

The Age of Information

Part V

Graphic design in the global village

The International Typographic Style

18

During the 1950s a design movement emerged from Switzerland and Germany that has been called Swiss design or, more appropriately, the International Typographic Style. The objective clarity of this design

movement won converts throughout the world. It remained a major force for over two decades, and its influence continues into the 1990s.

The visual characteristics of this international style include a unity of design achieved by asymmetrical organization of the design elements on a mathematically constructed grid; objective photography and copy that present visual and verbal information in a clear and factual manner, free from the exaggerated claims of propaganda and commercial advertising; and the use of sans-serif typography set in a flush-left and ragged-right margin configuration. The initiators of this movement believed sans-serif typography expresses the spirit of a more progressive age and that mathematical grids are the most legible and harmonious means for structuring information.

More important than the visual appearance of this work is the attitude developed by its early pioneers about their profession. These trailblazers defined design as a socially useful and important activity. Personal expression and eccentric solutions were rejected, while a more universal and scientific approach to design problem solving was embraced. In this paradigm, the designers define their roles not as artists but as objective conduits for spreading important information between components of society. Achieving clarity and order is the ideal.

Pioneers of the movement

More than any other individual, the quality and discipline found in the Swiss design movement can be traced to Ernst Keller (1891–1968). In 1918 Keller joined the Zurich Kunstgewerbeschule (School of Applied Art) to teach the advertising layout course and develop a professional course in design and typography. In teaching and in his own lettering, trademark, and poster design projects, Keller established a standard of excellence over the course of four decades. Rather than espousing a specific style, Keller believed the solution to the design problem should emerge from its content. Fittingly, his work encompassed diverse solutions. His poster for the Rietburg Museum (Fig. 18–1) demonstrates his interest in symbolic imagery, simplified geometric forms, expressive edges and lettering, and vibrant contrasting color. A gentle and unassuming man, Keller initiated a climate of excellence in Swiss graphic design.

The roots of the International Typographic Style are to a large extent found in the curriculum advanced at the School of Design in Basel. The development of this curriculum has its basis in fundamental geometric exercises involving the cube and the line. This foundation, begun in the nineteenth century and thus independent of De Stijl and the Bauhaus, was the basis for the 1908 formation of the school's *Vorkurs* (foundation course) and remained relevant to the design program in the 1950s.

Théo Ballmer (1902–65), who studied briefly at the Dessau Bauhaus under Klee, Gropius, and Meyer in the late 1920s, applied De Stijl principles to graphic design in an original way, using an arithmetic grid of horizontal and vertical alignments. In 1928 Ballmer's poster designs achieved a high degree of formal harmony as he used an ordered grid to construct visual forms. In his "Büro" poster (Fig. 18–2), both the black word and its red reflection are carefully developed on the underlying grid. The other lettering on this poster shows the influence of Van Doesburg's experiments with geometric letterforms. However, Ballmer's lettering is more refined and graceful than the ungainly types of Van Doesburg. While the grid used to build the forms in the "Büro" poster is invisible, in Ballmer's "Norm" poster (Fig. 18–3) the grid itself is openly displayed.

Max Bill's (1908–94) work encompassed painting, architecture, engineering, sculpture, and product and graphic design. After studying at the Bauhaus with Gropius, Meyer, Moholy-Nagy, Albers, and Kandinsky from 1927 until 1929, Bill moved to Zurich. In 1931 he embraced the concepts of *art concret* and began to find his way clearly. Eleven months before Van Doesburg died in April 1930, he formulated a manifesto of *Art Concret*, calling for a universal art of absolute clarity based on controlled arithmetical construction. *Art concret* paintings were totally constructed from pure, mathematically exact visual elements—planes and colors. Because these elements have no external meanings, the results are purely abstract. Graphic design is the antithesis of this concept in one sense, as design without symbolic or semantic meaning ceases to be a graphic communication and becomes fine art. However, *art concret* concepts can nonetheless be applied to the structural aspect of graphic design.

18–1. Ernst Keller, poster for the Rietburg Museum, undated. Emblematic images are energized by repetitive geometric elements.

18–2. Théo Ballmer, poster for an office professions exhibition, 1928. Traces of the grid squares used to construct this poster remain as the thin white lines between the letters.

18–3. Théo Ballmer, poster for a traveling exhibition of industrial standards, 1928. Absolute mathematical construction is used, rather than the asymmetrical horizontals and verticals of De Stijl.

As the 1930s gave way to the war years and Switzerland maintained its neutrality, Bill constructed layouts of geometric elements organized with absolute order. Mathematical proportion, geometric spatial division, and the use of Akzidenz Grotesk type (particularly the medium weight) are features of his work of this period (Fig. 18–4). He further explored the use of the ragged-right margin and indicated paragraphs by an interval of space instead of a paragraph indent in some of his 1940s book designs. His American architecture exhibition poster, constructed with an intricate grid (Fig. 18–5), demonstrates his strategy of designing a mathematical structure to contain the elements. The evolution of Bill's art and design was based on the development of cohesive principles of visual organization. Important concerns include the linear division of space into harmonious parts; modular grids; arithmetic and geometric progressions, permutations, and sequences; and the equalization of contrasting and complementary relationships into an ordered whole. In 1949 he concluded, "It is possible to develop an art largely on the basis of mathematical thinking."

In 1950 Bill became involved in the planning of the curriculum and buildings for the Hochschule für Gestaltung (Institute of Design) in Ulm, Germany. This school, which operated until 1968, attempted to establish a center of research and training to address the design problems of the era with educational goals similar to those of the Bauhaus. Among the cofounders, Otl Aicher (1922–91) played a major role in developing the graphic design program (see Figs. 20–31 through 20–34). Bill left the Ulm directorship in 1956, and the school evolved using scientific and methodological approaches to design problem solving. English typographer Anthony Froshaug (1918–84) joined the Ulm faculty as professor of graphic design from 1957 until 1961 and set up the typography workshop. Froshaug's design of the Ulm journal's first five issues (Fig. 18–6) is paradigmatic of the emerging movement.

The Ulm Institute of Design included a study of semiotics, the philosophical theory of signs and symbols, in its curriculum. Semiotics has three branches: *semantics*, the study of the meaning of signs and symbols; *syntactics*, the study of how signs and symbols are connected and ordered into a structural whole; and *pragmatics*, the study of the relation of signs and symbols to their users. Also, principles of Greek rhetoric were reexamined for application to visual communications.

In counterpoint to Bill's evolution toward a purist approach to graphic design from the 1930s to the 1950s, there was also a strong tendency toward complexity in this period. During the same era, Max Huber (1919–92) brought a vitality and intricacy to his work. After studying the formal ideas of the Bauhaus and experimenting with photomontage as a student at the Zurich School of Arts and Crafts, Huber moved south to Milan, Italy, and began his career. Returning to his native Switzerland during the war, Huber collaborated with Bill on exhibition design projects. After his return to Italy in 1946, Huber produced phenomenal graphics. Bright, pure hues were combined with photographs in intense, complex visual organizations (Fig. 18–7). Huber took advantage of the transparency of printing inks by layering shapes, typography, and images to create a complex web of graphic information (Fig. 18–8). Sometimes Huber's designs seem pushed to the edge of chaos, but through balance and alignment he maintained order in the midst of complexity.

Functional graphics for science

German-born Anton Stankowski (1906–98) worked from 1929 until 1937 as a graphic designer in Zurich, where he enjoyed close contact with many of the leading artists and designers of Switzerland, including Bill, Matter, and Richard P. Lohse (1902–88). During his Zurich period, Stankowski was particularly innovative in photography, photomontage, and darkroom manipulation of images. Visual pattern and form were explored in his close-up photographs of common objects, whose texture and detail were transformed into abstract images.

In 1937 Stankowski moved to Stuttgart, Germany, where he painted and designed for more than five decades. A dialogue is evident between Stankowski's painting and his design. Ideas about color and form from his paintings often find their way into his graphic designs; conversely, wide-ranging form experimentation in search of design solutions seems to have provided shapes and compositional ideas for his fine art.

World War II and military service, including a period as a prisoner of war after his capture by the Russians, interrupted his career. After the war, his work started to crystallize into what was to become his major contribution to graphic design: the creation of visual forms to communicate invisible processes and physical forces (Figs. 18–9, 18–10, and 18–11). The abilities Stankowski brought to this problem were a strong mastery of constructivist design, an intellectual acumen for science and engineering, and a burning curiosity. Research and comprehension of the subject preceded his designs, for only after understanding the material to be presented can a designer invent forms that become symbols of complex scientific and engineering concepts. Stankowski tackled the unseen, ranging from electromagnetic energy to the internal workings of a computer, and transformed the concept underlying these forces into visual designs.

In 1968 the senate of Berlin commissioned Stankowski and his studio to develop a comprehensive design program for that city. Consistent design standards for architectural signage, street signs, and publications were developed. Instead of designing a trademark or unique typographic logo for use as the unifying visual element, Stankowski developed a tectonic element for consistent use on all material. This long horizontal line, with a short vertical line rising from it, became a symbol for the then-divided city of Berlin. The vertical line represented the Berlin Wall, which until 1989 separated the Soviet-dominated portion of the city from the rest of Berlin. The name *Berlin*, set in medium Akzidenz Grotesk, was always placed on the right side of the tectonic element (Fig. 18–12).

New Swiss sans-serif typefaces

18–4. Max Bill, book cover, 1942. Mathematical precision is achieved by the alignment of type down the center of the page, creating harmony and order in an asymmetrical layout.

18–5. Max Bill, exhibition poster, 1945. Diamond-shaped photographs form a wedge; some photographs are placed on the white ground to equalize the figure and ground.

18–6. Anthony Froshaug, cover for the Quarterly Bulletin of the Hochschule für Gestaltung, Ulm, 1958. The four-column grid system, use of only two type sizes, and graphic resonance of this format were widely influential.

18–7. Max Huber, yearbook cover, 1951. An informal balance of halftones printed in red, black, and blue combines with yellow rectangles to turn the space into an energy-charged field.

18–8. Max Huber, poster for automobile races, 1948. Speed and movement are expressed by typography racing back in perspective and arrows arcing forward, bringing depth to the printed page.

18–9. Anton Stankowski, trademark for Standard Elektrizitätsgesellschaft, 1953. Dynamic equilibrium is achieved by an asymmetrical construction in an implied square, signifying communications transmission and reception.

18–10. Anton Stankowski, calendar cover for Standard Elektrizitätsgesellschaft, 1957. A radial configuration symbolizes transmission and radiation using the client's radio and telephone products.

18–11. Anton Stankowski, image from a Viessmann calendar. Linear elements change color after passing through the central bar, representing heat and energy transfer in furnace boilers.

The emerging International Typographic Style was exemplified by several new sans-serif type families designed in the 1950s. The geometric sans-serif styles, mathematically constructed with drafting instruments during the 1920s and 1930s, were rejected in favor of more refined designs inspired by nineteenth-century Akzidenz Grotesk fonts (see Fig. 12–35). In 1954 a young Swiss designer working in Paris, Adrian Frutiger (b. 1928), completed a visually programmed family of twenty-one sans-serif fonts named Univers (Fig. 18–13). The palette of typographic variations—limited to regular, italic, and bold in traditional typography—was expanded sevenfold. Numbers replaced conventional nomenclature. The normal or regular weight with the proper black-and-white relationships for book setting is called Univers 55, and the family ranges from Univers 39 (light/extra condensed) to Univers 83 (expanded/extrabold).
Fonts to the left

of Univers 55 are expanded; fonts to the right of Univers 55 are condensed. The stroke weights of fonts above Univers 55 are lighter, while stroke weights of fonts below Univers 55 are heavier. Because all twenty-one fonts have the same x-height and ascender and descender lengths, they form a uniform whole that can be used together with complete harmony (Fig. 18–14). The size and weight of the capitals are close to the size and weight of the lowercase characters; therefore, the texture and tone of a Univers text setting is more uniform than that of most earlier typefaces, especially in multilingual publications. Frutiger labored for three years on Univers. To produce the Univers family, the Deberny and Peignot foundry in Paris invested over 200,000 hours of machine engraving, retouching, and final hand-punching to create the 35,000 matrixes needed to produce all twenty-one fonts in the full range of sizes.

In the mid-1950s, Edouard Hoffman of the HAAS type foundry in Switzerland decided that the Akzidenz Grotesk fonts should be refined and upgraded. Hoffman collaborated with Max Miedinger (1910–1980), who executed the designs, and their new sans serif, with an even larger x-height than that of Univers, was released as Neue Haas Grotesk. When this design was produced in Germany by the now defunct D. Stempel AG in 1961, the face was named Helvetica (Fig. 18–15), the traditional Latin name for Switzerland. Helvetica’s well-defined forms and excellent rhythm of positive and negative shapes made it the most specified typeface internationally during the 1960s and 1970s. However, because Helvetica’s various weights, italics, and widths were developed by different designers in several countries, the original Helvetica family lacked the cohesiveness of Univers. As digital typesetting became prevalent in the 1980s, versions of the Helvetica family with more systemic compatibility were developed, including Linotype’s 1983 Neue Helvetica with eight weights, each with extended, condensed, and italic versions.

A master of classical typography

18–12. Anton Stankowski, cover for Berlin-Layout, 1971. The cover design derives from a Stankowski painting.

18–13. Adrian Frutiger, schematic diagram of the twenty-one Univers fonts, 1954. Frutiger systematically altered the forms of fonts located on this chart above, below, and to the left or right of Univers 55.

18–14. Bruno Pläffli of Atelier Frutiger, composition with the letter u, c. 1960. All twenty-one variations of Univers can be used together to achieve dynamic contrasts of weight, tone, width, and direction.

18–15. Edouard Hoffman and Max Miedinger, Helvetica typeface, 1961. The basic version of Helvetica released by the Stempel foundry in 1961 is shown, along with some of the variations developed later.

While German and Swiss designers were forging the International Typographic Style, a major German typeface designer evolved from the traditions of calligraphy and Renaissance typography. A tremendous admiration for Rudolf Koch and Edward Johnston proved the catalyst that launched the career of Hermann Zapf (b. 1918). A native of Nuremberg, Germany, Zapf entered the graphic arts as an apprentice photo retoucher at age sixteen. A year later he started his study of calligraphy after acquiring a copy of Koch’s *Das Schreiben als Kunstfertigkeit* (Writing as Art), a manual on the subject. Four years of disciplined self-education followed, and at age twenty-one Zapf’s first typographic involvement began when he entered Koch’s printing firm. Later that year Zapf became a freelance book and typographic designer, and at age twenty-two the first of his more than fifty typefaces was designed and cut for the Stempel foundry. Zapf developed an extraordinary sensitivity to letterforms in his activities as a calligrapher, typeface designer, typographer, and graphic designer; all of these activities contributed to his view of typeface design as “one of the most visible visual expressions of an age.”

Zapf’s triumvirate of typefaces designed during the late 1940s and the 1950s are widely regarded as major type designs (Fig. 18–16): Palatino (released in 1950) is a roman style with broad letters, strong serifs, and elegant proportions somewhat reminiscent of Venetian faces; Melior (1952) is a modern style that departs from earlier models through its vertical stress and squared forms; and Optima (1958) is a thick-and-thin sans serif with tapered strokes. While Zapf’s typeface designs are based on a deep understanding of the past, they are original inventions designed with a full understanding of twentieth-century technologies. To the complex and technically demanding craft of typeface design Zapf brought the

spiritual awareness of a poet capable of inventing new forms to express the current century and to preserve it for posterity.

18–16. Hermann Zapf, typefaces. Palatino, 1950; Melior, 1952; and Optima, 1958. These alphabets have a harmony and elegance seldom achieved in typeface design.

18–17. Hermann Zapf, page from *Manuale Typographicum*, 1968. Parandowski's quotation about the power of the printed word to "govern time and space" inspired this graphic field of tension radiating from the central cluster.

18–18. Hermann Zapf, page from *Manuale Typographicum*, 1968. Using his Michelangelo typeface, Zapf organized this page with classical symmetry and exquisite intervals between letters. The subtle shadow relief of the ruled lines suggests an inscriptionlike quality.

18–19. Emil Ruder, book jacket for an anthology of Dada poetry, reproduced in *Typography: A Manual of Design*, 1967. The contrast created by combining different fonts becomes a graphic metaphor for the randomness of the Dadaists.

18–20. Armin Hofmann, logotype for the Basel Civic Theater, 1954. This hand-lettered logotype anticipates the tight spacing and capital ligatures of phototypography. The control of spatial intervals between letterforms is magnificent.

In the area of book design, Zapf's two editions of *Manuale Typographicum*, published in 1954 and 1968, are outstanding contributions to the art of the book (Figs. 18–17 and 18–18). Encompassing eighteen languages and more than a hundred typefaces, these two volumes consist of quotations about the art of typography, with a full-page typographic interpretation for each quotation. Zapf, like Eric Gill, combines a great love and understanding of the classical traditions of typography with a twentieth-century attitude toward space and scale.

Design in Basel and Zurich

The further development of the International Typographic Style occurred in two cities, Basel and Zurich, located 70 kilometers (about 50 miles) apart in northern Switzerland. Fifteen-year-old Emil Ruder (1914–70) began a four-year compositor's apprenticeship in 1929 and attended the Zurich School of Arts and Crafts when he was in his late twenties. In 1947 Ruder joined the faculty of the Allgemeine Gewerbeschule (Basel School of Design) as the typography instructor and called upon his students to strike the correct balance between form and function. He taught that type loses its purpose when it loses its communicative meaning; therefore, legibility and readability are dominant concerns. His classroom projects developed sensitivity to negative or unprinted spaces, including the spaces between and inside letterforms. Ruder advocated systematic overall design and the use of a grid structure to bring all elements—typography, photography, illustration, diagrams, and charts—into harmony with each other while allowing for design variety. Problems of unifying type and image were addressed.

More than any other designer, Ruder realized the implications of Univers and the creative potential unleashed by the unity of proportion, because the consistent baseline and x-height allowed the mixing of all twenty-one typefaces. Ruder and his students exhaustively explored the contrasts, textures, and scale possibilities of the new face in both commissioned and experimental work (Fig. 18–19). His methodology of typographic design and education was presented in his 1967 book *Typography: A Manual of Design*, which had a worldwide influence.

In 1947 Armin Hofmann (b. 1920) began teaching graphic design at the Basel School of Design, after completing his education in Zurich and working as a staff designer for several studios. Together with Emil

Ruder, he developed an educational model linked to the elementary design principles of the *Vorkurs* established in 1908. This curriculum was the decisive one for the 1950s and was widely used in the pharmaceutical industry by former students such as Karl Gerstner (b. 1930), the founder of the GGK agency. Also in 1947, Hofmann opened a design studio in collaboration with his wife, Dorothea. Hofmann applied deep aesthetic values and understanding of form to both teaching and designing. As time passed, he evolved a design philosophy based on the elemental graphic-form language of point, line, and plane, replacing traditional pictorial ideas with a modernist aesthetic. In his work and in his teaching, Hofmann continues to seek a dynamic harmony, where all the parts of a design are unified. He sees the relationship of contrasting elements as the means of invigorating visual design. These contrasts include light to dark, curved lines to straight lines, form to counterform, soft to hard, and dynamic to static, with resolution achieved when the designer brings the total into an absolute harmony.

Hofmann works in diverse areas, designing posters, advertisements, and logos, as well as other materials (Figs. 18–20 through 18–23). His environmental graphics, which take the form of letterforms or abstract shapes based on letterforms, are often incised into molded concrete (Fig. 18–24). In 1965 Hofmann published *Graphic Design Manual*, a book that presents his application of elemental design principles to graphic design.

Zurich designers, including Carlo L. Vivarelli (1919–86), were also forging the new movement in the late 1940s. Vivarelli's "For the Elderly" poster, conceived to spread awareness of the elderly and their problems, used the angle of illumination on the face for dramatic impact (Fig. 18–25). Swiss design began to coalesce into a unified international movement when the journal *New Graphic Design* began publication in 1959 (Figs. 18–26, 18–27, and 18–28). The editors were Vivarelli and three other Zurich designers who played a major role in the evolution of the International Typographic Style: Lohse, Josef Müller-Brockmann (1914–96), and Hans Neuburg (1904–83). This trilingual periodical presented the philosophy and accomplishments of the Swiss movement to an international audience. Its format and typography were a living expression of the order and refinement achieved by Swiss designers.

Emerging as a leading theorist and practitioner of the movement, Müller-Brockmann sought an absolute and universal form of graphic expression through objective and impersonal presentation, communicating to the audience without the interference of the designer's subjective feelings or propagandistic techniques of persuasion. A measure of his success can be gauged by observing the visual power and impact of his work. Designs made by Müller-Brockmann in the 1950s are as current and vital as they were a half-century ago and communicate their message with intensity and clarity (Fig. 18–29). His photographic posters treat the image as an objective symbol, with neutral photographs gaining impact through scale (Fig. 18–30) and camera angle (Fig. 18–31). In his celebrated concert posters, the language of constructivism creates a visual counterpart to the structural harmony of the music to be performed (Fig. 18–32).

His exhibition poster "Der Film" (Fig. 18–33) demonstrates the universal design harmony achieved by mathematical spatial division. The proportions are close to the three-to-five ratio of the golden mean, considered the most beautifully proportioned rectangle by the ancient Greeks. The space is divided into fifteen rectangular modules, with three modules across the horizontal dimension and five down the vertical dimension. The top nine modules approximate a square, the title fills three units, and three are below the title. *Film* occupies two units, and the secondary typographic information aligns with the front edge of the *F* in *Film*. This design organization grew out of functional communication needs. The title projects clearly at great distances against the field of black, and the overlapping of *Film* in front of *der* is a typographic equivalent to the cinematic techniques of overlapping images and dissolving from one image to another. The graphic power of this poster's elemental simplicity successfully combines effective communication, expression of the content, and visual harmony.

As with Müller-Brockmann's music posters, geometric forms become metaphorical in a poster for an exhibition of lamps (Fig. 18–34). In a 1980 poster for an exhibition of his own he revealed the nature of the grid structures underlying his work (Fig. 18–35). Through his designs, writing, and teaching, Müller-Brockmann became the era's most influential Swiss designer as the national movement he helped create grew beyond the country's borders.

18–21. Armin Hofmann, poster for the Basel theater production of *Giselle*, 1959. An organic, kinetic, and soft photographic image contrasts intensely with geometric, static, and hard-edged typographic shapes.

18–22. Armin Hofmann, trademark for the Swiss National Exhibition, Expo 1964. An E for Exhibition links with the Swiss cross. The open bottom permits the white space of the page to flow into the symbol.

18–23. Armin Hofmann, poster for Herman Miller furniture, 1962. Shapes and silhouettes of Herman Miller chairs cascade through space, anchored to the format and the type by the red logo at the top center.

18–24. Armin Hofmann, exterior sculpture for the Disentis, Switzerland, high school, 1975. The altered direction of the boards of the molds used to cast the concrete relief produces a vigorous textural contrast.

18–25. Carlo L. Vivarelli (designer) and Werner Bischof (photographer), "Für das Alter" (For the Elderly) poster, 1949. The contrasting juxtaposition of an organic, human, and textured photograph with sharp geometric typography intensifies the meaning of both.

18–26. Carlo L. Vivarelli, cover for *New Graphic Design 2*, 1959. The mathematical structure of the organizational grid signifies the scientific and functional design philosophy of the Swiss movement.

18–27. Hans Neuburg, pages from *New Graphic Design 7*, 1960. Asymmetrical balance, white space, and rigorous adherence to a four-column grid characterized this publication.

In Switzerland, a country with outstanding design schools, such self-educated graphic designers as Siegfried Odermatt (b. 1926) are a rarity. Originally Odermatt planned to become a photographer, but after working in photographic studios for several years, he turned to design and typography. After a period of employment in several advertising agencies, Odermatt opened his own studio in 1950. Working for corporate clients in the areas of trademark development, informational graphics, advertising, and packaging, Odermatt played an important role in applying the International Typographic Style to the communications of business and industry. He combined succinct, efficient presentation of information with a dynamic visual quality, using straightforward photography with drama and impact. Ordinary images were turned into convincing and engaging photographs through the careful use of cropping, scale, and lighting, with attention to shape and texture as qualities that cause an image to emerge from the page (Figs. 18–36, 18–37, and 18–38). Odermatt seeks originality through the idea, not through visual style—in his work, graphic design is always seen as an instrument of communication.

18–28. Hans Neuburg, pages from *New Graphic Design 13*, 1962. Trademark design competition entries are organized on a grid; spatial intervals create rhythm and movement.

18–29. Josef Müller-Brockmann, *American Books Today* catalog cover, 1953. Shapes signify books, while color signifies the country of their origin.

18–30. Josef Müller-Brockmann, *Swiss Auto Club* poster, 1954. Photography amplifies the text, "The friendly hand sign protects against accidents."

18–31. Josef Müller-Brockmann, public awareness poster, 1960. Red type declares “less noise,” while the photograph graphically depicts the discomfort noise causes.

18–32. Josef Müller-Brockmann, “Musica Viva” concert poster, 1959. Colored squares march in musical rhythm on the tilted white square. Typography and shapes align in harmonious juxtaposition.

18–33. Josef Müller-Brockmann, “Der Film” exhibition poster, 1960. Against a black field, the word Film is white, the word der is gray, and the other typography is red.

18–34. Josef Müller-Brockmann, poster for an exhibition of lamps, 1975. Modulated, glowing multicolor disks signify the radiant energy of lighting fixtures.

18–35. Josef Müller-Brockmann, exhibition poster, 1980. The grid, always underlying Müller-Brockmann’s designs, becomes visible as a major element in this poster.

18–36. Siegfried Odermatt, advertisement for Apotheke Sammet over-the-counter medicine, 1957. Close-up photography makes ordinary subjects arresting. The trademark is created from the firm’s initials.

18–37. Siegfried Odermatt, cover for Schelling Bulletin, no. 4, 1963. This folder for a paperboard and packaging manufacturer uses an unexpected photographic view of an ordinary object.

18–38. Siegfried Odermatt, inside pages for Schelling Bulletin, no. 4, 1963. A four-column grid unifies typography with product photography.

Much of Odermatt’s work is purely typographic, and he believes a one-color typographic design can achieve the visual impact and power of full-color graphics through strength of concept and orchestration of visual form, space, shape, and tone. By his fresh and original arrangements of graphic elements, Odermatt demonstrates the infinite possibilities for dividing and organizing space on the printed page. There is also an element of the playful and the uninhibited in his work, a feature that is unusual for Swiss design of this period. Rosmarie Tissi (b. 1937), who joined his studio in the early 1960s, is also known for her playful work (Fig. 18–39). In 1968 she became an equal partner with Odermatt in the studio Odermatt & Tissi. This studio loosened the boundaries of the International Typographic Style and introduced elements of chance, the development of surprising and inventive forms, and intuitive visual organization into the vocabulary of graphic design. This phase of the studio’s development marked the beginning of a break with the traditions of Swiss design and will be discussed further in chapter 23.

During the post–World War II era the spirit of internationalism grew. Increased trade enabled multinational corporations to operate in more than a hundred different countries. The speed and pace of communications were turning the world into a global village. There was an increasing need for communicative clarity, for multilingual formats, and for elementary pictographs and glyphs to enable people from around the world to comprehend signs and information. The new graphic design developed in Switzerland helped fulfill these needs, and its fundamental concepts and methodology spread throughout the world.

The international typographic style in America

The Swiss movement had a major impact on postwar American design. Its influence was first felt in the late 1940s and 50s, and became especially evident during the 1960s and 1970s. A self-taught graphic designer who embraced the potential of European modernism, Rudolph DeHarak (b. 1924) began his

career in Los Angeles in 1946. Four years later he moved to New York, where he formed his own design studio in 1952.

DeHarak's evolution has been a continuing quest for communicative clarity and visual order, which are the qualities he deems vital to effective graphic design. He recognized these qualities in Swiss design during the late 1950s and adapted attributes of the movement such as grid structures and asymmetrical balance. Responding to the legibility and formal perfection of Akzidenz Grotesk before it was available in the United States, DeHarak obtained specimen sheets from European foundries so that he could assemble headlines for his designs, which combine purity of form with elemental signs and images. A series of album covers for Westminster Records (Fig. 18–40 and 18–41) evoke conceptual images of the music's structure.

During the early 1960s DeHarak initiated a series of over 350 book jackets for McGraw-Hill Publishers using a uniform typographic system and grid (Fig. 18–42). Each book's subject was implied and articulated through visual configurations ranging from elemental pictographs to abstract geometric s

18–39. Rosmarie Tissi, Univac advertisement, 1965. A dynamic, powerful image is created by the careful cropping and placement of two telephone receivers.

18–40. Rudolph DeHarak, cover for the album *Sounds of the Alps*, c. 1961. Three vigorous brushstrokes signify sound waves and Switzerland's mountainous terrain.

18–41. Rudolph DeHarak, cover for the album *Vivaldi Gloria*, early 1960s. Squares of color become a twentieth-century designer's emotive response to eighteenth-century music.

18–42. Rudolph DeHarak, book jackets for McGraw-Hill Publishers, early 1960s. Each cover conforms to a consistent format, yet the subjects are interpreted through a remarkable variety of symbolic forms and images.

tructures. This series of paperback books covered academic disciplines including history, psychology, sociology, management, and mathematics. DeHarak's approach appropriately expressed the conceptual content of each volume. The nature of book-jacket design in the United States was expanded and redefined by DeHarak's extensive production.

18–43. Jacqueline S. Casey, announcement for the MIT Ocean Engineering program, 1967. Typography sits above an X-ray of a chambered nautilus shell superimposed on a wavelike repetition of fluid blue shapes.

18–44. Ralph Coburn, poster for the MIT jazz band, 1972. A staccato repetition of the letterforms of the word jazz establishes musical sequences and animates the space.

18–45. Jacqueline C. Casey, poster for an MIT open house, 1974. Stencil letterforms announce the open house, and the open O does double duty as a concrete symbol of the opening of the campus to visitors.

18–46. Dietmar Winkler, poster for a computer programming course, 1969. The term COBAL emerges from a kinetic construction of modular letters.

18–47. Arnold Saks, "Inflatable Sculpture" poster for the Jewish Museum, 1968. A sequence of bars bending upward signifies the action of energy upon pliable materials and graphically conveys the essence of the subject.

The International Typographic Style was rapidly embraced in corporate and institutional graphics during the 1960s and remained a prominent aspect of American design for more than two decades. A

noteworthy example was found in the graphic-design office at the Massachusetts Institute of Technology (MIT), where a sustained level of quality and imagination was achieved. In the early 1950s MIT established a graphic-design program enabling all members of the university community to benefit from free, professional design assistance on their publications and publicity material, an early recognition of the cultural and communicative value of design by an American university. MIT based its graphic-design program on a commitment to the grid and sans-serif typography. The staff was innovative in the use of designed letterforms and manipulated words as vehicles to express content. This approach evolved in the work of Jacqueline S. Casey (1927–91), director of the Design Services Office; Ralph Coburn (b. 1923); and Dietmar Winkler (b. 1938), a German-trained designer who worked with Casey and Coburn from 1966 until 1971.

The Design Services Office produces publications and posters (Fig. 18–43) announcing concerts, speakers, seminars, exhibitions, and courses on the university campus. These frequently use solid-color backgrounds. Many of their solutions are purely typographic, originally created on a drafting table for economical line reproduction. In a sense, letterforms are used as illustrations, for the design and arrangement of the letters in key words frequently become the dominant image (Figs. 18–44 and 18–45). The use of graphic form to express technical and scientific information is demonstrated by Dietmar Winkler’s poster for a computer-programming course (Fig. 18–46).

The rapid spread of the International Typographic Style resulted from the harmony and order of its methodology. The ability of elemental forms to express complex ideas with clarity and directness is seen in the “Inflatable Sculpture” exhibition poster (Fig. 18–47) by Arnold Saks (b. 1931).

The design movement that began in Switzerland and Germany, then outgrew its native boundaries to become truly international, had practitioners in many nations around the globe. This approach was of special value in countries such as Canada and Switzerland, where bilingual or trilingual communications are the norm. It was particularly useful when a diverse body of informational materials ranging from signage to publicity needed to be unified into a coherent body. A growing awareness of design as a logical tool for large organizations caused corporate design and visual-identification systems to expand after World War II. During the mid-1960s the development of corporate design and the International Typographic Style were linked into one movement. This will be discussed in chapter 20.