofessionals. Even the simplest corporate report is now typeset and formatted, raising the visual expectations of our audiences. To distinguish high end graphic communications from the vast output of desktop publishing, a new demand for highly personal, interpretive and eccentric design expressions is surfacing.

With this new interest in personal content, the graphic design may once more turn toward the fine arts, but built on decades of progress in methodology, theory and formal strategies. The multivalent character of graphic design continues to shift between opposing values. Is this fluidity an indicator of the field’s persistent immaturity, or a confirmation of its relevance to a rapidly changing world? Oppositions—art/business, visual/verbal, European/American, scientific/intuitive—are graphic design’s strength and richness.

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Today there is hardly a designer under retirement age that doesn't begin the workday by booting up the Mac. In the past ten years, the computer has thoroughly transformed graphic design practice. But this book is about a different revolution, a second computer revolution. Now computers are transforming a deeper level of visual communications fundamentals, becoming more than a sketching, composition and production tool for graphic design. Electronics are becoming communications’ delivery medium, the context, the content and a conceptual world as well. This form of graphic design is no longer linear and two dimensional. It is hyperfluid and six-dimensional, adding the dimensions of real time, motion, sound and interactivity to our two traditional XY coordinates.

Increasing amounts of visual communications are delivered to our audiences via screens. Will a conventional printed piece soon be the exception, rather than the typical output of graphic designers? Digital graphic design shapes computer operating system logic and displays, software interfaces, smart product interfaces, hypermedia, electronic publishing, interactive education and information systems, digital interactive exhibits, plus a plethora of internet applications and the exploding world of websites. Nearly all conventional forms of design, including editorial design, corporate publications design, advertising, packaging, exhibits, signage, products and interiors, are infused with electronic media and intelligent digital characteristics that interact with their users and audiences.
Most of the pioneering graphic designers that specialize in this area today have had to acquire this knowledge informally, largely through trial and error, in the context of professional design practice. There is yet a real educational vacuum in this emerging field-- few offices have design staff actually trained in universities for this new discipline, and only a few true design programs exist to date. Too much of this area is covered by default by people untrained in visual communications methods and formgiving. Electronics technologists make many of the design decisions in the digital world, as well as the thinly trained output of the host of lower level schools, many at the community college level, that are rushing to offer roughly formulated programs on internet design. Most of these programs are essentially superficial software instruction and are far too short and shallow to meet the challenges of this field. To become a professional discipline, this new field needs fully formulated curricula on the university level. A solid design education in the design of new media may take more than four years; graduate level study may be necessary to achieve any depth and expertise.

This vast field desperately needs to define its process and professional content-- a philosophy and curriculum, and an identity. It even needs a name. The terms “new media” and “multimedia” are problematic, their vagueness and ambiguity contributing to the misconception that anyone familiar with the software tools is qualified to practice in it. “Computer graphics” and “website design” describe the product rather than the conceptual process of designing.

**So what is the name to be?**
+ Multimedia design?
+ New media design?
+ Digital graphic design?
+ Computer-delivered visual communications?
+ Screen-based communications?
+ Electronic communications design?

Words come loaded with the baggage of associations, and most seem inadequate or inappropriate to describe this new process. Somehow the product, or at least the output medium, is easier to describe. But as professionals, we need an identity for the conceptual process and professional service. “Graphic”, as in graphic design, hardly seems applicable, referring as it does to the venerable tradition of paper-based multiple markmaking. Fine art printmakers and the printing industry also claim ownership of the term “graphics”. The adjective “visual”, as in visual communications, seems inappropriate now that sound has been added to our communications tools.

“Design” remains at the core of our process, with its reference to conceptual analysis, planning and strategy. Because “communications” is our goal, I find myself using the term ‘communications design’ more frequently than ‘graphic design’ in these days of rapidly changing practice. Perhaps “digital communications design” best describes our new realm.

But is it graphic design? Louise Sandhaus of California Institute of the Arts poses this rhetorical question. Is new media design a subset of graphic design? Or a sibling of graphic design under the larger umbrella of communications design? Or is this field destined to evolve into a mature and separate design discipline, as autonomous as interior design, industrial design, or illustration? Another Cal Arts graphic design educator, Edward Fella, has argued that conventional graphic design and the emerging field of digital communications design are as different as photography and film. University design programs and our professional design organizations are currently debating these possibilities.

When compared to visual communications subsets like typography or editorial design, digital communications design has a larger magnitude of difference. While this new area draws on many traditional graphic design skills and methodologies, it also dives into a whole new universe which is largely conceptual, and less tangible. It employs a new medium, electronic information processing, and new output, which is often interactive and dynamic. This is a new world of experience for our audiences— a conceptual space, a digital environment peopled with virtual personas and communities in continuous flux.

As a result, digital communications design is far more conceptual than traditional graphic design and requires a much more deeper understanding of the communications process. This is not just making nifty images on a computer. To create comprehensible virtual communication spaces for our audiences, designers must grasp profoundly more complex fundamentals of how human beings receive information, conceptualize information space, navigate and orient themselves, understand, respond, make choices, change behavior and express themselves. Not only is communications theory and methodology applicable, including semiotics, but also cognitive and perceptual psychology and strategies from the social sciences and cultural anthropology. Some designers must be literate in computing science. Neighboring disciplines, such as urban design, film, music composition, drama and storytelling are useful to designers through analogy. All these sources are rapidly recombining into whole new theories and methods in this wide open environment.
our audiences become more visually educated and discerning with a constant appetite for the new, communications environment, clients will seek an even higher level of professional design vision to keep their communications compelling and competitive in an ever-expanding
The real challenge is to explore, develop and codify a new language of interaction design that ranges from the very technical and structural to the sensual and cultural interface of virtual communication spaces. What serves as an interface in print design—a table of contents, page turning, and index—has become incredibly more complicated in the digital domain.

Interactivity compels the greatest magnitude of change to graphic design process. Interactive nonlinear communications create conceptual spaces are far more complex than the two-dimensional spaces traditional graphic designers are so expert at shaping and our audiences are experienced in understanding. Interactivity requires new kinds of wayfinding through the information, experience or the task at hand, and the skillful pacing of time. When compared to non-interactive design projects, form giving comes at the very end of greatly extended conceptualizing stages. The complexity of interactive communications projects frequently can only be handled by teams of specialists offering a wide range of expertise from communications design and neighboring disciplines.

Much of this sounds extremely scientific, which it is.

The knowledge ante has been upped several magnitudes.

Those that came to design for its individualistic artistic expression will need to assimilate a new culture, and either acquire extensive new expertise—theoretical and technical—or learn to partner with those that do.

On the other hand, digital communications design must find a careful balance of the conceptual and the aesthetic as it evolves. Design is a narrow bridge between the worlds of science and art, the analytical/rational cerebral and the intuitive/subjective/sensory. It is critical that we not abandon the sensual and emotional side of this equation, including the expressive contributions of graphic design imagery and typography.

The designer’s imperative is to mediate between human beings and technology, to warm up, humanize, animate and materialize digital communications for the user. In doing so, function will be served and communications enhanced.

Since the advent of television and computers, the audience’s relationship to the electronic screen has been predominantly "frontal" and passive. To activate and animate screen communications, we need to develop a visual/verbal/audio/motion/interaction language, a new vocabulary of both conceptual and visual strategies. Just as the first movies used theater as a model before evolving a film language, new media must move beyond the metaphors of print and other familiar media to form an eloquent language of interaction.

Steven Johnson of Feed, an electronic magazine, sees this happening already and predicts that the Web experience is on the brink of becoming an art form and needs a nuanced vocabulary. He critiques current efforts to develop a language of interaction as narrowly utilitarian. Johnson contends that as designers’ expertise matures—and that of our audiences—more poetry and mystery can be added to the equation. More experienced users can tolerate and even demand a broader interaction where even chance, randomness and unpredictability are considered virtues.

What are the forms—visual, verbal, acoustic, spatial, temporal, structural—to build rich, compelling and memorable experiences? We await the strategies to be codified into signposts for designers on the electronic superhighway. Barbara Kuhr, design director of Hotwired, asks, "When will we design cars?" She points out that in the early years of motorized transportation, there was a wide variety of "horseless carriages", defined more by their antecedent than by the new paradigm of "cars" that eventually emerged and persists today. She anticipates the codification of some design paradigms to guide both designers and their audiences in the digital domain.

But perhaps digital design and the language of interaction will not be like cars, or film either, both of which have remained fairly constant once their paradigms were defined years ago. Film is a linear medium and cars are physical hardware that move real bodies of flesh and blood. Electronic technologies are dematerialized and in constant flux and evolution. Could it be possible that the nature of digital communications will remain a moving target? A language of interaction will be like a vernacular spoken language—more like English than Latin—that is in a constant state of mutation. Maybe there never will be fixed "rules", but rather constant evolution in a medium well suited for designers who are energized by experimentation. This is an exciting prospect, appropriate to designers’ special abilities to respond rapidly to change and solve problems on the fly. On the other hand, it could be very uncomfortable for designers who prefer "rules" and educational programs that need curricular structure.

Interactive digital technology is forcing another major paradigm shift that humbles as well as frees the traditional graphic designer. The digital delivery of interactive communications design media allows our audiences to "finish" our work. Communications design "pieces" will increasingly be delivered to audiences as potential experiences to be initiated by each receiver and "read" in a unique way based on each receiver’s preferences, interests, values, needs and even moods. Websites, CD-ROMs, interactive TV and advertising, and tailorable software are examples.
Designers find they cannot control many variables of how a home page downloads, not only because of the vagaries of differing electronic formats, but even more due to the preferences of our audiences who are increasingly opinionated and educated in the subtleties of form in typography, imagery and sound. Interactive media encourages audience members to create and add content.

This environment requires a much different visual design strategy than that of the traditional perfectionist designer. What are the implications for graphic designers trained in the modernist traditions of clarity, formal refinement and professional control? We can no longer think of our work as the production of as precious perfect artifacts, discrete objects, fixed in their materiality. The designer is no longer the sole author, realizing one’s own singular vision. This forces a reordering of our design intentions. The designer is an initiator, but not a finisher, more like a composer, choreographer or set designer for each audience member’s improvisational dance in a digital communications environment.

In fact, the potential for audience-customized communications is a powerful communications tool. Interactive electronic communications can be configured by each user to deliver they need when they need it, tailor able to their changing skills, characteristics and context over time. New interactive technologies make it possible to individualize all kinds of products and services.

The unfinished quality of on-line electronic media also offers valuable opportunities as well as challenges. For instance, the imperative to continuously update and upgrade a website to encourage repeat visits has all kinds of organizational implications, like long term budgeting and staffing, and maintenance of design integrity. But it also allows the designer to dynamically evaluate the success of an on-line piece through feedback on the number and duration of audience hits. We can now measure what is interesting and who is interested. Continuous cycles of iteration, testing and redesign are possible and practical. A piece is always a prototype, open to refinement and enhancement.

Design for experience and personalized interpretation is an opportunity to engage the audience’s interpretive powers, to counter the passive couch potato syndrome. Interpretive design can challenge the viewer to participate, to react, to think, and affect the outcome. Audience choicemaking and active feedback promise a deeper level of interactive communications.

Digital designers must understand how people construct meaning when they encounter information, objects or situations. Postmodern literary criticism and art theory offer promising strategies for the new interactive communications channels environment rich in dialog, discourse, debate, transaction, and negotiation. These deconstructive theories of discourse explore the potential for dialog between sender, message and receiver, and shift the major responsibility for meaning from the sender and message to the receiver. Meaning is constructed through the active participation of each reader/viewer who interprets multivalent nonlinear messages. Timothy Druckery, in a Siggraph essay, calls for theories of interactivity to be joined to theories of discourse.

We are coming to see digital technology as a sort of artifact, in spite of its immateriality. We already collect music CDs, and now CD-ROMs. Soon, family photo albums will be in digital format. Many graphic designers have digital image banks and sound collections stored in their computers. And so do our audiences, many of whom continuously sample elements that appeal to them and then recombine into their own Web compositions. Twelve year olds and grandmothers now know the difference between Times Roman and Univers. Audiences are becoming fans, connoisseurs and critics of digital communications design.

Many designers are worried about this amateur involvement in design. Professionals fear that their special expertise will lose value in a world where anyone with a computer and easy-entry software can make design and publish it through accessible desktop internet tools. On the other hand, as our audiences become more visually educated and discerning with a constant appetite for the new, clients will seek an even higher level of professional design vision to keep their communications compelling and competitive in an ever-expanding communications environment. Audiences demand the richness and performance of design expertise that elevates messages from informational data to truly resonant communications. Agile communications designers can only benefit from this challenging new world.