

# Journal of Business and Technical Communication

<http://jbt.sagepub.com/>

---

## **Typographical Design, Modernist Aesthetics, and Professional Communication**

Charles Kostelnick

*Journal of Business and Technical Communication* 1990 4: 5  
DOI: 10.1177/105065199000400101

The online version of this article can be found at:  
<http://jbt.sagepub.com/content/4/1/5>

---

Published by:



<http://www.sagepublications.com>

**Additional services and information for *Journal of Business and Technical Communication* can  
be found at:**

**Email Alerts:** <http://jbt.sagepub.com/cgi/alerts>

**Subscriptions:** <http://jbt.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

**Citations:** <http://jbt.sagepub.com/content/4/1/5.refs.html>

>> [Version of Record](#) - Jan 1, 1990

[What is This?](#)

---

# Typographical Design, Modernist Aesthetics, and Professional Communication<sup>1</sup>

Charles Kostelnick  
Iowa State University

*The technology of in-house publishing is radically shifting the responsibility for document design from the graphic specialist to the individual writer. To apply the new technology, professional communicators need to understand the principles underpinning typographical design and their origin in the functionalist aesthetics of modernism, particularly as articulated by the Bauhaus. While some of the key concepts of modernism—strict economy, universal objectivity, intuitive perception, and the unity of form and purpose—are well-suited to business and technical documents, these concepts are bound to an historical and intellectual milieu. By understanding the influence of modernism on typographical design, professional communicators equipped with the new technology can adapt design principles to the rhetorical context of specific documents.*

Whether they are prepared to or not, professional communicators are rapidly assuming greater control over document design. The technology of computers and laser printers now enables business and technical writers to select and embellish typefaces, adjust type size, design pages, and insert icons and graphic cues at will. (See Bowman and Renshaw for an overview of the new technology.) As this technology transfers design from the graphic studio and printing shop to the desktop, professional communicators will have to acquire far greater facility with visual language.

Desktop publishing, of course, is not the first technological innovation to change document design. In the late nineteenth century, the typewriter altered the visual language of handwritten correspondence by distributing text across the page in exact units (Walker 103). Although the typewriter transformed the visual language of practical writing, the dialectic between taste and utility—which characterized the development of handwriting—continued to govern visual design (Kostelnick, “Evolution”). Technology may define the scope and nature of visual language, but document designers articulate this language with both functional and aesthetic choices.

We are now at another watershed in document design—one that offers a far richer vocabulary of visual language but one that also entails new risks and responsibilities. With the advent of computer-generated publishing, the technical capabilities that have heretofore

---

1. I wish to thank the MIT Press for permission to reproduce Figures 2 and 3, which are taken from Hans M. Wingler’s *The Bauhaus: Weimar, Dessau, Berlin, Chicago*. These visuals may not be reproduced without permission in writing from the MIT Press.

been the preserve of graphic specialists, typographers, and printers are now within the reach of the professional communicator. This transfer of technology from the graphic specialist to the writer will give professional communicators unprecedented control over document design, requiring them to integrate visual and verbal language in virtually every communication task—from a manual, proposal, or complex report to the most routine letter or memo. The new technology will also expand the role of the professional communicator: Instead of placing text for a brochure, newsletter, or annual report into the hands of the graphic specialist, professional communicators will likely design these documents themselves. In assuming their new roles—as typographer, graphic designer, and aesthetician—professional communicators will encounter a host of questions about the relation between form and text, the nature of visual rhetoric, and the application of design principles to professional communication.

How will professional communicators cope with these issues? Already we are being bombarded with the jargon of the typographer (“picas,” “points,” “leading”), which has begun to reach professional communicators through a variety of media: computer software, document-design seminars, and in-house publishing magazines. For example, *Publish!*, a magazine specializing in desktop publishing, contains a section called “Page Makeover,” which advises neophytes on how to design documents and how to manage the Pandora’s box of graphic tools now within their grasp. One such article in this section, for example, stresses visual simplicity, giving readers suggestions on how to avoid “busy” pages and to create a “cleaner look.” The designer should analyze the intended message and devise a “design system” that clarifies the content of the document. Designers, moreover, should select visual elements that produce “dynamic movement,” guiding the reader’s eyes across the page (Spiegelman 77-78). These guidelines represent design as a highly intuitive process that requires the right feel for page design, for the reader’s perceptual experience, and for melding visual and verbal styles. Indeed, in *Graphic Design for the Electronic Age*, Jan V. White advises the neophyte to “relax” and to “do what feels sensible” (1, my emphasis).<sup>2</sup>

This kind of instruction supposes that anybody can learn how to design and that a perceptual state of innocence, untainted by an adherence to formal conventions, is the *sine qua non* for getting started. I use these examples not to criticize this approach—after all, visual design entails both intuitive and rational choices—but to raise some important questions facing professional communicators: Where do these notions about simplicity, combining text and form, and creating perceptually “dynamic” pages come from? Upon what authority do they rest? Moreover, how do we square these apparently subjective claims with the emerging “science” of information design?

To answer these questions, I wish to explore the aesthetic under-

2. Along similar lines, White advises: “Don’t think about design; it will happen by itself as you solve the problem” (9). I wish to thank Sarah K. Burton for calling my attention to White’s text.

pinnings of modern typographical design, as well as to show that, because of its functional orientation, modernism actually anticipates the rational, objective approaches to information design. My argument here is that **many of our ideas and assumptions about the nature of design—both subjective and objective—originate in the intellectual and aesthetic doctrines of modernism, which encompassed a variety of disciplines, including architecture, art, and typography.** The principles of modernism coalesced in the Bauhaus, an international school of design that began in Weimar (1919-1925), came to fruition in Dessau (1925-32), and later closed in Berlin (1932-33). Integrating theory and practice, the Bauhaus provided the intellectual and aesthetic underpinnings for modernist design—not only in architecture but in all forms of visual expression, including typography.

Before professional communicators exercise their typographical freedom—made possible by laser printers, scanning devices, and ever more sophisticated software—they need to know the origins of the modernist paradigm and its implications for text design. My focus, then, will not be the *technology* of computer-generated publishing—plenty is being written about that—but instead the *design theories and principles* that professional communicators will likely apply in transforming this technical wizardry into usable documents. To do so, I will first outline the intellectual background for modernist design, then explain in more detail some of its key principles. I will then show the implications of these principles for professional communicators in the postmodern era.

## The Intellectual Background for Modernist Design

**Modernist aesthetics privileges precision, economy, and objectivity—**machine-age values that underpin not only art and architecture but information design as well. As Robin Kinross has shown, the quest of information designers for a functional, objective visual language had its roots in modernism (“Rhetoric” 24-29).

To establish such a language, over the past four or five decades information designers have examined typefaces, textual arrangement, data displays, and pictographic symbols, constructing a perceptual and cognitive profile of how readers visually process texts. While some of this research is better suited to giving us proscriptive, rather than comprehensive, design guidelines, recent studies by James Hartley and by Patricia Wright, among others, have provided valid reader-oriented methods for evaluating the usability of visual language in a variety of contexts.<sup>3</sup> Far from being antithetical to aesthet-

---

3. For a summary of some of this empirical research and its benefits and limitations, see Kostelnick (“Systematic Approach” 39-40). Tinker, for example, showed that some typographical displays are less legible than others (e.g., continuous text set in upper case is less legible than text set in lower case). While these findings, along with Tinker’s experiments in line length and leading, provide general guidelines for designers, they do not provide

ics, however, these rational, functional approaches to text design grew out of modernism, which provided the impetus for objective empirical inquiry.

Although modernism created the intellectual climate for information design, the modernist alliance with functionalism lay not so much in the realm of science as in that of aesthetics, culture, and ideas. As such, modernist designers were not concerned with testing and validating existing forms but with discovering new forms that embodied machine-age values. By cultivating a functional, international style, modernists worked within the intellectual environment of the time.

While technology supplies the means to invent, designers respond intuitively to a particular cultural milieu in which they create a new visual language (Crouwel 152-57, 160; Kinross, "Rhetoric"). The critical period in the development of a modern style occurred in the first three decades of the twentieth century when a series of aesthetic movements, culminating in the Bauhaus, transformed the language of design. Among these movements and their chief advocates were Futurism (Marinetti, Boccioni), Constructivism (Lissitzky, Zwart), De Stijl (van Doesburg, Mondrian), and Cubism (Picasso, Braque). These and other movements in art and architecture laid the theoretical foundations of modernism, which the Bauhaus assimilated and combined under the leadership of Gropius, who directed the Bauhaus between 1919 and 1928. (See Banham 12, 276; Pevsner 38-39 for detailed discussions of this concept.) Significantly, then, developments in architecture played a central role in the evolution of graphic design (Hurlburt 8-9). As Herbert Spencer points out, "The roots of modern typography are entwined with those of twentieth-century painting, poetry, and architecture" (11; see also Crouwel 152-53). The revolution in textual form was inseparable from the modernist transformation of the visual arts.

The aesthetics of architecture and art extended to the printed page because early twentieth-century modernists sought to integrate a variety of design disciplines under the aegis of functionalism. This fusion of the arts, which had been anticipated in the writings of Ruskin and Morris, was now propelled by a machine-age sensibility. The "beauty of speed," as Marinetti put it in his 1909 *Manifesto of Futurism (Selected Writings 41)*, would permeate all facets of modern life. The Bauhaus—the fullest integration of design disciplines in which typography played a major role—sought to erase the barrier between art and functional application.<sup>4</sup> "There

---

easy solutions to complex problems. Nonetheless, even if translating empirical research into practical guidelines can be slippery business, the process of inquiry itself can identify key issues pertaining to usability and thereby aid the designer (Barnard and Marcel 38).

4. According to Sibyl Moholy-Nagy, "Typography was given a place of equal importance with painting, sculpture, architecture, theatre and all the crafts in the Bauhaus Program" (47).

is no essential difference,” Gropius announced in the First Proclamation of the Weimar Bauhaus in 1919, “between the artist and the craftsman” (Bayer, Gropius, and Gropius 18). A technological culture demanded a functional design program capable of solving contemporary problems—from the configuration of a building or a piece of sculpture, to that of a chair, teapot, or brochure. The aim of the Bauhaus curriculum in design was to explore the functional value of forms and materials and to strip away the shackles of traditional styles and methods. As Bauhaus designer and teacher Moholy-Nagy put it, “The multiplication of mechanical appliances, and new methods of research, required a new intellectual orientation, a fusion of clarity, conciseness, and precision” (*New Vision* 19). Under the auspices of functionalism, the engineer became the “noble savage” (Banham 123; see also Gropius’s remarks in Wingler 52) of modernism, the one who saw purely and innocently with an instinct for utilitarian efficiency. Not surprisingly, the designer Le Corbusier found inspiration in grain elevators and ocean liners (25-33, 81-97), and some of the pivotal modernist designs exemplified what Reyner Banham called the “factory aesthetic” (79-89). This sort of rational functionalism engendered a practical aesthetic which the Bauhaus transformed into a cohesive program.

Because of its multidisciplinary, functional orientation, modernist design immediately served commercial, technical, and political purposes. Futurist manifestoes integrated visual art, politics, and contemporary life; Constructivist designs transmitted political propaganda, advertising, and civil-service information; De Stijl and Cubist collages revolutionized poster display. Stressing “workable” principles of art” (Kery 13), the Bauhaus directly applied modernist aesthetics to commercial tasks. Gropius envisioned the Bauhaus integrating not only art and technology but also art and industry (Bayer, Gropius, and Gropius 27-28). The Bauhaus gradually undertook commercial work, instituting a printing workshop and a typography and art department, which carried out commissions in advertising, publicity, and exhibit display.<sup>5</sup> As the Bauhaus matured, it shifted from a “romantic” to a “functionalist” approach to typographical design (Bayer 22-23), which was initially influenced by Constructivist principles and which was later used to display technical, scientific, and economic information (Müller-Brockmann 216). By searching for functional solutions to practical problems and by integrating a variety of disciplines, the Bauhaus transformed modern document design. Thus, not only architects and artists but business and technical communicators as well can lay claim to the Bauhaus legacy.

5. These commissions included exhibit displays for the Junkers Works at the “Gas and Water” exhibition in Berlin. Advertising materials, some of them produced under the direction of Joost Schmidt, were also designed for other firms (Wingler 510-12).

## Some Key Ideas of Modernist Design

Contemporary text and information design, then, are rooted in the visual aesthetics of modernism. To trace these roots, I will explore four key ideas, crystallized by the Bauhaus, that have profoundly affected the way we think about the visual design of information:

- the unity of text and form
- the emphasis on economy and simplicity
- the search for a universal, objective style
- the faith in intuition, both in terms of the innate perception of the individual and the collective intuition of a culture

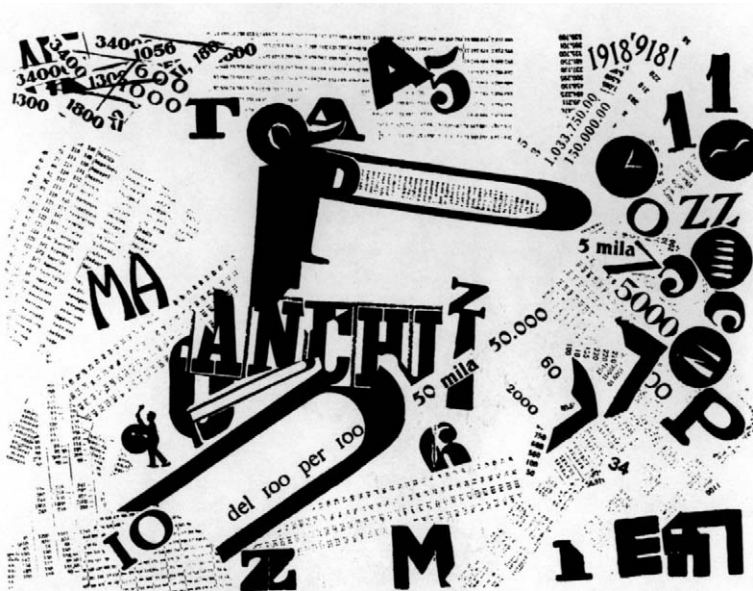
### Unity of Text and Form

Functional modernism demanded a clear connection between the form of an object and its purpose. Superimposing a traditional façade over a new building lacked taste because it contradicted the functional purpose of a modern building. This insistence on the unity of form and purpose also applied to texts. Before modernism, convention largely superseded invention, and typography evolved slowly. The early modernists, however, created new techniques which unified text and form by freely combining words and visual elements (Crouwel 152-57; Spencer 15-27). The Cubists integrated fragments of text into their paintings and collages, while the poet Apollinaire arranged verses on the page to create what he termed “ideogrammatic poems” or “calligrammes” (Spencer 17). These experiments contributed to the expanding pool of fresh, unorthodox forms that directly challenged traditional visual language.

The real breakthrough, however, came with the explosive designs of Futurism, which melded text and visual form into a single message. Marinetti’s Futurist “words-in-freedom” poetry (*Selected Writings* 98), illustrated in Figure 1, created visual dynamism by swirling textual fragments around the page in varying typographical configurations, evoking the quintessential Futurist values of dynamism and speed. Marinetti’s design radically transforms the role of typography, combining numbers, pictures, and fragments of words to simulate the “beauty of speed.” His composition captures in exaggerated form the essence of early modernist typography: to “set vision in motion” (S. Moholy-Nagy 46); to fuse text and visual image into a dynamic unity whereby text becomes image, image becomes text. (See Perloff 94-101 for a discussion of Futurist text design.) The designs of other movements—for example, the Constructivist posters of Lissitzky and the De Stijl compositions of van Doesburg—also combined text and form, further energizing the visual language of the printed page.

These typographical innovations paved the way for the Bauhaus designers. The impulse to unify text and form can be clearly seen in Figure 2, Joost Schmidt’s poster for the 1923 Bauhaus exhibition. Schmidt, a student who later became an instructor of typography, uses words, lines, circles, and arcs to create dynamic axes that com-





**FIGURE 1. MARINETTI, UNE ASSEMBLÉE TUMULTUEUSE (SENSIBILITÉ NUMÉRIQUE)**  
*Les Mots en Liberté Futuristes*, 1919, p. 108.

bine text and graphics into a single message. The boundary between word and image is virtually erased, as the text extends the graphics, and the graphics unify and articulate the text.

Schmidt’s artistic composition, however, was only part of a larger, more comprehensive Bauhaus program aimed at integrating form and function. **The early Bauhaus explored the spiritual quality of design, by which Gropius meant the essential unity of form, material, and use:**

We perceive every form as the embodiment of an idea, every piece of work as a manifestation of our innermost selves. Only work which is the product of inner compulsion can have spiritual meaning. (Bayer, Gropius, and Gropius 22)

This bond between form and idea, which the eclectic styles of the nineteenth century had undermined (Pevsner 19-20), was one of the cornerstones of the Bauhaus program. This principle was epitomized in the Bauhaus Basic Course (*Vorkurs*) in design, required during the first year of study. **In the Basic Course, Johannes Itten and his successors taught that the unity of form and purpose was intimately bound to the elementary qualities of materials and geometric shapes, an understanding of which prepared students for productive design in any media or discipline.** Josef Albers exemplified this ap-





**FIGURE 2. SCHMIDT, POSTER DESIGN FOR THE 1923  
BAUHAUS EXHIBITION**

From Hans M. Wingler, *The Bauhaus: Weimar, Dessau, Berlin, Chicago*, p. 377. English adaptation. Copyright © 1969 by The Massachusetts Institute of Technology. Reprinted by permission of the MIT Press.

proach in his initial assignment in which he asked students to create designs from newspapers, an exercise that taught students to adapt forms to the materials at hand (Beckmann 196-97).

We can credit the Bauhaus both for crystallizing the unity between form and idea and for applying this principle to practical text design. Moholy-Nagy, an artist and theorist and a key figure in the Bauhaus printing program, explains that “the new typography is a simultaneous experience of vision and communication” (“The New Typography” 76). **Unlike traditional approaches, which produced passive compositions, Moholy-Nagy’s new methods of design appealed to the vision of the reader by activating the page:**

An essential component of typographical order is the harmonious arrangement of the surface spaces, **the invisible and yet clearly perceivable tension-laden linear relationships that permit various possibilities of balance apart from symmetrical equilibrium.** In contrast to the centuries-old static-concentric equilibrium, one seeks today to produce a **dynamic-ecentric equilibrium.** In the first case the typographic object is captured at a glance, with all the centrally focused elements—including the peripheral ones; in the second case, the eye is lead [*sic*] step by step from point to point, whereby [the awareness of] the mutual relationships of the individual elements must not suffer . . . (“Modern Typography” 81)

**This dynamic structuring of the text on the page guided the eye of the viewer through the information, enhancing the expressiveness and legibility of the document.** In Moholy-Nagy’s designs for the Bauhaus, he uses bold lines to divide the page, organizing the information into contrasting units that guide the eye “step by step from point to point.” A similar approach can be seen in Figure 3, Herbert Bayer’s design for a broadside outlining the curriculum (*Lehrplan*) of the Dessau Bauhaus. Here Bayer uses lines, headings, and spatial variations in the text to articulate the information visually. Moholy-Nagy’s and Bayer’s pages are far more rational, controlled, and rectilinear than Marinetti’s chaotic composition but, like the early Futurist designs, treat visual language as absolutely integral to the message.

Today, we take for granted the role of visual design in communicating the tone, style, arrangement, and content of a message. The visual language of the text *is* the text—the two are inseparable—and readers expect consistency between the purpose of a document and its textual form. This expectation is a twentieth-century phenomenon that grew out of modernist theories about the nature of design.

### **Emphasis on Economy and Simplicity: The Death of Ornament**

Unifying form and purpose in the machine age required justifying each design element on functional grounds. The beauty of the machine, moreover, could only be captured by reducing forms to their essential components. This radical emphasis on economy epitomized Gropius’s vision for the Bauhaus:

# das bauhaus in dessau

## lehrplan

**zweck:**

1. arbeit in einer leitungsverantwortung unter abschluss eines gesetzlich festgelegten und eingetragenen formellen berufsausbildungslehrganges für die berufsprüfung
2. praktische verfahrensweise zur herstellung von bauelementen, bauteilen, bauteilgruppen und bauelementgruppen
3. praktische verfahrensweise zur herstellung von bauelementen, bauteilen, bauteilgruppen und bauelementgruppen

**lehrgänge:**

1. werklehre für:
  - a) holz (bauelemente)
  - b) metall (bauelemente)
  - c) keramik (bauelemente)
  - d) gewebe (weberei, kleberei)
  - e) baum und kunststoff
- ergänzende lehrgänge:
  - materiallehre
  - werkstofflehre
  - schweißtechnik
  - präzisionslehre
  - vertragsschließen
2. formlehre (grafisch und theoretisch)
  - a. anschaunng
    - 1. westhofkunds
    - 2. naturstudium
  - b. darstellung
    - 1. projektionslehre
    - 2. konstruktion
    - 3. werkschriften und modellbau
  - c. gestaltung
    - 1. zeichnung
    - 2. bauelemente

**ergänzende lehrgänge:**

- sonstige aus gebieten der kunst und werkschaft

**lehrlinge:**

- 1. grundlehre
  - a. bauelemente
  - b. bauteile
  - c. bauteilgruppen
  - d. bauelementgruppen
- 2. bauelemente
  - a. bauteile
  - b. bauteilgruppen
  - c. bauelementgruppen

auskunft erteilt die geschäftsstelle des bauhauses tessau maurerstr. 36



**2. bauelemente:**

die arbeit in einer leitungsverantwortung unter abschluss eines gesetzlich festgelegten und eingetragenen formellen berufsausbildungslehrganges für die berufsprüfung

**3. bauelemente:**

die arbeit in einer leitungsverantwortung unter abschluss eines gesetzlich festgelegten und eingetragenen formellen berufsausbildungslehrganges für die berufsprüfung

**praktische versuchsarbeiten:**

wird entsprechend für bauhaus auf bauelemente, bauteile, bauteilgruppen und bauelementgruppen

**lehrlinge:**

- 1. grundlehre
- 2. bauelemente
- 3. bauteile
- 4. bauteilgruppen
- 5. bauelementgruppen

**aufnahme:**

die erfordernisse sind: einjährige schulbildung für die arbeit, ebenfall ein bauteilgruppenbildung, bauteile, bauteilgruppen und bauelementgruppenbildung, bauteile, bauteilgruppen und bauelementgruppenbildung

**lehrgänge:**

- 1. bauelemente
- 2. bauteile
- 3. bauteilgruppen
- 4. bauelementgruppen
- 5. bauelemente
- 6. bauteile
- 7. bauteilgruppen
- 8. bauelementgruppen
- 9. bauelemente
- 10. bauteile
- 11. bauteilgruppen
- 12. bauelementgruppen

die leitung des bauhauses in dessau walter gropius



unter gleichem titel:  
 a) handwerkerschule  
 b) maschinelereischule  
 c) maschinenbauerschule  
 d) auskunft erteilt die geschäftsstelle dessau, maurerstraße 36

FIGURE 3. BAYER, BROADSIDE OUTLINING THE CURRICULUM FOR THE DESSAU BAUHAUS, 1925  
 From Hans M. Wingler, *The Bauhaus: Weimar, Dessau, Berlin, Chicago*, p. 107. English adaptation.  
 Copyright © 1969 by The Massachusetts Institute of Technology. Reprinted by permission of the MIT Press.

Architecture during the last few generations has become weakly sentimental, esthetic and decorative. Its chief concern has been with ornamentation, with the formalistic use of motifs, ornaments and mouldings on the exterior of the building—as if upon a dead and superficial mass—not as part of a living organism . . . .

This kind of architecture we disown. We want to create a clear, organic architecture, whose inner logic will be radiant and naked, unencumbered by lying façades and trickeries; we want an architecture adapted to our world of machines, radios and fast motor cars, an architecture whose function is clearly recognizable in the relation of its forms. (Bayer, Gropius, and Gropius 29)

Here lies the core of twentieth-century design theory—for buildings as well as for the printed page. Whether the design was a steel and glass curtain wall or a text structured on a grid, modernists took it as axiomatic that economical designs were **functional and truthful, those with ornament wasteful and dishonest.** Today such beliefs lend authority to the graphic designer's call for lean, clean page layouts and to Edward Tufte's admonition to eradicate "chartjunk" from graphs and data displays (107-21). **In all aspects of document design, machine-like economy is good and visual prolixity suspect.** (See **Barton and Barton for an analysis of simplicity in document design.**)

In establishing economy as a founding principle, early modernists denounced ornament as culturally regressive. No longer tenable was the nineteenth-century defense of ornament as a socially and culturally justifiable artifact. **Ruskin, who vehemently opposed the onslaught of industrialism, had defended ornament as "the principal part of architecture"** (qtd. in Pevsner 19), but radical modernists like Adolf Loos roundly thrashed this notion. Loos argued in his essay "Ornament and Crime" that "cultural evolution is equivalent to the removal of ornament from articles in daily use" (226-27), including furniture and other domestic artifacts. Ornament revealed the pathological behavior of the savage: "No-one," Loos claimed, "can create ornament now who lives on our level of culture" (230). **Removing ornament from visual forms, then, assumed the moral force of progressivism, while sanctioning ornament was viewed as culturally reactionary, if not atavistic.**

Although Loos fought the remnants of ornament tooth and nail, other modernists also took up the cause. Marinetti denounced traditional aesthetics, and, in his founding *Manifesto of Futurism*, he glorified the sleek, dynamic forms that captured the "beauty of speed." For Marinetti, machines provided the inspiration for Futurist poetry (*Selected Writings* 98). Cubist painting and posters reduced images to bare, hard-edged forms that captured only essential aspects of reality. Founders of the De Stijl school like van Doesburg and Mondrian divided their compositions into asymmetrical units on a grid, anticipating contemporary page display. Jan Tschichold, an influential typographer and contemporary of the Bauhaus, argued that "the essence of the new typography is clarity" (254); hence, "the content of the printed matter must be given pure and direct expression" (255).

This emphasis on clear, efficient forms was mirrored in Bauhaus designs—buildings as well as texts. Moholy-Nagy's rational, highly structured page designs for the Bauhaus Books paralleled the sleek, rectilinear geometry of the steel and glass façade. Bauhaus designs typically incorporated the clean, simple geometry of basic forms. This tendency can be seen in Figure 2, where Schmidt's plain, geometrical design (including the stylized Bauhaus logo inside the circle in the upper left) captures the Bauhaus ideal with machine-like precision and economy.

In the typography workshop at the Dessau Bauhaus, Bayer fostered economy in a variety of ways, perhaps most pervasively by using sans serif typefaces—a practice that characterized the Bauhaus (Whitford 167, 170)—and by abolishing upper-case letters. Evidence of Bayer's aesthetics of economy can be seen in the curriculum document in Figure 3. Using all lower-case type, he structures the information on the page by integrating text with simple graphic cues. The circles in the upper left and lower right, the heavy lines that control the borders of the text, the arrow beneath the vertical string of text on the left margin—these graphic cues interact with the text to form a balanced composition that guides the eye through the document. Bayer's arrangement of text creates a hierarchy of information, with headings and indentation moving the reader from section to section. On the left and right margins, Bayer rotates the text 90 degrees, a typical Bauhaus motif (Müller-Brockmann 216). This spatial variation both echoes the vertical line work, creating visual harmony, and isolates text that tells readers how they can find out more about the program. Thus, through simple, economical visual cues, Bayer carefully structures the information in the document, creating the maximum visual impact from each design element. Such rarefied expression of visual language was at the very heart of Bauhaus aesthetics.

## The Search for a Universal Style

Abolishing ornament and unifying text and form enabled modernists to develop **an aesthetic program based on functional criteria**. Concomitantly, they sought to create an objective, international language of design independent of national boundaries or historical periods. This clean break with the past was epitomized by the concept of *Sachlichkeit* (roughly equivalent to “objectivity”), which was one of the guiding principles of European modernism at the turn of the century. The advocates of *Sachlichkeit* championed extreme utilitarianism and machine-like austerity (Pevsner 32-33; see also Kinross, “Rhetoric” 26), paving the way for the objective style of the Bauhaus.

**The Bauhaus quest to discover objective, universal forms** was predicated on the perceptual principles taught in the Basic Course in design. The purpose of the Basic Course was to cleanse the students' vision, to return them to a perceptual state of innocence: Students had to relinquish preconceived notions about style, materials, and forms before they could internalize new principles of design. Be-

cause these principles were based on the psychology of perception (Kery 13)—specifically, on gestalt notions of form (Sless 52-57)—they had a certain universal quality. (See also S. Moholy-Nagy 48; Lupton 51).

Like advocates of the gestalt theory of perception, Bauhaus designers believed that all humans share innate abilities, independent of cultural orientation, to perceive visual forms and patterns. What could be more objective, culturally neutral, and universal than the processing organ of the eye? Vision had no associations with the past but drew only from the immediate perceptual experiences of the present. This faith in an innate visual faculty underlies modernist approaches to design (Lupton 50-51).

The urge to recreate the visual world, heralded in the Bauhaus slogan “starting from zero” (qtd. in Wolfe 12), permeated all disciplines at the Bauhaus, including typography: “We want to create a new language of typography,” Moholy-Nagy proclaimed, “whose elasticity, variability and freshness of typographical composition is exclusively dictated by the inner law of expression and the optical effect” (“The New Typography” 75). Geometrical forms—the purest and most universal “optical effect”—dominated Bauhaus compositions, which freely intermixed circles, line work, and rectilinear shapes. Like the painter Mondrian, who focused on rudimentary forms and colors, Bauhaus designers aimed to reduce the language of typography to its most basic, fundamental expression. Bayer constructed his “Universal” typeface from simple lines, angles, and arcs (Bayer, Gropius, and Gropius 151), and in the process eliminated all superfluous elements, including serifs and capital letters. Such rudimentary forms would endure because they employed simple, machine-like geometry. Josef Albers, who succeeded Moholy-Nagy as master of the Bauhaus Basic Course, developed his typographical system around three components from which he formed the letters of the alphabet (Bayer, Gropius, and Gropius 151). Both of these systems used elementary forms to create a universal language of typography.

Outside the Bauhaus, perhaps the most ambitious attempt to invent a universal graphic language based on perceptual principles was Otto Neurath’s Isotype (International System of Typographic Picture Education). Developing his pictographic system in the 1920s and 30s to disseminate practical information, Neurath regarded the eye as a universal instrument for learning (18-24). Although Neurath founded his system on scientific theories and methods, his emphasis on objective perception—on “seeing” rather than “reading”—allied Isotype with the modern movement (Lupton 47-51).

After World War II, Swiss typographers like Emil Ruder and Adrian Frutiger brought the same impulse for universal *Sachlichkeit* to text design. (For an assessment of Swiss typography in the development of modern text design, see Kinross, “Emil Ruder’s *Typography*”; “Rhetoric” 27.) Assessing the “printed letter,” Ruder contends that “it is impersonal, neutral and objective by nature, and it is precisely these qualities which enable the typographer to use it universally and to vary his composition in a multitude of ways” (22). To

achieve this “objective” quality, Ruder arranged text on a grid system, transforming the page into a universal language accessible to the reader. In Ruder’s typographical compositions, the aesthetics of the steel and glass façade finds its counterpart in the “neutral” sans serif typeface arranged as rationally on the page as the infinitely repeatable elements of a curtain wall.

The search for an international typographic language is exemplified by Frutiger’s design for his sans serif Univers typeface. Kinross points out that Frutiger’s Univers typeface “might . . . be the best example of the modernist postulate of the neutral, international sanserif” (“Emil Ruder’s *Typography*” 151). Figure 4 displays a few of the several styles of Univers. Unlike Bayer’s heavy and more geometrical “Universal” face, Frutiger’s Univers is highly refined and pliable. Words could be shaped in different weights and widths all within the same system, suggesting that this face could accommodate any typographical problem (Kinross, “Rhetoric” 23). In the realm of typeface design, Univers is the culmination of the modernist search for an objective visual language. This approach to typographical form, which also gave rise to sans serif faces like Helvetica that are common in desktop-publishing software, grew out of modernist aesthetics.

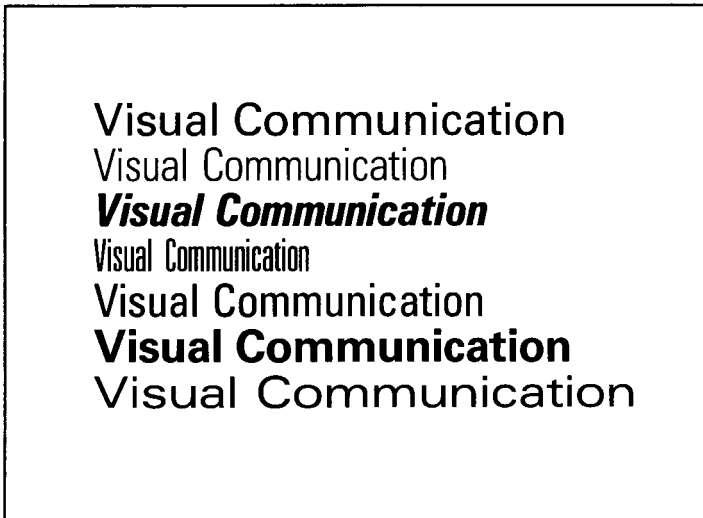


FIGURE 4. SEVERAL STYLES OF THE UNIVERS TYPEFACE



## Faith in Intuition

Modernists sought to create an objective, well-engineered visual language appropriate to the machine age. Whether the text materialized as a steel and glass façade, a piece of furniture, or an informational document, form adhered to rational criteria: economy, objectivity, and adaptation to purpose. **Beneath the veneer of *Sachlichkeit*, however, lay subjective elements of an essentially romantic character. By abandoning formal prescriptions, modernism surrendered design to the perceptual instincts of the designer.** In outlining the Bauhaus program, Gropius observed that the creation of new forms required—in addition to technological capabilities—“new philosophical concepts deriving from a series of intuitive perceptions” (Bayer, Gropius, and Gropius 22). **This faith in intuitive judgment underpinned the Bauhaus philosophy of education: Restored to a state of innocence, designers could articulate their innate feel for visual form.**

**The Basic Course provided an educational method for unlocking this creativity.** Johannes Itten, who gave the Basic Course its initial shape and educational philosophy, sought to “liberate the creative forces” within students, to enable them to produce “genuine work” through their “own experiences and perceptions,” and to extirpate the “dead wood of convention” (7). Gropius expressed similar views about the mission of the Basic Course:

Its chief function is to liberate the individual by breaking down conventional patterns of thought in order to make way for personal experiences and discoveries which will enable him to see his own potentialities and limitations. (Bayer, Gropius, and Gropius 26)

For all of its claims to an objective, universal style, the Bauhaus education was based on subjective notions about individual creativity. “Starting from zero” created a vacuum that could be filled only by the intuitive conjectures of the designer.<sup>6</sup>

**In addition to individual intuition, modernists subscribed to cultural intuition by believing that forms emanated from the spirit of the age.** Wim Crowel has argued that designers, including typographers and text designers, work intuitively within a given cultural milieu (152-55, 157). Modernists are no exception: Although they sought objectivity and universality, modernists acknowledged their own historical relativism. Despite his iconoclastic views about traditional forms, Loos lamented the absence of a style unique to contemporary life: “Shall every age have a style of its own and our age alone be denied one?” (227). Like others who worked in the same era, Moholy-Nagy believed that “every age possesses its own visual forms and its own corresponding typography” (“Modern Typography” 80). Frutiger later claimed that “sanserif typefaces seem to be the expres-

---

6. Rejecting formal principles and conventions, modernists found sanction in subjective intuition. Later, in the 1960s, this reliance on subjective judgment led theorists like Christopher Alexander to develop rational design methods.

sion of the spirit of the twentieth century” (16). While individual intuition guided the neophyte designer in the Bauhaus workshop, modernists believed that cultural intuition shaped the new visual language of the twentieth century.

This historical viewpoint obviously conflicts with some of the principal tenets of modernism. “Starting from zero” was the ultimate ahistorical edict. Abolishing ornament, flouting conventional methods, and striving for objectivity enabled the designer to enter a timeless universe of forms where a single international style unified all design. The structural transparency of the steel and glass skyscraper, transplantable in any culture, provided a model of clarity and efficiency for all artifacts—from an industrial tool to a text display. Modernists understood the instability of *style* as well as its tendency to degenerate into imitation. Even though the Bauhaus promulgated a distinctive philosophy of design, it never sanctioned a unique Bauhaus style. As an amalgam of modernist values, however, the Bauhaus ideals were vulnerable to cultural change. A sans serif typeface may have temporarily epitomized the functionalist values of modernism—but it was scarcely the final word.

## Implications for Professional Communicators

The influence of the Bauhaus continues today, long after its closing in the early 1930s, not so much in the form of tangible artifacts but in its aesthetic principles that underpin contemporary design. Professional communicators will need to grapple with these principles as they begin to design documents with the tools of the typographer. To find their way through the maze of in-house publishing, they need not only to understand the rationale behind these seminal principles but to discern their limitations as doctrines bound to modernist aesthetics.

Postmodernists like Robert Venturi have criticized modernist functionalism as bland and dogmatic and proposed in its place a more diversified language of visual form. Venturi has argued for “richness of meaning rather than clarity of meaning” (23) and attacked the “less is more” philosophy as simplistic, retorting “More is not less” (23-24). In the postmodern era, the rectilinear lines of the skyscraper have been softened by ornaments and oblique angles, just as the strict geometry of page design has given way to a more flexible, and even more traditional, use of type. The eclectic menu of typefaces now available in desktop-publishing systems—everything from Romans and Gothics to modern sans serifs like Geneva and Helvetica—is more than just a marketing tool. It reflects the greater tolerance among designers for intermixing the traditional and the avant-garde, for creating rich and subtle effects on the page, and for responding to the needs of users rather than adhering to aesthetic doctrines. Postmodernism recognizes design as a medium for *communication* between designer and user (Jencks 6), and some theorists, such as Richard Buchanan, regard design as a form of rhetoric. This emphasis on the language of visual form parallels the increasing

attention of document designers to the usability of the printed page and to the expectations of specific users.

With these developments in mind, I have summarized below some guidelines and caveats for applying the principles of modernist design to professional communication.

1. *Integrate visual and verbal language to achieve the purpose of the document.*

Although visual thinking has traditionally been devalued (Arnheim 1-10), modernism has succeeded in elevating visual language to an essential role in document design. Because each message is unique, however, the designer must choose visual elements—typefaces, spatial arrangement of text, graphic cues—that complement the purpose of the document. By enabling writers to make these choices as the document evolves, desktop publishing gives writers optimum rhetorical control. In this way, desktop publishing allows the writer to meld text and form throughout the writing process, maximizing the interaction between word and image.

2. *Consider strict economy to be as much an aesthetic and rhetorical as a functional criterion.*

Ornament-free design grew out of early modernism and its rejection of nineteenth-century eclecticism and revivals. Although streamlined forms epitomize the modernist style, they no longer evoke the same pristine qualities sought by their inventors. Postmodernists have criticized economy as tedious and unimaginative; moreover, while we generally assume that economy enhances utility, information designers have not provided conclusive evidence to support the modernist claim that *less* is always *more*. For example, the debate over whether sans serif typefaces are more legible than serif faces has not been resolved. (For an analysis of economy and pictographic symbols, see Frascara 476.) Since the relation between economy and function remains unresolved, extreme simplicity should be valued as much for its rhetorical and aesthetic qualities as for its improved legibility.

3. *Use visual language that the audience is accustomed to, but adapt this language to the context of the document.*

One of the chief dilemmas of modernist design is the search for objectivity and stability amid cultural change. Because text design reflects the prevailing taste, any claims to universality or rhetorical “neutrality” must be confined to a particular culture or historical moment (Kinross, “Rhetoric” 23-29). Changes in taste, along with the highly contextual nature of professional communication, hinder the quest for an objective, universal visual language: The perceptual and rhetorical variables of each document are simply too complex. Nonetheless, visual conventions engender strong reader expectations. In making reader-oriented choices, designers need to weigh these collective expectations against the context, audience, and use of a particular document.

4. *Combine intuitive and rational problem-solving during the writing/design process.*

Many modernist principles of design are founded on innate perception. Cleansed of artificial conventions, the designer could tap these perceptual instincts through the laws of gestalt. (See, for example, Dondis; Arnheim.) Since an understanding of modern design can be acquired through innate perception rather than solely through training in formal methods, professional communicators can acquire facility in visual language by experimenting with fundamental concepts such as balance, contrast, and parallelism. Because desktop publishing allows the immediate visual feedback of the printed page, this form of document design is well-suited to intuitive methods. Intuition cannot, however, act as the sole guide: Because professional communicators create documents for specific audiences and situations, they need to evaluate rationally the visual-processing tasks of users.

## Conclusion

With its emphasis on functionalism, modernist aesthetics supplied a philosophy for solving practical design problems. *The Bauhaus translated modernist theories into tangible forms by applying innovations in typography, text arrangement, and graphics to books, advertising, and informational materials.* Despite the tempering effect of postmodernism, the principles that underlie the modernist revolution—the unity of text and form, economy, universal objectivity, the faith in intuition—continue to exert a profound influence on visual thinking in the design disciplines.

The advent of in-house publishing, however, has expanded the domain of these principles beyond the graphic designer and typographer to the workplace in business, industry, education, and government. As in-house publishing radically decentralizes the design process—generating interminable menus of visual choices—professional communicators will constantly encounter the residual influence of modernism. The unity between aesthetics and functional application that modernist theorists envisioned for all categories of design may yet find its most prolific expression in the visual language of business and technical documents.

## References

- Arnheim, Rudolf. *Visual Thinking*. Berkeley: U of California P, 1969.
- Banham, Reyner. *Theory and Design in the First Machine Age*. London: Architectural Press, 1960.
- Barnard, Phil, and Tony Marcel. "Representation and Understanding in the Use of Symbols and Pictographs." *Information Design: The Design and Evaluation of Signs and Printed Material*. Ed. Ronald Easterby and Harm Zwaga. New York: Wiley, 1984. 37-73.
- Barton, Ben F., and Marthalee S. Barton. "Simplicity in Visual Representation: A Semiotic Approach." *JBTC* 1.1 (1987): 9-26.

- Bayer, Herbert. "Toward the Book of the Future." *Books for Our Time*. Ed. Marshall Lee. New York: Oxford UP, 1951. 22-25.
- Bayer, Herbert, Walter Gropius, and Ise Gropius, eds. *Bauhaus: 1919-1928*. New York: Museum of Modern Art, 1938.
- Beckmann, Hannes. "Formative Years." *Bauhaus and Bauhaus People: Personal Opinions and Recollections of Former Bauhaus Members and Their Contemporaries*. Trans. Eva Richter and Alba Lorman. Ed. Eckhard Neumann. New York: Van Nostrand Reinhold, 1970. 194-99.
- Bowman, Joel, and Debbie Renshaw. "Desktop Publishing: Things Gutenberg Never Taught You." *The Journal of Business Communication* 26.1 (1989): 57-77.
- Buchanan, Richard. "Declaration by Design: Rhetoric, Argument, and Demonstration in Design Practice." *Design Issues* 2.1 (1985): 4-22.
- Crouwel, Wim. "Typography: A Technique of Making a Text 'Legible'." *Processing of Visible Language*. Vol. 1. Ed. Paul Kolers, Merald E. Wrolstad, and Herman Bouma. New York: Plenum, 1979. 151-64. 2 vols. 1979-80.
- Dondis, Donis A. *A Primer of Visual Literacy*. Cambridge: MIT P, 1973.
- Frascara, Jorge. "Design Principles for Instructional Materials." *Information Design: The Design and Evaluation of Signs and Printed Materials*. Ed. Ronald Easterby and Harm Zwaga. New York: Wiley, 1984. 469-78.
- Frutiger, Adrian. *Type Sign Symbol*. English trans. Andrew Bluhm. Zurich: ABC, 1980.
- Hurlburt, Allen. *Layout: The Design of the Printed Page*. New York: Watson-Guptill, 1977.
- Itten, Johannes. *Design and Form: The Basic Course at the Bauhaus and Later*. Trans. Litten Educational Publishing. Rev. ed. New York: Van Nostrand Reinhold, 1975.
- Jencks, Charles A. *The Language of Post-Modern Architecture*. 4th ed. New York: Rizzoli, 1984.
- Kery, Pat. "The History of the Illustrated Magazine: One Hundred Years in the Fine Arts." *Ligature* 3.1 (1985): 9-14.
- Kinross, Robin. "Emil Ruder's *Typography* and 'Swiss Typography'." *Information Design Journal* 4.2 (1984): 147-53.
- . "The Rhetoric of Neutrality." *Design Issues* 2.2 (1985): 18-30.
- Kostelnick, Charles. "The Evolution of Visual Conventions in Business Writing: Form, Function, and Technology." 53rd National and 15th International Convention of the Association for Business Communication. Indianapolis, 27 Oct. 1988.
- . "A Systematic Approach to Visual Language in Business Communication." *The Journal of Business Communication* 25.3 (1988): 29-48.
- Le Corbusier. *Towards a New Architecture*. Trans. Frederick Etchells. 1946. London: Architectural Press, 1970.
- Loos, Adolf. "Ornament and Crime." *Adolf Loos: Pioneer of Modern Architecture*. Ludwig Münz and Gustav Künstler. Trans. Harold Meek. New York: Praeger, 1966. 226-31.
- Lupton, Ellen. "Reading Isotype." *Design Issues* 3.2 (1986): 47-58.
- Marinetti, Filippo Tommaso. *Les Mots en Liberté Futuristes*. Milan: Edizioni Futuriste di "Poesia," 1919.

- \_\_\_\_\_. *Marinetti: Selected Writings*. Trans. R. W. Flint and Arthur A. Coppotelli. Ed. R. W. Flint. New York: Farrar, Straus, and Giroux, 1972.
- Moholy-Nagy, Laszlo. "Modern Typography: Aims, Practices, Criticism." *Wingler* 80-81.
- \_\_\_\_\_. "The New Typography." *Moholy-Nagy*. Trans. Sibyl Moholy-Nagy. Ed. Richard Kostelanetz. New York: Praeger, 1970. 75-76.
- \_\_\_\_\_. *The New Vision*. Trans. Daphne M. Hoffman. 4th ed. New York: Wittenborn, Schultz, 1947.
- Moholy-Nagy, Sibyl. "The Bauhaus and Modern Typography: The 'Masters' Liberate the Typographic Image." *Print* 14.1 (1960): 45-48.
- Müller-Brockmann, Josef. *A History of Visual Communication*. English trans. D. Q. Stephenson. New York: Hastings, 1971.
- Neurath, Otto. *International Picture Language*. Trans. Marie Neurath. Ed. Robin Kinross. 1936. Reading: U of Reading, Dept. of Typography & Graphic Communication, 1980.
- Perloff, Marjorie. *The Futurist Moment: Avant-Garde, Avant Guerre, and the Language of Rupture*. Chicago: U of Chicago P, 1986.
- Pevsner, Nikolaus. *Pioneers of Modern Design: From William Morris to Walter Gropius*. Rev. ed. Harmondsworth, Eng.: Penguin, 1960.
- Ruder, Emil. *Typography: A Manual of Design*. English trans. D. Q. Stephenson. 3rd ed. New York: Hastings, 1977.
- Sless, David. *Learning and Visual Communication*. New York: Halsted-Wiley, 1981.
- Spencer, Herbert. *Pioneers of Modern Typography*. Rev. ed. Cambridge: MIT P, 1985.
- Spiegelman, Marjorie. "Page Makeover." *Publish!* 1.1 (1986): 76-79.
- Tinker, Miles. *Legibility of Print*. Ames: Iowa State UP, 1963.
- Tschichold, Jan. "The Principles of the New Typography." *History of Graphic Design and Communication*. Trans. Clive Ashwin. London: Pembridge, 1983. 252-56.
- Tufte, Edward. *The Visual Display of Quantitative Information*. Cheshire, CT: Graphics Press, 1983.
- Venturi, Robert. *Complexity and Contradiction in Architecture*. Museum of Modern Art Papers on Architecture 1. New York: Museum of Modern Art, 1966.
- Walker, Sue. "How Typewriters Changed Correspondence: An Analysis of Prescription and Practice." *Visible Language* 18.2 (1984): 102-17.
- White, Jan V. *Graphic Design for the Electronic Age*. New York: Watson-Guptill, 1988.
- Whitford, Frank. *Bauhaus*. London: Thames and Hudson, 1984.
- Wingler, Hans M. *The Bauhaus: Weimar, Dessau, Berlin, Chicago*. Trans. Wolfgang Jabs and Basil Gilbert. Ed. Joseph Stein. Cambridge: MIT P, 1969.
- Wolfe, Tom. *From Bauhaus to Our House*. New York: Farrar, Straus, and Giroux, 1981.