Armin Hofmann:
Thoughts on the Study and Making of Visual Signs.
Basle School of Design/Yale School of Art, 1947 to 1985
Armin Hofmann, born in 1920, studied graphic design in Winterthur and Zürich/Switzerland. Since 1947 he has worked as a designer and teacher at the Basle School of Design/Switzerland. He has also taught workshops in graphic design at Yale University since 1956. In 1968 Hofmann founded a post-graduate program in graphic design at the Basle School of Design and has since served as director of both this program and the school’s five-year vocational program in graphic design. In 1973 Hofmann founded the Yale University Summer Program in Graphic Design/Brissago, Switzerland. He has lectured at universities, design schools and professional design organizations throughout Europe and the United States, and has served as a judge in numerous design competitions. Hofmann’s widely published design work includes posters, symbols, letterforms, books, exhibitions and architectural graphics. He has authored many essays on design and in 1966 his book Graphic Design Manual: Principles and Practice was published. He is a member of Alliance Graphique Internationale (AGI).

Editor’s Notes

The Advanced Class for Graphic Design, an arm of the Basle School of Design, is a program on the graduate level. The two to four-year program gives no examinations, no grades and no degrees are granted. Yet, in the design world, study with the Basle faculty, acknowledged to be among the most demanding and giving in the field, confers a distinction upon its alumi that is the equal of any more conventional degree.

The school’s strengths are in the areas of design theory and method: drawing, film, color, letterform design and typography. In this issue, the works of Basle’s graduate students are shown to illustrate the concepts of the school’s teachers: Kurt Hauss, André Gürler, Max Schmid, Peter von Arx, Max Mathys, Gregory Vines, Armin Hofmann, and director of the international post-graduate program, and Wolfgang Weingart, who has, in a sense, reinvented typography as a discipline. Hofmann and Weingart, whose statements and images appear on opposite sides of this issue, represent two distinct sides of the Basle approach. Their work as teachers and as practitioners demonstrates that Swiss graphic design is not monolithic, but is, in fact, diverse and multi-faceted as design should be. These two teachers — Hofmann, the Apollonian theoretician, and Weingart, the Dionysian eccentric — have built, with their colleagues, a learning framework that not only permits, but requires each person to work to capacity in an environment that encourages growth and individual expression.

MSF


Student work by:

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16-19: Hamish Thompson
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1-15: Assignment, Part I: Arrange four triangles of varying size and shape within a square format. The triangles should have contiguous sides and ultimately appear as a compact composition. The final results should be simple graphic representations of chosen themes such as layering, flying, balancing and turning. They should be drawings made with a variety of instruments and materials that create different textures. A short written explanation should accompany each final composition. The purpose of this exercise is to teach students to express creatively visual ideas and at the same time focus on achieving artistic values in their work.

Part II: After completing drawn compositions with specific visual themes, make interpretations of the same compositions/themes using colored gouache paints, according to the following specifications: 1) Each of the four triangles and the background should be painted in a different solid color yet share the same value or gradation. 2) The color of one of the triangles should be mixed using only black and white and should create an optical illusion within the composition. 3) As color intensity, temperature and complementary contrasts determine the unity and impact of a color picture, they should be manipulated expressively. 4) The use of color should enhance the original visual theme of the drawn composition. 5) A diagram explaining the structure of the colors used should accompany the final work.
16-35: After designing a basic grid, the student removes, cuts or adds to parts of the grid, progressively changing the composition according to a freely-invented system in a series of at least four steps.

By means of the sign man frees himself from the here and now and has the capacity for abstraction. — Umberto Eco

Although the sign has increasingly become the object of extensive scholarly inquiry, there is still very little specific instruction in this field at art and design schools. The term sign/symbol is predominantly explored and dealt with at universities and there mainly from the viewpoint of linguistics. Since it is very difficult to understand the essence of the visual sign by operating on pure theory, scholars such as Peirce, Saussure, Barthes and Eco have had difficulty formulating the results of their analyses relating to the sign. They are forced again and again to resort to terms that are valid within linguistics but either prove completely inadequate in the language of images or are extremely abstruse. It appears that only a small, specifically indoctrinated elite is capable of following the scholarly treatises and findings in the field of semiotics.
One must, however, understand the educational responsibility with which our schools (all types of schools, but especially design schools) are charged in light of the fact that visual information is becoming more and more important. All people, regardless of age, education or professional status, make themselves understood by means of images, learn with the help of images, amuse others with and are entertained by images. Whether these symbolic references are philosophical in nature or relate to everyday life does not play as important a role as the fact that man, after all, can think only in images and that abstract observations become useless and insubstantial if they cannot be supported by images.

*What an idea to believe that one could conceive of movement without having an image in one’s mind of some thing moving. — C. S. Peirce*
Poster Design for Telecommunication.
38-49: Objects of similar size and shape are photographically represented and juxtaposed in a group. In comparing two or more objects, different, simple messages emerge: technology/nature, aggressive/passive, or moving/static.

50-55: Variations have been made by combining various graphic with appropriate photographic representations of the letterform "Y," the number "1," and a flute.
The material represented is an excerpt from a thesis that documents mason marks engraved on the Basle Cathedral and compares the organic Romanesque marks with more geometric Gothic marks. Each mark represents the signature of the mason who cut the stone, many of whom specialized in cutting only specific types of stones.

An earthquake in 1356 destroyed sections of the late Romanesque cathedral. The crypt, sacristy and walls of the choir that survived are engraved with numerous Romanesque mason marks dating back to 916 A.D. The rebuilt sections of the cathedral are inscribed with Gothic mason marks that date as late as the fifteenth century.

All of the above mason marks are Romanesque except for the typical Gothic mark featured in the lower right photo on page 10 and the two Gothic marks identified on St. Gall's Portal. The structural contrasts between Romanesque and Gothic mason marks reflect differences also found in comparing Romanesque with Gothic architectural details.
In the studies on pages 10 to 19, picture signs/symbols are analyzed with regard to their form, structure and meaning. Students have explored possibilities in formulating individual picture signs so that the signs later belong (formalistcally, structurally and conceptually) to their total picture alphabets. It is important to recognize that an isolated graphic sign has no meaning. It acquires meaning only when it appears: 1) within an appropriate context; 2) in an interplay with other signs (67-76, 77-88, 89-96, 97-113); 3) as a member of a complete group of signs (38-49).

Ludwig Wittgenstein (1889-1951) wrote: "If we are utterly unable to imagine spatial objects outside of space, temporal objects outside of time, then we cannot imagine any object outside of the possibility of a relationship with other objects. The object is independent inasmuch as it can be found in all possible contexts — but this form of independence is a form of association with the context, a form of dependence."
Further consideration of the term "sign" reveals the vast significance of the design professional's function in today's society. Whether he is an artist, architect, designer, filmmaker, advertising expert or teacher, the "designer" always works with signs, establishes signs, refers to signs, reproduces them, transmits them and believes in them. The sign maker, consciously or unconsciously, becomes a teacher in this process. The public receives, processes, remembers, uses and is thus educated by these signs.

This blending of pedagogical influence and professional activity will be demanded in the future of every person who holds a public office, proceeding on the assumption that, through mass media, more and more people will be in a position to produce their own signs. In today's society, in
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which the technical conveyance of signs of every kind is no longer a problem, the responsibility of each individual increases. Suddenly the average person (not just the design professional) is confronted with a whole network of signs and sign systems which he can no longer handle without a deeper knowledge of their structure, function and effect. In this age of electronic communication technology a new dimension evolves around the usage of signs, in that their repetition and distribution can no longer be brought under control. Oddly enough, we are only now beginning to comprehend the fact — which should have been clear to us after the Hitler era — that whoever works publicly with signs or establishes signs, exercises a powerful political influence for which he must take responsibility. This responsibility is carried equally by the particular client (government or

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77-88: This study represents relationships of and confrontations between signs and objects that identify powers in history, political, religious and cultural. For example, the atomic symbol featured next to the flint, our most modern and our oldest tool or weapon, illustrates the development of technological power.

(continued on page 16)
89-96: How is a sign formed? When does it become a symbol? What is its history? How does its historical meaning affect its present meaning? In answering these questions and others, the student develops abilities and sensitivities in working effectively with the components of visual communication.

private industry) and the visual designer. The fact that, in a democratic society, the consumer assumes a certain amount of individual responsibility in his interpretation of signs does not diminish the ever-growing task of those who create signs today.

A sense of my increasing responsibility as a sign maker prompted me to add a pedagogical dimension to my work as a designer in Basle. My personal work is therefore inseparable from my teaching just as my pedagogical activity, shown here, would be unthinkable without my ongoing practice of applied design. One of the most important functions of teachers at elementary schools and design schools in the future will be the creative development of new teaching methodologies. Here the training of a designer differs fundamentally from what is expected of fine art instruction. Design education thus assumes an important function as a link between the rather emotionally-based programs of fine art schools and the primarily scholarly discipline of semiotics.

(continued on page 99)
The Fateful Apples of Atalanta
Classical Mythology

Having been told by the Heavens that she would meet her death through marriage, the fair and fleet-footed Atalanta announced that any suitor would have to outrun her before he could win her as his bride, and that those who failed would die. The lovesick Melanion went to Venus for help in his desperate efforts to win the maiden. Venus gave him three golden apples to toss in Atalanta's path during his race with her. As he'd hoped, Atalanta stopped to pick up the golden apples and thus lost the race to Melanion. Enraptured with one another, the new couple forgot to thank Venus for her help and then inadvertently profaned a holy place. As punishment Atalanta and Melanion were turned into lions, but in honor of their gallantry they were eternalized as stars, Leo Major and Leo Minor.
In each of the featured examples of sign studies included here, the student first researched the origins, meaning and contemporary usage of a given sign and then, working with its fundamental structure, developed a graphic presentation of his findings. Through practical investigations, the student has attempted to analyze various types of signs, to order them, to juxtapose them, as well as to explore their meanings and illustrate the ways in which meaning can be graphically manipulated.

97-113: The student has represented apples found in religion, folklore, art, politics, cultural traditions and modern society through a variety of graphic manipulations of an apple silhouette.
Logo Design (letterform, pictogram, photographic symbol, text).

Robert Rebetez  Mal- und Zeichenartikel  Bäumleingasse 10  Basel

The end.
In this contribution to Design Quarterly I hope to give you a brief overview of my seventeen years as an instructor of typography at the Basle School of Design/Switzerland — of the work we have done in the typeshop and the kind of work we will be doing in the future. I want to illustrate, with specific examples, my teaching approach, which is all about the process of learning rather than the philosophy of teaching. It is a learning process that engages a simple, direct and open attitude toward typography and life, a process not of making typography while suffering pain, but rather of having fun exploring all the possibilities of classical typography, systematic typography, ugly typography, research typography, rigid typography, computer typography, crazy typography, painting typography, do-it-yourself typography, Swiss typography, letter spacing typography. These are the typographic viewpoints represented on the following twenty pages. Although we enjoy great freedom in our work, a careful observer will see that serious care, critical judgment and visual sensibility are our highest priorities throughout the design process.

When I began teaching in 1968, classical, so-called “Swiss typography” (dating from the 1950s), was still commonly practiced by designers throughout Switzerland and at our school. Its conservative design dogma and strict limitations stifled my playful, inquisitive, experimental temperament and I reacted strongly against it. Yet at the same time I recognized too many good qualities in Swiss typography to renounce it altogether. Through my teaching I set out to use the positive qualities of Swiss typography as a base from which to pursue radically new typographic frontiers.

I try to teach students to view typography from all angles: type must not always be set flush left/ragged right, nor in only two type sizes, nor in necessarily right-angle arrangements, nor printed in either black or red. Typography must not be dry, tightly ordered or rigid. Type may be set center axis, ragged left/ragged right, perhaps sometimes in a chaos. But even then, typography should have a hidden structure and visual order.

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Thoughts on Typography

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Student Work from the Late-1960s to the Mid-1970s

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18-20
Typographic Research into the Computer World
Miscellaneous Thoughts on Typography.

I find many mysterious relationships among the 26 characters of our alphabet as they are traditionally designed for type composition. The letters 'W' and 'Z' have structurally little in common with the letters 'E' and 'F'. 'W' and 'Z' are extremely dynamic: 'W' like a bolt of lightning, 'Z' like a bolt in flight. 'E' like an economic organ, 'F' like a botanical. (Note: stroke movements, however, among letterforms of many calligraphic renderings are better visually harmonized.)

Low-resolution letterforms do not have structural differences that sharply distinguish them from one another as do high-resolution letterforms. The absence of these structural differences among all alphabets makes readability more difficult:

The only advantage I find to phototype composition over traditional metal type composition are the increased rate of output and the choice to make a quicker profit. Otherwise I find that phototype output is all too often visually insomnience, distorted through photographic manipulation, difficult to read and so on, thus contributing to the demoralization of our printing culture.

Today printing technology gets better and better, but the design of printed matter gets worse and worse...

Unlike metal type which has its built-in, fixed baseline and its given space to the left and right of the characters, present-day provides no anchor or letter-spacing structures, being perfectly I feel as if I am floundering in a vast ocean unable to find anything to hold onto.

For me, making typography is like coordinating a four-headed creature: design ideas, conceptual thinking, typographic elements and printing techniques.

There are two ways to get interesting work today:
1) Play golf and meet the right people, or
2) Build your name into something stronger than golf.

Types of Studies: Typographic Play with Letter-Spacing, Underlining and 'Step'-Typography


Techniques Used: Hand-Composing and Letterpress Printing

Film Collage Techniques
In our society and in the future we need lively, unique and creative people. We need strong personalities who can influence the development of typography through their personal contributions.

To force typography into a cage is not typography.

To be innovative you must be one step ahead of the others.

"You know" trends in graphic design today (lettering, stepped shapes, underlining...) are nothing new. They are natural results of investigative elementary typography whose elements have their origins in the mechanics of hand-composed lead type.

Exercise, Typographic Research and Work with Color


Computer Graphics
From 1968 to the mid-1970s we worked with a specific vocabulary of signs and elements.

1-4: Semantic interpretations of four aspects of TEE (Trans-Europ Express) trains: High Speed, Punctual, Safe, Comfortable Slumber. 5, 6: Zoo. Snake and Camel. 7: Frühling (Spring). The ease, sparkle and scent of springtime. 8: ändern (to change). Certain letters appear in German with a double-dot accent. By shifting one dot of the "ä" to the right, the
What does this teaching have to do with the profession? Perhaps educators should prepare students not only for today but also for the future. I have a teaching method I call the “typography backpack system.” Through intensive investigations students fill their backpacks with a basic typographic vocabulary that they discover and develop. This vocabulary serves as a resource upon which they can later draw in job situations. Typographic ingredients and experiences can be added meaning of the word is changed.
Two typical examples made in the early 1970s.
And three more examples from this same time.
endlessly, to create still newer typography flavors and concoctions. This typography backpack system describes the fundamental process of our learning and working with typography.

Coming from a generation of typographers professionally trained in hand-composing, I believe in the importance of the role that hand-composing craft and technique play in the design process. Care in execution from the very beginning to the end determines the final quality of one's work. This uncompromising standard of excellence in workmanship is one of the secrets of my teaching and applies not only to our work with lead type, but also to work with transparent films, and to the infinite graphic possibilities of computer design.

In the late 1960s we worked exclusively with hand-composed lead type and hand-printing on letterpresses. (See timeline on pages 2, 3). Despite the obvious limitations of the letterpress, compared to all other more sophisticated printing techniques, it remains the simplest, most direct tool with which to teach students principles of color-mixing and printing quality. It is the most practical and effective means by which students can manipulate, experiment, alter and ultimately realize their typography ideas. After five hundred years, the flexibility of the letterpress as an educational tool has yet to be surpassed.

In the mid-1970s we discovered the fascination of transparent films — a medium one can see through! Traditionally used primarily by trade workers and rarely thought of as an art medium, film presented us with horizons of a new, unknown design world. We tried combining two media: lead type with its fixed limitations, and film with its boundless possibilities.

Soon we discovered the consequences of working with the new media combinations: the more complex the media (regarding visual treatment and technical production), the greater is our need for the mastery of basic formal design principles and production techniques, before we can responsibly and effectively handle the media. So, in the late 1970s we returned to basic studies of formal design principles, but on a deeper, more analytical level than before. In early 1985 we began to work with images we create on an Apple computer — a medium new to Swiss design schools.

The work in this issue represents all of the various media and techniques we use in the typeshop: hand-composed lead type and the letterpress; transparent film collages made with a repro-camera; graphic images made on the computer; and lastly, new creations made possible by combinations of all of the above. The sluggishness of lead type combined with the magic of film craziness and the infinite graphic possibilities of computers are perhaps the language of a new world of typography.

(continued on page 16)
Our treatment of lead type changed as we began work with film-collages in the mid-1970s.

23-42: During a walk in southern Switzerland this student was fascinated by the ruins of a medieval fortress in Bellinzona. Inspired by the visual similarities between a door of the fortress and locked-up type chases in the typeshop, he made a series of typographic interpretations of his impressions. The work evolved from pencil sketches to working with lead type elements, printers' screens and film techniques. The final film collages are a series of cover designs for a Swiss magazine.
After discovering the complexity of film-collage techniques, we resumed basic typographic research.

| Typographie | realisiert Sprache mit den gebräuchlichen Schriftzeichen, deren Sinn ist. Mitteilungen eines Senders einem Empfänger zu zuführen.
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43-54: What can we add to alter a grid made up of alphabet letters, and


in so doing create new meanings, feelings, images, viewpoints, patterns...? The exercise invites crazy ideas.

55-66: If you figure out the reading system of each text arrangement, you will decode the same text. 67-70: An excerpt from a study investigating how we see and read the impact of changes in classical structure. This exercise also serves to teach students that text typography need not be a composed block of type.
Elementary research and "typographic paintings" happen side by side in the typeshop.
Valencia
1974
R.E.C. 17074
Producido en España

71-78: Whereas the examples on the previous page were theoretical, here is a similarly systematic study that deals with hierarchies of typography for a book cover design. 79-86: When specifying type, it is often useful to draw a grid that can be followed by typesetters. How much can one simplify a typographic grid structure without losing comprehensibility?

87-90: Research can often be a dry field. Personal expression finds refreshing outlets in “typographic painting” — work that is free and lively.
School is an institution free of the concrete demands made by existing standards in the profession. Teaching programs should be open, constantly evolving and never bound by fixed opinions. It is important for society that school be a place for experimentation. Students should not be given irrevocable truths or absolute values, but instead should be guided in developing their abilities to independently search for knowledge and personal values.

Graphic design education at the Basle School of Design is characterized by a specific teaching approach and teaching substance. Our strategy is to incorporate traditional aesthetic values with freedom and change. Our educational goals are to provide a thorough and basic understanding of design principles. We teach students to explore constantly and to build upon new possibilities by creating differentiated design solutions. The results of such schooling are not pre-programmed
typographers or graphic designers, but rather people who, upon entering the profession, have a
firm grasp of the design process — the ability to analyze, explore, conceptualize, recognize, apply
and execute solutions to a vast range of design problems.

As a teacher I see myself as a guide and working partner who inspires lively, provocative
exchanges of ideas with students. It is important that students open themselves to such a relation-
ship with me, and that I allow students great freedom within a large, but nevertheless defined
sphere. In the midst of today's rapid technological growth, I try not to forget that new technology
will not design for us. I teach, work and live into the future without a preconceived direction.
Venturing from playful typographic research into the unknown possibilities of the computer.
Research in Modern Typography

Lisa Pomeroy

Karl Gerstner

El Lisitsky

Hans-Rudolf Lutz

Win Crouwel

Alexander Rodchenko

Jan Tschichold

Hans Neuburg

Matt Zwart

Gábor Sugiura
106-120: This last project summarizes the design process and demonstrates the various media with which we work: the development of simple to complex typographic images is made using several media including drawing, film collage, computer graphics and combinations of all of these.

The end.
Weingart:
My Typography Instruction at the Basle School of Design/Switzerland 1968 to 1985.

Design Quarterly

With many thanks

To all my students, whose inspiration, enthusiasm and hard work have made teaching exciting for me.

Burlington, November 1985