

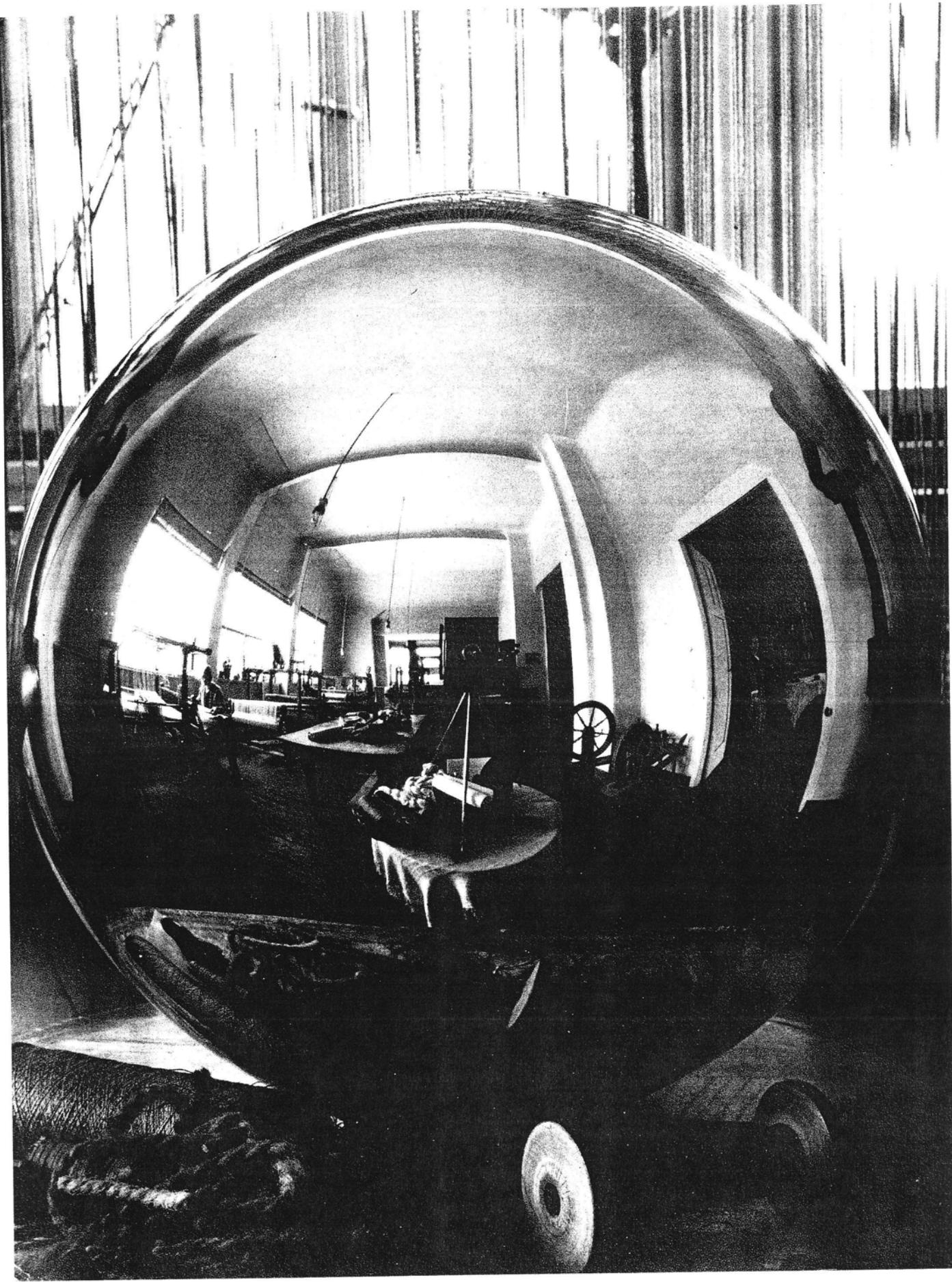
WORKSHOPS FOR MODERNITY

BARRY BERGDOLL | LEAH DICKERMAN

BAUHAUS

1919
1933

The Museum of Modern Art, New York



BAUHAUS FUNDAMENTS

LEAH DICKERMAN

Given its diasporic influence in our lives today, the Bauhaus is so familiar that we think of it as a form of ur-modernism, a point of mythic origin. Yet at the same time, there are ways in which it is not well known at all, overshadowed as it has often been by the many meanings given to it in later years.¹ A current strain of writing, conversely, stresses failure, describing its tenuous footing as a business, for example, or the way the goal of creating goods for mass production often eluded it.² Despite the iconic quality of so many Bauhaus images and objects, the school's most significant achievement may be its nurturing of a sustained cross-media conversation about the nature of art in the modern age: over the course of fourteen years — precisely those of the tumultuous tenure of the Weimar Republic — the Bauhaus brought together artists, architects, and designers in a kind of cultural think tank for the times. Certainly the duration is unprecedented, but the rich mix of prominent participants in different fields of the visual arts is nearly so. This purposeful diversity, present from the start, provoked a reimagining of the relation between fine art and design that offered a formidable challenge to the distinction between them. The result was hardly monolithic in orientation, but rather a series of positions, varying and sometimes at variance with one another, that attempted to work through the ways in which a new modern culture of technological media, machine production, global communication, and postwar politics might shape the role of the artist. Thinking of the Bauhaus this way highlights its commitment to theory as well as practice, though of course the two are deeply intertwined. Rather than trace the school's complicated history, which has been richly chronicled elsewhere, this essay examines a series of key precepts that gave specific shape to Bauhaus modernism.³

Teaching as Experience

Although the Bauhaus was ultimately many things — publisher, advertising agency, industrial-design partner, fabricator — it was first and foremost a school, and its approach to modernism was defined pedagogically. Skeptical about the possibility of teaching the skills necessary for the making of great art, the school's founding director, Walter Gropius, placed "workshops" at the center of its curriculum in his April 1919 manifesto (cats. 38, 39). In doing so he was aligning himself with a current of progressive thinking about design reform established before the war.⁴ Already an important element in the program of several modern craft schools, workshop-based education was aimed at bringing students out of the studios of the academies that had flourished in the later nineteenth century, where they were taught by imitating historical examples, and into the process of making things, in order to gain an understanding of materials. And where academic models reinforced the distinction between fine-arts and applied-arts education, the Bauhaus's workshops were to be led by both a master craftsman (*Handwerksmeister*, later *Technischer Meister* or *Werkmeister*) and a fine artist (*Formmeister*), a pairing that spoke of Gropius's desire to assure that technical knowledge was complemented by aesthetic ambition. This too had precedents in modern craft schools,⁵ but the radical potential of placing artists in the workshops was heightened by the type of artist Gropius invited to take on the role: his first faculty picks were plucked from the crucible of the avant-garde, theoretically confident and distinctly antiacademic in approach.⁶

The most novel part of the Bauhaus curriculum, however, had no place in Gropius's 1919 program. Dismayed by the talents of the students who enrolled in the first year — a motley crew of war veterans no longer young, leftovers from the Weimar schools that were amalgamated to form the Bauhaus, and those seeking a certain meal in time of rampant food shortages⁷ — Johannes Itten (cat. 2), who had become form master for the sculpture, metalwork, woodworking, wall-painting, and weaving workshops, proposed a preliminary course.⁸ Itten had founded his own school in Vienna in 1916: his charisma is suggested by the fact that no fewer than sixteen of his students there followed him to the Bauhaus, and perhaps equally by the fact that the famous Alma Mahler, by then married to Gropius, proposed him as a faculty member to her husband. Gropius and Itten agreed that greater theoretical

¹ Georg Muche

Untitled (Weaving workshop), 1921

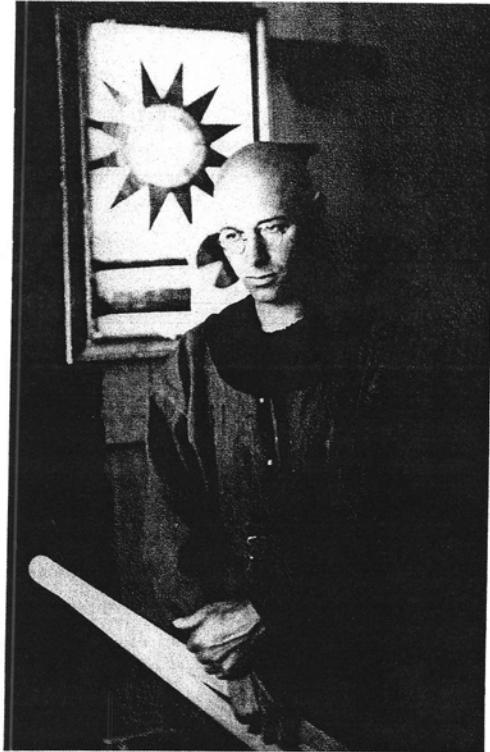
Gelatin silver print

6 1/4 x 4 11/16" (15.8 x 11.9 cm)

The Museum of Modern Art, New York.

Thomas Walther Collection. Gift of

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training was necessary to raise the general level of student work.⁹ Intended to offer an introduction to issues of color, form, and materials considered fundamental to all visual expression, the preliminary course erased the boundaries between craft and fine-art education. Taught continuously from the fall of 1920 throughout the school's existence, first by Itten, later by László Moholy-Nagy and Josef Albers, with complementary color and form courses taught by Vasily Kandinsky and Paul Klee, and required from 1921 until 1930 for students of all disciplines, it was in the end the school's most defining pedagogical feature.¹⁰

Itten began his classes with a focus on the students' bodies, leading a series of exercises that drew on ancient yogic traditions and must have seemed far more exotic in 1920 than today: stretching to produce physical flexibility, isometric relaxation of different body parts in turn, rhythmic chants and breathing — a regime that Klee wryly dubbed “a kind of body massage to train the machine to function with feeling.”¹¹ Yet the Eastern origins and corporeal focus of Itten’s practice can be read with a critical edge: Itten often spoke of his interest in Oswald Spengler’s book *The Decline of the West* (1918/1922), which denounced Western rationalism and technology.¹² A series of quickfire drawing exercises intended to awaken the psyche, senses, and hand followed: in some, students would be directed to render the experience of a dramatic situation — a storm or battle, for example — rapidly and freely, in a form of automatism predating its adoption by the Surrealists.

Like his own teacher Adolf Hözel, a pioneer in teaching abstraction, Itten took the old masters as a starting point, projecting black and white lantern slides for the class to analyze. In charcoal drawings made after icons of German culture such as the *Crucifixion* panel from Grünewald’s Isenheim Altarpiece of c. 1512–16, students used loose, sweeping lines to define the work’s essential expressive components (cat. 68). Itten further expounded his theories in his manifesto *Analysen alter Meister* (Analysis of old masters), published in the first and only volume of Bruno Adler’s almanac *Utopia* (1921). Here, case studies offered photomechanically printed reproductions of five German masterpieces, along with tools for their analysis: a freehand drawing of each work, rendered lithographically, defining its skeletal structure with notes on its use of color; a page of ornate typography, echoing the work’s compositional structure in its visual form and speaking of the work’s emotional content; and in one instance a tipped-in sheet of tracing paper printed with a geometric diagram of ruled lines, analyzing the work beneath and summarizing it in mathematical formulas (cat. 67). This luxurious sheet in fact analogizes Itten’s lens on the past: a kind of looking through the historically specific — narrative, iconography, period style — to what he saw as timeless abstract laws. In this light a painting like Itten’s own *Aufstieg und Rubepunkt* (Ascent and resting point, 1919; cat. 61) begins to look a good deal like the lattices of lines that he traced on top of the old masters.

This view supported Itten's basic pedagogical premise, a type of radical formalism at a moment when modernism's embrace of abstraction was still new: all art could be understood as a series of oppositions, of color, texture, material, or graphic mark — large/small, long/short, broad/narrow, thick/thin, much/little, straight/curved, pointed/blunt, smooth/rough, hard/soft, transparent/opaque, continuous/intermittent.¹³ The bulk of Itten's preliminary course consisted of exercises in which students explored the effects of these contrasts in abstract compositions using a limited range of basic forms (the circle, the square, the triangle). Collages and assemblages of found scraps scavenged from drawers and workshop floors, charcoal drawings with marks of varying intensities, and wood and plaster reliefs experimenting with texture and three-dimensional form proliferated (cats. 69–72). These compositions also stand as a first effort, repeated in many iterations through the Bauhaus, to define a primary visual language for all artistic practice.

The preliminary course established a series of shaping principles that would extend far beyond Itten's departure, in 1923, after a final break with Gropius. It became one of the school's most distinctive premises that all students should be instructed in the principles of abstraction before moving on to specific areas of study. And Itten's search for fundaments, his sensory-corporeal focus, and his technological/mathematical analytic idiom would serve as the framework for much Bauhaus thinking to come. Foremost among the legacies of the early preliminary course, however, was an overarching sense of epistemological doubt: a skepticism about received knowledge. Itten declared it his aim to rid students of "all the dead wood of convention"¹⁴ — a tabula rasa imperative deeply connected to the experience of World War I. The goal of such "unlearning" was to bring the young artist back to a state of innocence beyond the corruption of culture — to a childlike self — from which learning could begin anew. As scholars have recognized, Itten's course had precedents in progressive thinking about the education of children (he was trained as a primary school teacher), especially that of Friedrich Froebel,¹⁵ the founder of kindergarten, the "children's garden" in which play was central to learning, and Heinrich Pestalozzi, a great influence on Froebel. Pestalozzi in turn imagined his program for the sensory education of children as a practical development of Rousseau's idea, put forth in *Emile* (1762), that education should cultivate innate faculties rather than impose external forms of knowledge.¹⁶ This genealogy of thought provided fertile terrain for Bauhaus thinking about severing arts education from the academic tradition, in which students were schooled in ideas of normative beauty.

Albers described his later version of the preliminary course as a form of experimentation:

First we seek contact with material.... Instead of pasting it, we will put paper together by sewing, buttoning, riveting, typing, and pinning it; in other words we fasten it in a multitude of ways. We will test the possibilities of its tensile and compression-resistant strength. In doing so, we do not always create "works of art," but rather experiments; it is not our ambition to fill museums: we are gathering experience.¹⁷

Experience, not knowledge, was the Bauhaus watchword. But the term is hardly a neutral one, for it is precisely the decline of experience in the modern age that is lamented by so many cultural commentators at the time — Walter Benjamin, Edmund Husserl, Georg Simmel, and Ferdinand Tönnies among them. "Never," wrote Benjamin, "has experience been contradicted more thoroughly: strategic experience has been contravened by positional warfare; economic experience, by the inflation; physical experience, by hunger; moral experience, by the ruling powers."¹⁸ In each of the critic's examples, an overarching understanding of a complex whole has been replaced by a severely impoverished view. The integrated self is succeeded by an anonymous replaceability. In this context, the experiential ambitions of the preliminary course offered a fragile bulwark against the dysphoria of modernity.

Basic Units

Itten's distilling drive initiated a key impulse at the Bauhaus: an effort to define the primary elements of visual form, in a parallel process to the attempt in the preliminary course to return to the basic core of the student's mind, stripped of the interference of cultural convention. Beginning in 1922, both Kandinsky and Klee taught classes on basic form within the preliminary-course curriculum.¹⁹ Kandinsky's book *Punkt und Linie zu Fläche* (Point and line to plane, 1926; cat. 254), based on this teaching program and with a title inventorying the irreducible elements of graphic work, issued an overarching directive: "We must at the outset distinguish basic elements from other elements, viz. — elements without which a work in any particular art cannot even come into existence."²⁰ As part of this mandate, the theory of color — that most basic component of visual experience — became an important focus within the preliminary-course curriculum. Itten developed a twelve-spoke color wheel, incorporating the three primary colors, three secondary ones, and six intermediate tones, to create a color system that he correlated with the twelve notes of the musical scale (cat. 66). In his earlier writing Kandinsky had concentrated on single colors in isolation in order to define their most basic affective capacities, and had found that "the two great divisions which at once become obvious are: 1) the warmth or coldness of a color; and 2) the lightness or darkness of a color." The number of permutations was thus limited, he concluded: "I. warm and 1) light or 2) dark; or II. cold, and either 1) light or 2) dark."²¹ Kandinsky's own preoccupation with the three primary colors and primary forms — triangle, circle, and square — left a direct, ducklinglike imprint on his students, visible in Herbert Bayer's wall-painting design for the staircase in the Van de Velde building the school occupied in Weimar (1923; cat. 192), Peter Keler's cradle (1922; cat. 208), and Heinrich Bormann's graphic analysis of a musical composition (1930; cat. 370). These efforts to describe fundamental elements and the rules of their interaction proved defining in another way as well: science provided a template for art in the modern age, and the Bauhaus was imagined as an experimental laboratory, with art the product not of inspiration but of research.

Kandinsky worked with some sense that the most distilled forms of expression would allow for correspondences among mediums. "Every phenomenon of the external and of the inner world," he wrote in *Punkt und Linie zu Fläche*, "can be given a linear expression — a kind of translation."²² Linear diagrams he made in 1925 from photographs of the modern dancer Gret Palucca, who often visited the Bauhaus, seem a kind of test case (cats. 381, 382): working from these stilled images — Kandinsky felt that the "precise structuring" of Palucca's movements was best captured by the camera — he made simple linear drawings that defined the "large simple forms" of her poses.²³ Kandinsky was hardly alone at this moment in trying to devise new modes of dance notation that would offer a stable visual code for performance, a kind of language that would capture experience without resorting to text.²⁴ And he was similarly interested in developing musical notations based on graphic marks and primary forms rather than the conventional script of notes on a staff.²⁵ These distilled forms, Kandinsky suggested, would offer a framework for crossing boundaries between the visual arts, music, and dance.

The basic units defined within the teaching of the preliminary course became the building blocks for larger systems in the products of the workshops. Around 1922, Bauhaus faculty and students began to create a broad range of works using recombinable modular elements. The artist was reimagined as a designer of systems. To one side of a drawing for a universal lettering, Bayer drew straight and curved elements from which all of the characters in his type system could be shaped (1925; cat. 257). Albers designed molded-glass forms to serve as mobile units for his *Kombinations-Schrift* (Combinatory letters, c. 1928; cats. 259, 260), an alphabet rather less readable than Bayer's but one that announced modularity as its signal purpose. In the ceramics workshop in 1923, Theodor Bogler produced a series of prefabricated molded teapot parts — variant handles, spouts, and lids — that could be attached to a standardized body for a range of alternate vessels (cats. 112–14). Gropius too pursued the idea of

modularity in architecture, designing a series of *Baukästen*, cubic components for single-family housing, which were to be prefabricated, then ordered and combined in different configurations (cat. 28). These primary forms took a place within a new postwar culture of standardization: in 1917, a national organization, the Normenausschus der Deutschen Industrie, had been established to regulate units of measurement, symbols, and basic elements of manufacture (such as screws) within and across industries.²⁶ The more things were standardized, the more they could be combined.

Grid Logic

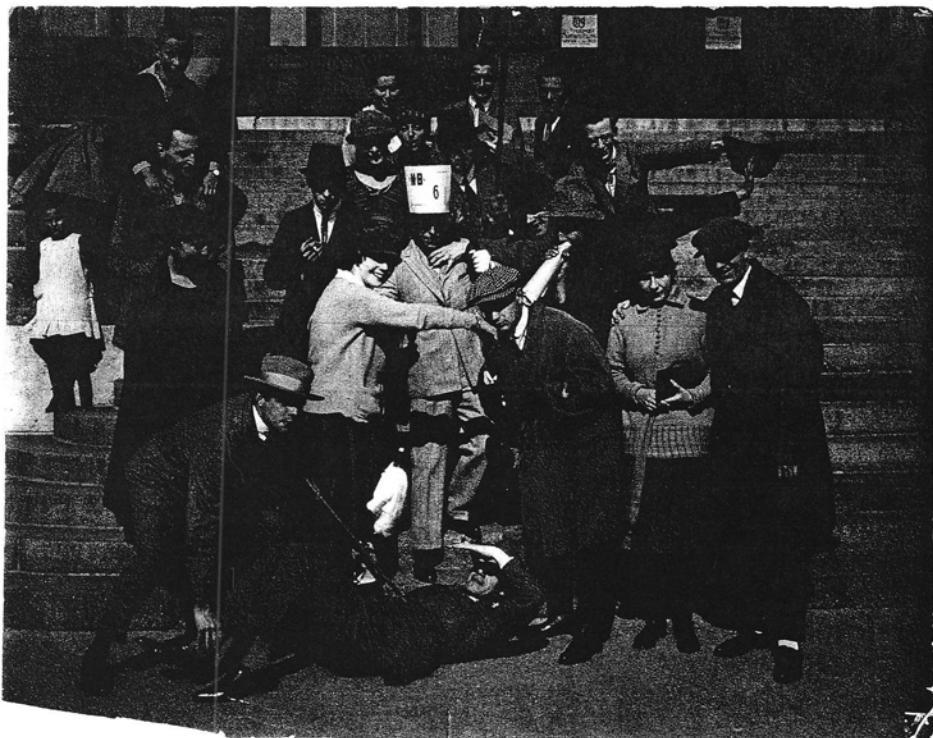
By 1922 the Bauhaus had made an important shift away from the marriage of Expressionism and craft reform that had marked its founding years. After an “impassioned romanticism that was a flaming protest against materialism and the mechanization of art and life” came a “reversal of values,” wrote Oskar Schlemmer, who arrived at the Bauhaus in the winter of 1921 to head the wall-painting workshop. Schlemmer’s text was not without an overheated romanticism of its own:

Dada, court jester in this kingdom, plays ball with the paradoxes and makes the atmosphere free and easy. Americanisms transferred to Europe, the new wedged into the old world, death to the past, to moonlight, and to the soul, thus the present time strides along with the gestures of a conqueror. Reason and science, “man’s greatest powers,” are the regents, and the engineer is the sedate executor of unlimited possibilities.²⁷

The change was publicly unveiled on the opening day of the 1923 exhibition of student and faculty work, where Gropius gave a speech announcing changes at the school and offered a slogan intended to brush away the remaining cobwebs of mysticism: *Kunst und Technik: Eine neue Einheit* (Art and technology: a new unity).²⁸

One explicit change was the introduction of a new business unit, run by a business manager charged with assuring the school’s financial viability through partnerships with outside retailers and manufacturers. (The 1923 exhibition itself was mounted in part to solicit buyers for the school’s products.) This realignment was complex — the school’s relationship to industrial production was in the end ambiguous, characterized by paradoxes and false starts more than successes — but at this moment the Bauhaus artist decisively dropped the robe of the shaman to take on the guise of the technician.²⁹ The visual idiom that emerged is marked by a tenacious embrace of the grid as structuring framework, if stretched into new domains: Anni Albers’s textiles (cats. 163, 164, 276), Josef Albers’s luminescent glass works (cats. 83, 93, 94, 277–79), the three-dimensional grid of Marcel Breuer’s tubular-steel chairs (cats. 296–98, 301, 302), Andor Weininger’s kinetic stage designs (cat. 221), and Bayer’s Bauhaus letterhead (cat. 245) are only some of many examples. If we can discern the dominant imperatives of other forms of modernism — the way *faktura* belongs to the Russian avant-garde of a certain moment, and fracture to Dada — then it is certainly the thorough working-over of the logic of the grid that gives overarching shape to the products of the Bauhaus.

The change betrays the influence of avant-gardes outside the Bauhaus: the double impact of de Stijl and Constructivism. In 1922, Theo van Doesburg, impresario of the de Stijl group, had forged an alliance between Constructivism, de Stijl, and Dada at the school’s doorstep, organizing an international congress in Düsseldorf that May and a second in Weimar itself in September (cat. 3) — a united front of critics of Expressionism. A major show of work from the new Soviet Union, at the Galerie van Diemen, Berlin, in 1922, had offered the West a first view of developments in that country since the Revolution. Van Doesburg had taken up residency in Weimar in April 1921, publishing his *De Stijl* magazine



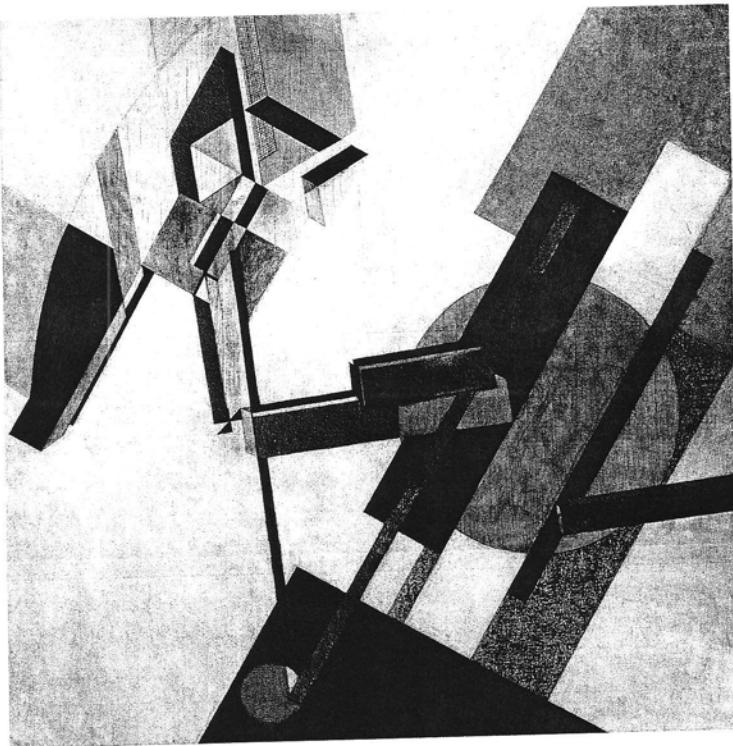
there — the first journal dedicated to a theory of abstraction. And although he was never asked to join the Bauhaus faculty, from 1921 to 1923 he offered private instruction in the city, attended by a number of Bauhaus students, and he served as a familial critic to the school, giving lectures praising its pedagogical ambitions but disparaging the directions taken.³⁰

Gropius's hiring of Moholy-Nagy in 1923 gave leadership to the new direction. Three years earlier this Hungarian artist had settled in Berlin, a crossroads for the artists and intellectuals of Central and Eastern Europe, where he had established ties with the Dadaists Raoul Hausmann, Hannah Höch, and Kurt Schwitters; with the Russian El Lissitzky, who had studied with Kazimir Malevich; and with Van Doesburg himself, all key players in Van Doesburg's international congresses. Moholy's work was both manifesto and testing ground for a Constructivist and de Stijl vocabulary. His paintings of this moment — strongly influenced by Lissitzky in particular (cat. 4) — explore the intersection of abstract forms in abstract space, and are inhabited by floating planes without mass and of varying degrees of transparency (cats. 143–45, 147, 152, 153). The model is no longer perspectival, an image of things seen, but rather the idiom of descriptive geometry.

Moholy's latticeworks of forms intersecting on horizontal and vertical axes bring painting close to the language of architecture.³¹ (And Moholy, like Lissitzky, often deployed axonometry, a form of spatial projection common in architectural rendering, in which orthogonal lines remain parallel rather than meeting at the vanishing point of traditional perspective.) These works create an equivalence between the floating planes of color in the painted surface and those of the wall, ceiling, and floor of the built structure. This congruence opens the way for the radical integration of painting and architecture in works such as Keler's designs for Moholy's studio (cats. 231, 232) and Bayer's advertising kiosks and other buildings (cats. 224–29). But it also implicitly proposes a new model of architecture, in which planes slide past one another on a three-dimensional grid rather than the closed boxes of traditional architecture (cats. 236–39). Here one sees the ascendancy of what for Yve-Alain Bois are the twin premises of de Stijl:³² *elementarization*, the distillation of fundamental forms seen in the ruled line and the right angle, and the use of primary colors plus black, gray, and white; and *integration*, the binding

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Participants in the International Congress of Constructivists and Dadaists, Weimar, 1922
 Top row, left to right: Lucia Moholy-Nagy, Alfréd Kemény, László Moholy-Nagy.
 Second row from the top: Lotte Burchartz, El Lissitzky, Cornelius van Eesteren, Bernhard Sturtzkopf.
 Third row: Max Burchartz (with child), Harry Scheibe, Theo van Doesburg, Hans Vogel, Peter Röhl.
 Front row, standing: Alexa Röhl, Nelly van Doesburg, Tristan Tzara, Nini Smit, Hans Arp.
 Foreground, left: Werner Graeff. On ground: Hans Richter
 Photograph: photographer unknown. September 25 or 26, 1922.
 Gelatin silver print. $6\frac{3}{4} \times 8\frac{3}{8}$ " (17.1 x 21.9 cm). Bauhaus-Archiv Berlin



of these forms together in a new, encompassing whole. In the absorption of these principles at the Bauhaus, the grid became a structural tool allowing for the creation of spaces that integrated disparate mediums into overarching designs — painting, furniture, and textiles into architecture (cat. 20). And in the Bauhaus's final phase, Ludwig Hilberseimer and his students — remaking the fan shape of the autocratic city into gridded rectangular blocks — fulfilled this mode of thinking by taking architecture into city planning (cats. 443, 445).

Grid logic of course had special relevance for textile design, since fabric is defined by the horizontal and vertical intersection of warp and weft. The women of the Bauhaus weaving workshop, in rebelling against the leadership of their first form master, the painter Georg Muche,³³ voiced their collective opposition to the use of curvilinear forms that followed a pictorial logic foreign to the making of cloth, committing themselves instead to abstract compositions exploring the infinite possibilities of the grid. Although never a master in their workshop, Klee had an important influence on the weavers, growing out of a mutual interest in pattern and ornament.³⁴ In his classes Klee used the grid as a matrix for pattern development: students were instructed in a series of almost musical operations — rotation, inversion, mirroring, the transposition of complementary colors (cats. 120, 364, 365). Compositions of colored squares following similar principles flourished in Klee's own watercolors and paintings at this moment (cats. 85–88) — a testament to the proximity of pedagogy and practice. The computerlike punch cards used in the Jacquard looms (p. 208, fig. 1) bought for the workshop in 1925 offered an intensified technological framework for this way of working: the pixillated structures of Gunta Stölzl's Jacquard designs on graph paper (cats. 267, 268) presage digital logic.

Antinationalism

The embrace of a new language of universal form, grounded in the geometric, entailed the purging of a romantic German identity, signaled in emblems of a preindustrial world. This shift is clear in the movement from Carl Jucker's hammered-metal samovar of 1922 (cat. 109), with its spigot in the shape of a bear claw conjuring a German hunting tradition, or from Gyula Pap's candelabra of the same year (cat. 110), its seven arms aligned in a plane making reference to the original Old Temple lamp of biblical description,³⁵ to the geometrically based metalwork turned out in the metal workshop after Moholy took it over in 1923, much of it by his prodigiously talented student Marianne Brandt (cats. 111, 162, 165–67). (By contrast, in his brief tenure as form master of the metal workshop in 1922, Klee, in the words of Xanti Schawinsky, had guided the production of "spiritual samovars and intellectual doorknobs.")³⁶ But the story can be told in many ways; Breuer told it himself in his "Bauhaus film" photomontage (1926; cat. 96), which offers a cinematic trajectory from the romantic primitivism of his and Stölzl's "African" chair of 1921 to the support of the human body on a cushion of air at an unspecified date in the future. This swing was surely part of a larger critique of German Expressionism, its nostalgia and



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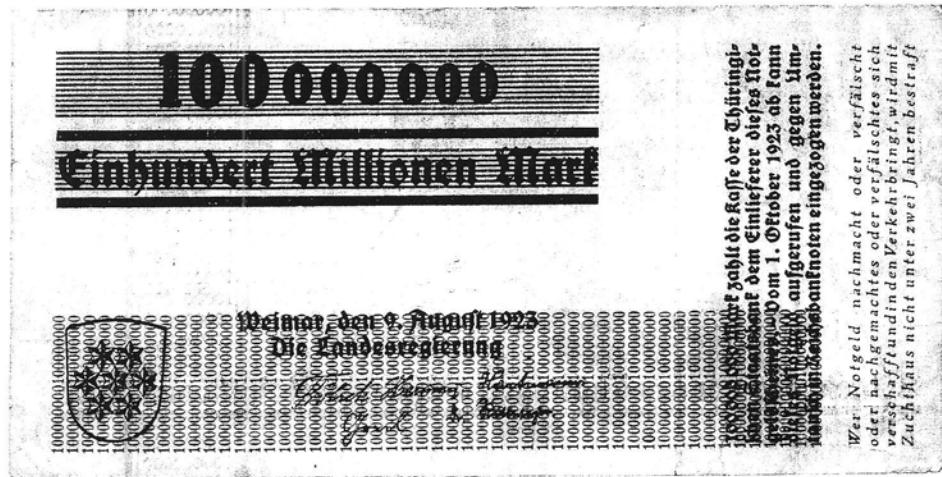
interiority too much the stuff of another moment for many both inside the Bauhaus and well beyond it, in a rare point of avant-garde consensus. But the urgent imperative to define what is essential and universal is characteristically Bauhaus.

Bayer's project to develop a universal lettering (cats. 257, 258), conducted from 1922 until his departure from the school in 1928,³⁷ took aim at Fraktur, the modern form of the spiky blackletter German script, now emphatically nationalist in claim. Ubiquitous in the 1920s, Fraktur even appears in the business correspondence of Albert Langen, the publisher of the *Bauhausbücher* book series (cat. 5). Bayer sought a letter stripped of such national signifiers, a truly international alphabet that spoke of the dream of unfettered global exchange. He began with Roman letters as the foundation of the Western letterform, but rationalized them, jettisoning their historical traces of handwriting, the up-and-down strokes of the pen seen in the serif flourishes and thicks and thins of traditional letterforms. Instead, Bayer used compass, T-square, and rule to create the small inventory of forms from which all the letters of his alphabet might be made (cat. 257). True, this was the language of the engineer, but put to a specific task: the purging of national identity through geometry, in a repudiation of style and the influence of culture. That it was to be understood politically is clear: a universalist program had strong meaning in this moment after the devastation of World War I, and the consequent shocks of class warfare, failed revolution, and the rising power of the right. Bayer himself wrote that "the typographic revolution," of which he was a pioneer, was "not an isolated event but went hand and hand with a new social and political consciousness."³⁸ One imagines, then, that a modification introducing Fraktur type into the banknotes that Bayer designed for the state of Thuringia in the midst of the inflationary crisis that took hold in Germany in 1923 was executed without his consent (cat. 6; see also cat. 262).³⁹

The connection between the Bauhaus's geometric imperative and the recent experience of war is made explicit in the chess set designed in 1922–24 by Josef Hartwig, the technical master of the woodcarving and stone workshops and an avid chess player himself (cats. 168, 169). In an article in the *Leipziger Tagesblatt* in 1924, Hartwig announced that chess players were in for "an enormous surprise, the demilitarization of chessmen, as it were,"⁴⁰ for he had replaced the game's traditional pieces, and their references to medieval warfare, with fully abstract objects. Against the background of the chessboard's grid, the form of each piece was derived from its characteristic movement: both the pawn and the rook, for example, which move parallel to the edges of the board, are cubic, while the L-shaped move of the

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Printed form letter from Albert Langen Verlag, Munich, to newspapers announcing the second, revised edition of László Moholy-Nagy, *Malerei, Fotografie, Film* (Painting, photography, film). *Bauhausbücher* no. 8. March 1928
11 x 8 5/8" (27.9 x 21.9 cm)
Letterpress on paper
Bauhaus-Archiv Berlin



knight is expressed in a cantilevered shape and the bishop's diagonal passage in an "x" form. In later variations of the set, even the chessmen's small base, with its lingering sculptural resonance, disappears, pushing forward this diagrammatic logic. For Hartwig this revamping followed a historical trajectory in which the game, which had functioned "for more than a thousand years as an imitation of a battle between hostile armies," now advanced to its present role "as a pure abstract game of the mind."⁴¹ War versus abstract logic were the terms of discussion.

The twentieth century was rife with proposals for "new men" to serve as the perfect analogues of the age. The list includes the speed-addicted personality of Italian Futurism, the traumatized ego of Dada, the hygienic nationalist of the French *Esprit Nouveau*, the collective, technologically astute subject of the Russian avant-garde, and the armored psyche of proto-fascism. A series of photographs hint at the outlines of a "new figure" for the Bauhaus: in one, by Erich Consemüller, a woman wearing a painted metallic theatrical mask by Schlemmer, and a dress made in the weaving workshop, sits in Breuer's tubular-steel club chair (cat. 7),⁴² while in a related image a masked male figure sits at a table with tea-consuming products of the metal workshop spread on top of it (cat. 8). These are half-mechanical automatons, like so many others in the visual culture of the decade, but here the mask is key: its blank visage is both deracinated and classless, just as the Bauhaus accoutrements of modern life are stripped of cultural traces. Devoid of mobile orifices, the rigid form of the mask enforces silence. The Bauhaus subject is a robotic mute: pared down to essential geometric forms, it passes easily across political borders.

Disenchantment with Language

Alfred Arndt recounts a telling anecdote from Itten's course. The students were instructed to "draw the war." Erich Dieckmann, a veteran with a shattered arm, sketched detailed images of trenches and barbed wire, guns and troops. Walter Menzel, who, as the class's youngest student, had escaped the conflict, stabbed the paper with his chalk and quit in frustration. Itten dismissed Dieckmann's work as a "Romantic picture" but praised the emotional authenticity of Menzel's: "It's all sharp points and harsh resistance."⁴³ Arndt's story speaks to a core Bauhaus fascination with the mute mark, emotionally resonant and disdaining narrative content.

A key text offered theoretical grounding for this disenchantment with the literary: Kandinsky's *Concerning the Spiritual in Art*, of 1911. The essay had been offered as a manifesto, a first theory of abstraction, put forward simultaneously with a practice that served as a model. Together they had had an extraordinary influence on a generation of artists and intellectuals. Kandinsky's towering reputation as a philosopher of abstraction was certainly a prime reason for Gropius's invitation to him to join the Bauhaus faculty, but even before his arrival, in 1922, the text had a shaping influence on Bauhaus thought.

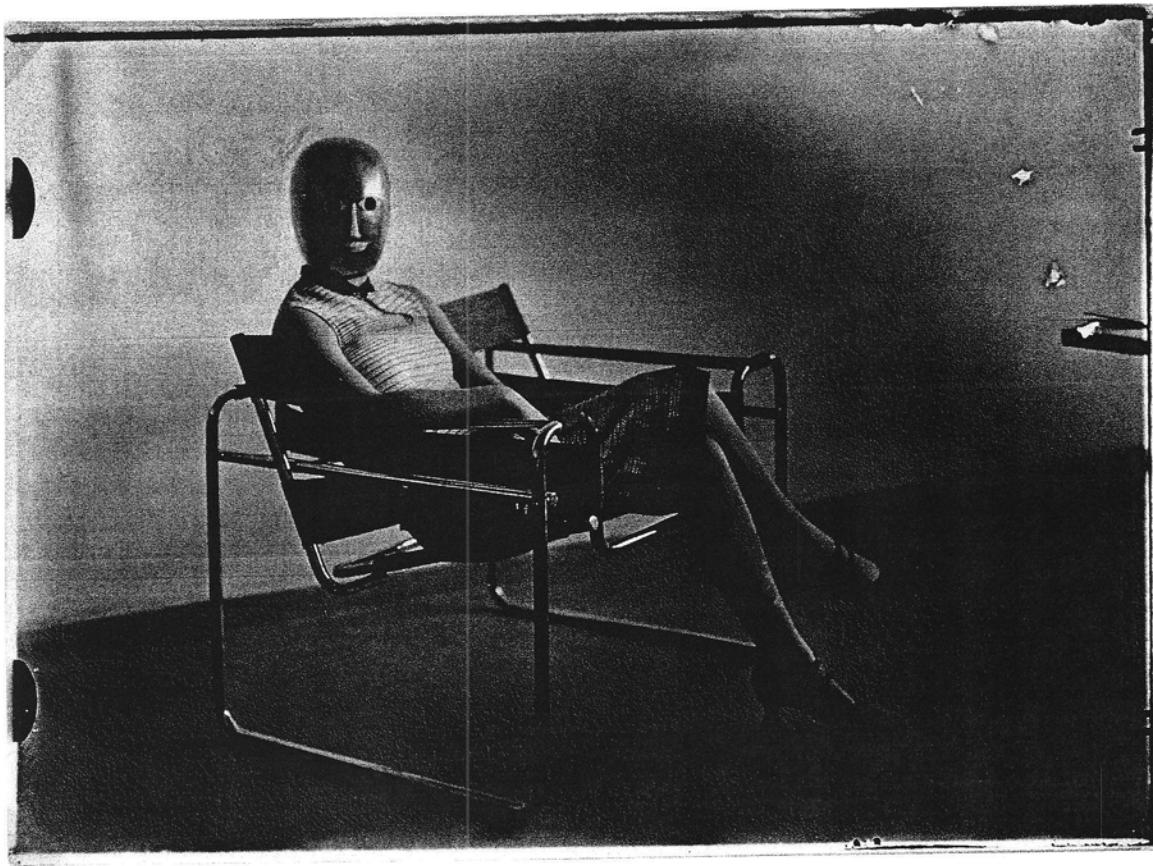
Concerning the Spiritual in Art is permeated by a profound concern with the status of language in art. Describing a salon exhibition, for example, Kandinsky writes that the pictures

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Herbert Bayer

100,000,000-mark emergency banknote designed for the state bank of Thuringia. Adapted from Bayer's original design to include Fraktur type. 1923. Letterpress on paper. 2 3/4 x 5 1/2" (7 x 14 cm). Bauhaus-Archiv Berlin

represent in colour bits of nature — animals in sunlight or shadow, drinking, standing in water, lying on the grass; near to, a Crucifixion by a painter who does not believe in Christ...; many naked women, seen foreshortened from behind...; portrait of Counsellor So and So.... All this is carefully printed in a book — name of artist — name of picture. People with these books in their hands go from wall to wall, turning over the pages, reading the names. Then they go away, neither richer nor poorer than when they came, and are absorbed at once in their business, which has nothing to do with art.⁴⁴



Here and elsewhere, Kandinsky builds an association between the verbal and the base materialism of modernity — the “business which has nothing to do with art.” For him, the most profound art spurns any content that can be named, instead offering “lofty emotions beyond the reach of words.”⁴⁵ This wordless terrain is the realm of what Kandinsky calls “inner need.”⁴⁶ In this paradoxically loquacious argument for the ineffable, abstraction emerges as way to shun the linguistic, to circumvent language — and that form of cognition that is language based. The alternate mode of expression that Kandinsky seeks would isolate the physiological impact of color and form to supplant the communicative with the sensory. Kandinsky stresses the lack of barrier between body and psyche: “The soul being one with the body,” he writes, physical impressions may produce “psychic shock.”⁴⁷

Kandinsky praises the Belgian Symbolist playwright Maurice Maeterlinck for using words to express an inner harmony by repeating them in a poetic context “twice, three times or even more frequently,”⁴⁸ detaching them from their meaning to create an abstract resonance instead. In 1913, in a volume of Kandinsky’s own poems called *Sounds*,⁴⁹ illustrated with his abstracted woodcuts, the artist guided his reader to repeat words until they became senseless, isolating sound images physiologically. Friedrich Kittler has read a form of logophobia into these verbal techniques, a means of simulating aphasia.⁵⁰ Something similar might be seen in the way Klee’s painting *Das Vokaltuch der Kammersängerin Rosa Silber* (Vocal fabric of the singer Rosa Silber, 1922; cat. 118) materializes language away from communication: letters become musical or aural units, while the gesso ground and muslin fabric give the surface a thick, textural density, appealing sensually rather than through the frictionless conduits of verbal exchange. Klee was thinking broadly about the alphabet as pictorial in this period, assigning students in his color theory course that same year to make compositions from combinations of letters.⁵¹ And then there is the matter of the title’s puns: *vokal* in German means not only “vocal” but “vowel,” and in Klee’s work, against the gridded backdrop, the R and S of the singer’s name appear along with the five vowels, the primary tools of the singer’s art.⁵² Puns point to the slippage of words, to words’ failure to mean unambiguously, and so to the thickening of language itself.

Schlemmer too was self-conscious about the role of words in his *Triadische Ballett* (Triadic ballet, 1922; cats. 216, 217). Schlemmer held up Baroque masked dance, an obsolete theatrical form, as a model for modern performance — “the starting point for renewal.”⁵³ Discussing the abolition of face masks in these dances in 1772, he remarked that “dates which historians consider the milestones of an ascent, actually mark the stages of decline.”⁵⁴ For Schlemmer, the mask offered a critical counter-point to the heightened emotional pitch and exaggerated expressive gesture of Expressionist theater.



The human actor was not a psychological subject but a geometrical phenomenon — an “art figure” (*Kunstfigur*)⁵⁵ created with costumes that rationalized the body through circles, spheres, and triangles. And by far the greatest virtue of Baroque theater for Schlemmer was that of silence.⁵⁶

Disclosing the characteristic Bauhaus belief that there was no principle that could not be rendered diagrammatically, Schlemmer published a drawing contrasting “drama” with “ballet/pantomime,” each represented by a right triangle (cat. 9). The long side of the drama triangle is “the oral stage” while the shorter sides are “play or plastic stage” and “visual stage.” Ballet/pantomime reverses the values: “play or plastic stage” is now dominant, “visual stage” secondary, and “oral stage” is replaced altogether by “aural stage.” In a way that resonates with Kandinsky’s writing, Schlemmer reveals a fascination with mute players; he sees the geometrically rationalized figure as a nonlinguistic entity. “When the word is silent,” he writes, “when the body alone is articulate and its play is on exhibition... then it is free.”⁵⁷ Yet at the same time, Schlemmer’s extravagant costumes work against the idea of ballet as a kinetic event. Exaggerated headdresses and masks, padded torsos and limbs, inhibit movement at the same time that they lend spectacular visibility to the pose. Moving from one static position to another, each a new, starkly geometric composition, Schlemmer’s figures seem designed for photographic representation — and judging from the number of camera images taken of them, this was indeed a major part of their function (cat. 218).

At the Bauhaus, even the act of reading was reconfigured to be less about words. Writing in 1925, Moholy lamented “the monotonous gray of recent books”⁵⁸ — the undifferentiated pages fostered by the line-by-line, left-to-right, top-to-bottom mode of reading. In a design of his own from that year, for a section of his book *Malerei Photographie Film* (Painting photography film, the eighth in the *Bauhausbücher* series; cat. 254), Moholy breaks down the traditional page block (cat. 12). Photographs of city views,

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Photographer unknown

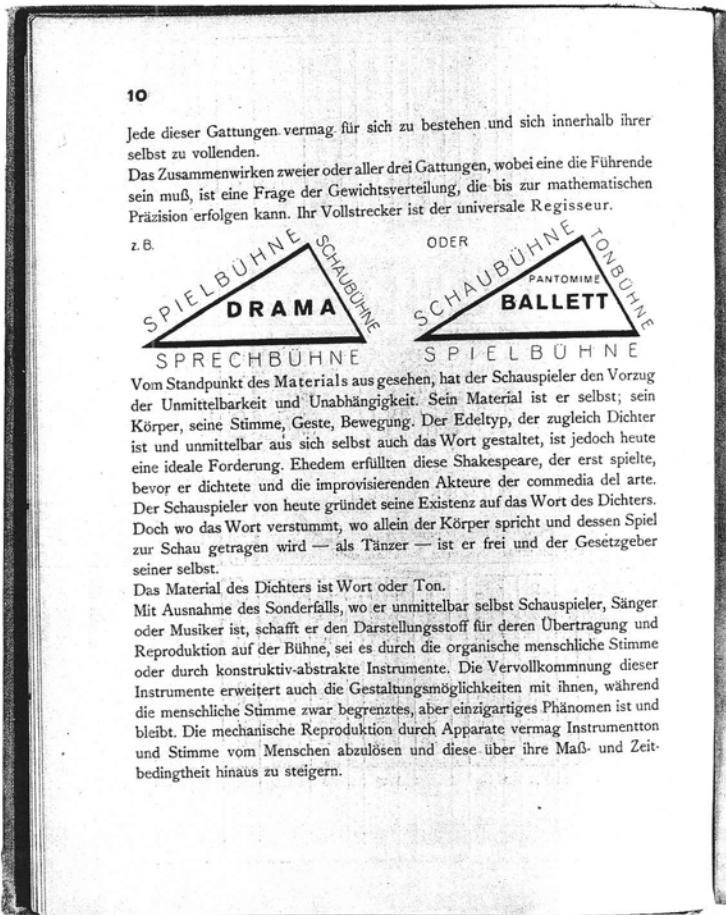
(probably Erich Consemüller)

Untitled (Man wearing a mask by Oskar Schlemmer with Bauhaus metal work on adjacent tabletop). 1926–27

Gelatin silver print

5 3/8 x 4 1/2" (13.6 x 11.4 cm)

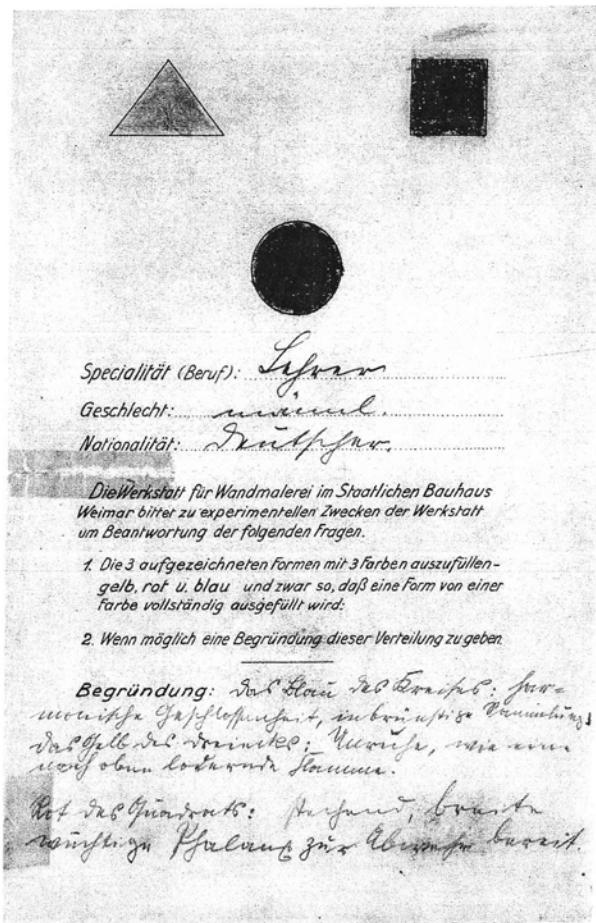
The J. Paul Getty Museum, Los Angeles



often taken at oblique angles — a wireless mast, electric signs at night, an aerial view of a city square, street lights — are dispersed across asymmetrically composed pages and juxtaposed with bold gridded lines, numbers, pictographs, and staccato bars of text ("electric signs with luminous writing which vanishes and reappears," "tempo tempo-o-tempo-o-o"). Such pages evoke the experience of the modern city, full of flashes of sensory information. In both form and content, *Malerei Photographie Film* was a manifesto for embracing the expanded role of photography in modern life. Precipitous technological changes, Moholy argued — the saturation of the public sphere with photographic images, on cinema screens and in illustrated newspapers and magazines — had fundamentally transformed human perception. People, he suggested, might soon start collecting color slides the way they already collected gramophone records, and "kinetic, projected compositions" and works made from materials produced for the "electro-technical industry" would replace paintings on the walls of modern homes.⁵⁹ *Malerei Photographie Film* was a book for this modern world. And it is notable that this new "typographical-visual-synoptical form"⁶⁰ dramatically reduced the number of words on the page, forming "a new visual literature"⁶¹ based on the integration of photomechanical printing techniques and avant-garde typographic experimentation.

Moholy was not alone among the designers at the Bauhaus in working to revise the status of the written word. Bayer, for example, designed type that corresponded less to the culture of the book than to speech itself: following the *Kleinschreibung* (literally, "writing small") reform movement, earnestly promoted by Dr. Walter Porstmann, a government efficiency and standards expert, in his 1920 book *Sprache und Schrift*,⁶² Bayer famously proposed abandoning capital letters in all Bauhaus correspondence and printed matter. The policy was adopted by Gropius to much criticism.⁶³ "We do not speak a capital a and a small a," Bayer wrote, pegging typography to the basis of language in sound — that is, language in its sensuous, embodied form.⁶⁴ Bayer's type imagines a vocalized word, binding sound and meaning into a unit.

In this pervasive disenchantment with language, it is precisely the body — the psyche and sensorium combined — that seems to offer a conduit for a new form of direct communication. In 1922–23, Kandinsky distributed a psychological test to Bauhaus students and faculty on behalf of the wall-painting workshop (cat. 10). The form instructed recipients to fill in the blank outlines of a triangle, a square, and a circle with the colors that each form seemed to elicit, and if possible (that is, if words might be

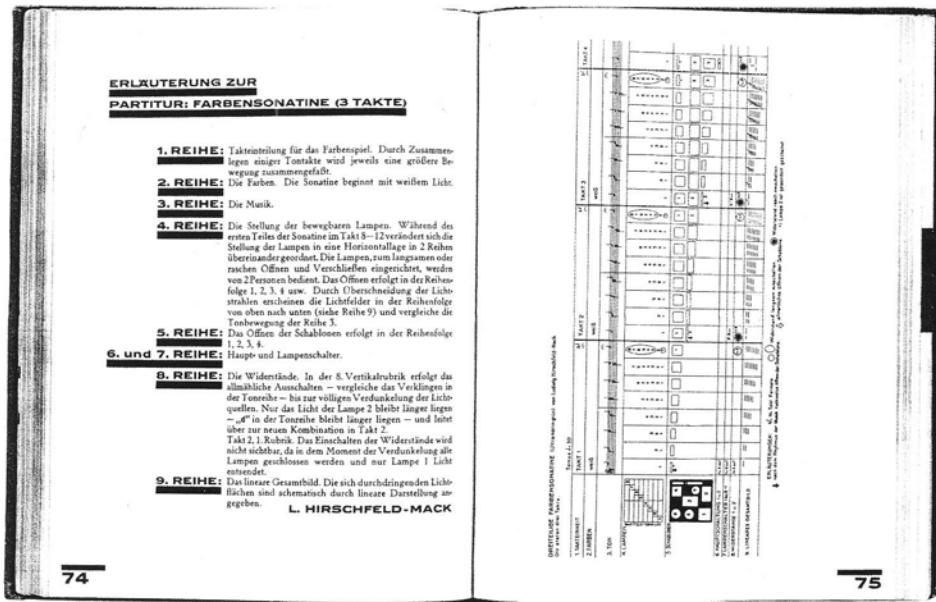


found) to explain the choice. Perhaps not surprisingly, most agreed with Kandinsky's own well-disseminated linkages: yellow for the triangle, red for the square, and blue for the circle. This type of exercise was not new for Kandinsky; much of his effort in the years he had spent at Inkhuks (the institute of artistic culture), Moscow, immediately before coming to the Bauhaus, lay in charting laws of subjective response to color and form in which the "physiological effect should serve simply as a bridge to the elucidation of the psychological effect."⁶⁵ The Bauhaus questionnaire speaks to a defining aspiration: to facilitate a form of immediate prelinguistic communication. Here Kandinsky seems to have been drawing on the work of Wilhelm Wundt, who founded the first laboratory for experimental psychology in Leipzig in 1875, and whose early studies focused on sensory perception, in particular on those sensations that preceded consciously formulated experience.

Yet part of the problem for Kandinsky, in his multiple attempts to chart mechanisms for universal psychic response, seems to have been that of cracking the code. Though overshadowed in recent scholarly thinking by the systems of Sigmund Freud and Ferdinand de Saussure, his approach offers an important modernist model, one that is neither psychoanalytical nor semiotic. Instead, it leans toward the phenomenology of Edmund Husserl, whose methodology was based on bracketing out the existence of the external world in order to attend to the perceiving body and primordial forms of signification.

Gesamtkunstwerk Thinking

In his 1919 program for the new school (cats. 38, 39), Gropius declared his purpose: the arts had become "isolated" in the modern age, and the school had to forge a "new unity." "The Bauhaus," wrote Gropius, "strives to bring together all creative effort into one whole, to reunify all the disciplines of practical art — sculpture, painting, handicrafts, and crafts — as inseparable components of a new architecture."⁶⁶ Architecture — and specifically the model of the cathedral — was imagined as the culmination of this new Gesamtkunstwerk, a total work of art binding different forms of creative endeavor together. The house commissioned from Gropius by the Berlin timber merchant Adolf Sommerfeld (cats. 77–82) offered an important first opportunity to realize the architect's aims; built in 1920–21, it involved contributions from the glass painting, woodworking, metalwork, and weaving workshops, all using a new abstract language of cubic ornament to produce an environment at once luxurious, coordinated, and modern.



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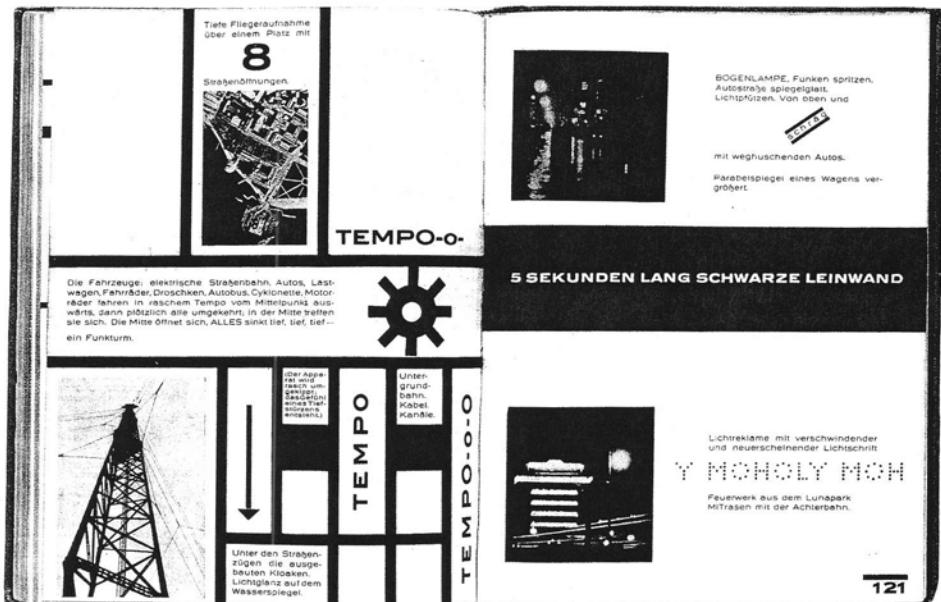
75

If Gropius saw his “new unity” of mediums as culminating in architecture, the same impetus permeated many of the school’s other activities. In this, the director got support from Kandinsky, an influential advocate of the idea of the *Gesamtkunstwerk* even before World War I. The term itself derived from Richard Wagner, who had used it to describe his vision of opera as a total spectacle expressing the mythic aspirations of a culture. But Kandinsky transformed the concept, imagining a fully abstract intermedia experience addressing an inner world of bodily and psychic effects. In an essay published on the occasion of the Bauhaus exhibition of 1923, Kandinsky began on a familiar note: modernity, he wrote, was characterized by the “isolation of the arts.” Theater provided the antidote: it could serve as a “magnet...attracting all these languages together.” In its modern form, it would function as an experimental laboratory in which the resources of architecture, painting, sculpture, music, dance, and poetry would be deployed simultaneously to create “a monumental abstract art,” both multisensory and immersive.⁶⁷

Abstract theater indeed emerged as something of a modern grail at the Bauhaus, pursued with enormous collective energy. An early program entitled *Mechanisches Kabarett* (Mechanical cabaret; cat. 220), staged by Kurt Schmidt with other students at the 1923 exhibition, spoke more to aspiration than to achievement: in what seems to have been a charmingly goofy presentation, dancers moved rhythmically across the stage to modern music, with brightly painted cutouts of geometric forms attached by belts to their black costumes. Weininger too, over a period of years, developed designs for a mechanized performance featuring abstract moving elements and puppets instead of actors (cat. 221). Baffles around the stage would rotate to reveal different-colored faces, while moving belts, seemingly borrowed from a factory assembly line, would be suspended horizontally and vertically in a grid structure. Weininger, one of the Bauhaus students who attended Van Doesburg’s classes in Weimar, later described the project as an outgrowth of his desire to create a “constantly changing de Stijl painting.”⁶⁸

Between 1922 and 1925, Ludwig Hirschfeld-Mack, working with Kurt Schwerdtfeger and Hartwig, achieved several stagings of an experimental media form he called “reflected light compositions” (cat. 11). Here, to a musical accompaniment, independently controlled beams of colored light were projected through templates of cutout geometric forms onto the back of a scrim that faced the audience. For Hirschfeld-Mack, the compositions used the very elements of expression neglected in most modern films — “light in motion, arranged in a rhythm based on time sequences” — and these elements, in distilled, abstract form, would stimulate “powerful physical and psychological effects.”⁶⁹ Abstract light theater was positioned here as an afterimage of the new popularization of film, a way of processing modern sensory experience. Hirschfeld-Mack’s primitive media machine has descendants in later Bauhaus efforts such as Kurt Kranz’s libretto for an abstract film (1930; cat. 373), whose leporello format moves the viewer’s eye from image to image in a sequential way, evoking the duration of time-based media, and Moholy’s *Lichtrequisit einer elektrischen Bühne* (Light prop for an electric stage, 1930; cats. 374, 375), a kinetic object with rotating, perforated metal parts that seems to have been designed in part for representation in film and photography. In fact Moholy used it to make works in both mediums.

The culmination of this ambition — the uniting of architecture and performance — may well be the commission Gropius received in 1927 from the radical director Erwin Piscator for a fully mechanized theater (cat. 372). Piscator hoped to replace the “peep box” of the proscenium stage, with



its perspectival assumptions, with a *Raumbühne* ("spatial stage," often translated as "total theater"), a space without stalls, balconies, or boxes that would allow the audience's active participation.⁷⁰ This was also to be a space of media saturation: "I imagined," Piscator wrote, "something like a theater machine, technologically designed like a typewriter, an apparatus equipped with the most modern lighting, horizontally and vertically moveable and revolving parts, innumerable film projectors, public address system etc."⁷¹ Gropius's unrealized scheme for this theater, developed with a Bauhaus team that included Weininger, Schawinsky, and Heinz Loew, featured a revolving central disk that could place the stage in the center of the structure for theater in the round. Sets would be replaced by images or film projected from a central media tower onto screens hung between twelve supporting columns, while the parabolic shape of the roof was determined by acoustic considerations.

Not surprisingly, such intermedia impulses transformed the boundaries between mediums, and it is worth meditating on the fate of painting at the Bauhaus. The autonomy of the discrete easel picture was challenged from the school's first years. Over the span of the institution's life, painting became an element of a fully designed environment, in a modernization of an Arts and Crafts model; its ambitions were appropriated by large-scale textile wall hangings; it was reconceived as wall painting, inseparable from the architectural space it defined; and it was dematerialized into mechanically produced light displays. It seems clear that the structure of the Bauhaus, with its *Gesamtkunstwerk* aspirations, spelled the obsolescence of traditional painting. In contrast to a more familiar narrative of modernism (crucially shaped in an Anglo-American context by the writings of Clement Greenberg) that saw painting on a trajectory toward ever greater medium specificity, the Bauhaus offered an alternate model, one shaped by the productive relationships among artists in different media fostered at the school itself, often across the divide between fine and applied arts.

The Modern Specialist

The ambitious *Bauhausbücher* publication program (cat. 254), a series of books announced by its coeditors, Gropius and Moholy-Nagy, in 1924 (cat. 255), put the school's intellectual agenda on display.⁷² Across a series of prospectuses, each offering a list of titles that together total over fifty volumes, we glimpse the invitees to the ultimate Bauhaus fête, a virtual dinner party of the simpatico. Fourteen books were ultimately produced. A 1925 list supplemented works by inhouse authors with proposed texts by Piet Mondrian on design, Van Doesburg on de Stijl aesthetics, Schwitters on Merz, Heinrich Jacoby on musical education, J.J. P. Oud on Dutch architecture, George Antheil on mechanical music, Albert Gleizes on Cubism, Filippo Tommaso Marinetti and Enrico Prampolini on Futurism, Tristan Tzara on Dada, Lajos Kassák and Ernst Kállai on the Hungarian avant-garde, Le Corbusier on architecture, Friedrich Kiesler on the space of the city, Jane Heap on America, and Martin Schäfer on constructive biology.⁷³ Each planned or realized volume would stand as a primary statement on the nature of the modern. Signaling a thoroughgoing commitment to theoretical analysis, this ambitious series is the Bauhaus program that most fully expresses the school's self-conception as a think tank. "Our goal," wrote Moholy in a letter to the Russian Constructivist Aleksandr Rodchenko, soliciting a contribution, "is to give a summary of all that is contemporary."⁷⁴



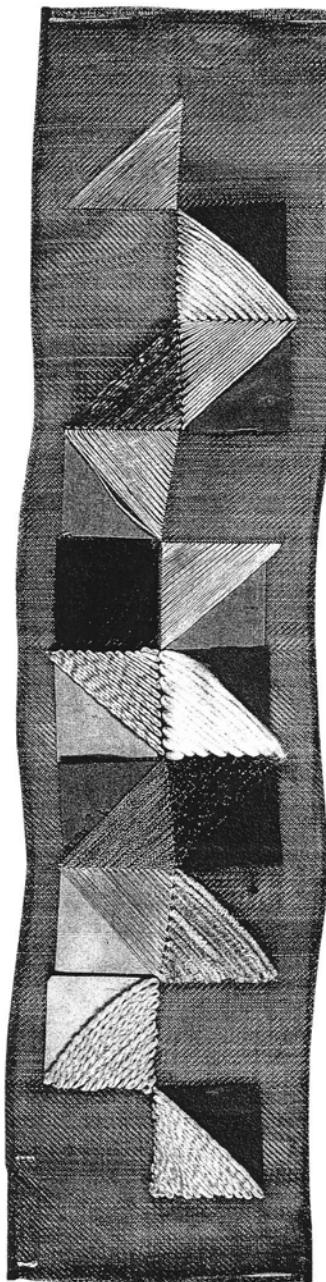
But the lists also speak of a political worldview, a commitment to dialogue and internationalism over retreat and isolation. The titles envision a world of keenly interconnected global efforts in different areas of endeavor subsumed under the aegis of “design.” Field permeability is the mantra, and a chartlike publication program that Moholy wrote in 1925 offers a manifesto:

These books deal with the problems of art, science and technology, and for the specialist of today they attempt to furnish information about the complex problems, working methods and research results in various areas of design, thereby providing the individual with a criterion for his own studies and with progress made in other areas. In order to be able to tackle a task of this magnitude the editors have enlisted the cooperation of the most knowledgeable experts from various countries who are trying to integrate their specialized work with the totality of phenomena of the modern world.⁷⁵

Moholy chooses the workmanlike language of the technical expert: with words like “working methods,” “information,” “specialist,” he deploys metaphors of the laboratory, R&D for the arts, pushing aside for good the persona of artist as shaman nurtured by Itten. In a 1925 photo by Lucia Moholy (cat. 13), Moholy played the part: dressed in mechanic’s overalls with slicked-back hair, rimless glasses, and tie, he has every bit the look of the factory manager.⁷⁶ He poses against a clean white plane uninterrupted by wainscoting or ornament, evoking a de Stijl environment in three dimensions and suggesting what might be the appropriate architectural analogue for this figure of modernity. After the Bauhaus moved to Dessau, in 1925, it abandoned the teaching-model pairing of *Werkmeister* and *Formmeister*, but while technical masters were no longer appointed to the workshops, the role of technician was subsumed by the artists themselves.

The books worked to brand the modern under the name of the Bauhaus. Moholy’s distinctive design — the consistent trim size, the placement of logo and series title on front cover and spine, and signature design elements like sans serif lettering and heavy rules — reveals a thought-out plan to give the series an overarching visual identity. This type of thinking was in itself new: the practices of branding and product standardization had emerged only in the years since 1900, as by-products of the vertiginous

13
Lucia Moholy
Untitled (László Moholy-Nagy). 1926
Gelatin silver print
9 1/16 x 6 1/4" (23 x 15.9 cm)
Bauhaus-Archiv Berlin



growth of a modern commodity culture.⁷⁷ But Moholy was also stepping farther into a pioneering role: during the first decades of modern marketing, advertising campaigns had for the most part been developed by business managers and executed by print-shop draftsmen.⁷⁸ Offering a combination of avant-garde aesthetics and professional knowledge, Moholy now claimed this role for the visual artist, with the Bauhaus itself as both client and agency.

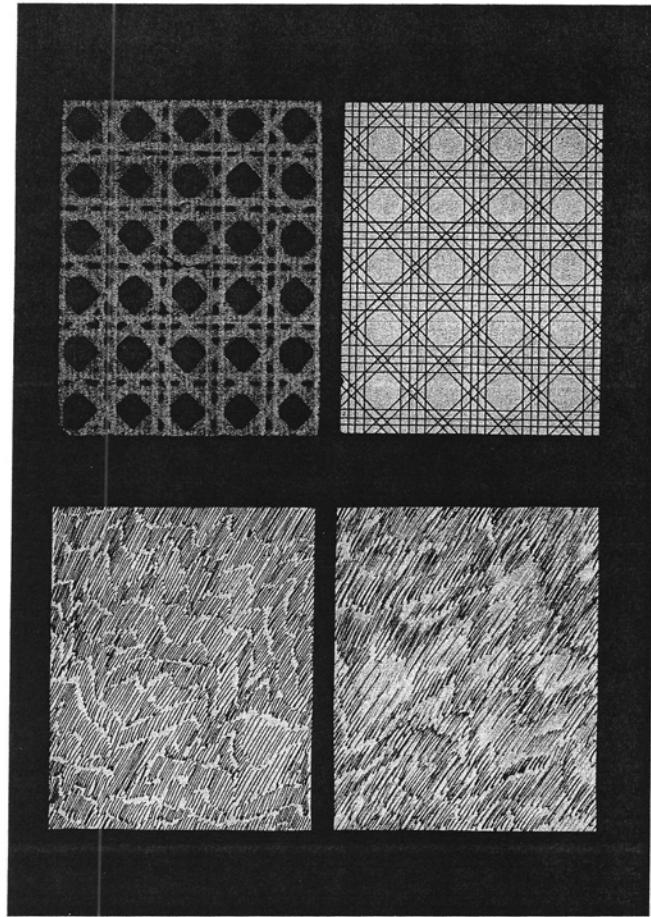
In 1923, Bayer designed a catalogue for the products of the school's workshops, the famous *Katalog der Muster* (Catalogue of designs), a set of loose-leaf sheets in the new standard A4 size (cat. 202).⁷⁹ A few years later, Joost Schmidt created an identity and publicity campaign for the city of Dessau, integrating photography, diagrams, and text into an overall design (cats. 252, 253). By 1926, commercial printers were looking to the Bauhaus for ideas: the print-and-graphics trade journal *Offset. Buch und Werbekunst* published a special issue on Bauhaus typography and advertising, with a cover by Schmidt (cat. 271). In 1929, a publicity card issued by the school described its print and advertising department as a full-service design shop whose capacities included the production of printed matter in modern typography; consulting in new advertising design; layout and production (or overseeing production) of publicity materials, business documents, catalogues, brochures, posters, advertisement etc.; the creation of company logos, trade names, window displays, exhibition designs, and advertising photographs.⁸⁰ Artwork was here reimagined as media work; the fine-art printmaking and bookbinding

14

Otti Berger

Tasttafel (touch panel) made for preliminary course taught by László Moholy-Nagy. 1928
Threads and board on wire backing with loosely attached multicolored square paper cards

22 7/16 x 5 1/2" (14 x 57 cm)
Bauhaus-Archiv Berlin

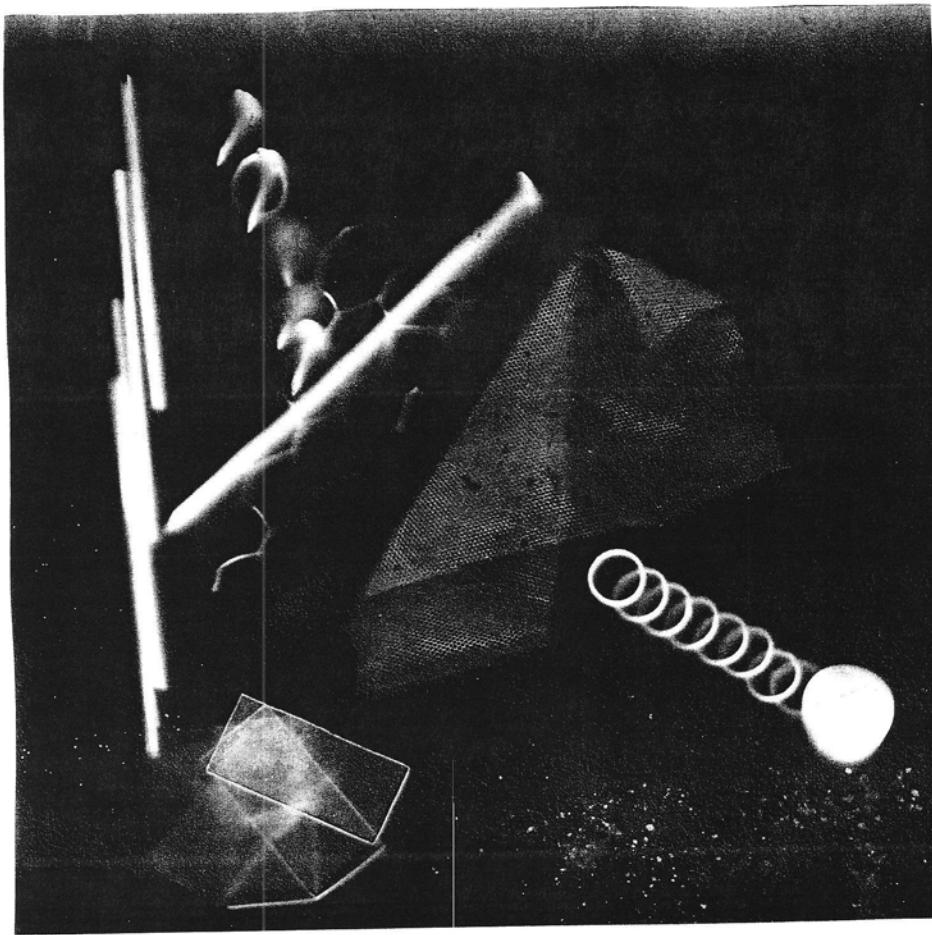


workshops of the school's first years were transformed with the move to Dessau into studios for advertising design and typography.⁸¹ The school's effectiveness in claiming the modern as a brand identity is suggested by Hannes Meyer's ironic quote in a lecture of 1929: "Bauhaus is fashion. All the ladies at the cocktail parties chatter about Bauhaus constructivism. Their calling cards are in lowercase letters."⁸²

Tactility

In the Bauhaus worldview as in Walter Benjamin's, experience was closely associated with the handling of things — hence Josef Albers's mandate for "contact with material."⁸³ Besides debunking traditional academic models of teaching through emulation, Bauhaus pedagogy took aim at another long-held premise of artmaking: the primacy of the visual.

In 1921, a the young Gunta Stölzl, who in 1927 would become the school's first female master, recorded the philosophy of her preliminary-course teacher Itten in her notebook: "Drawing is not the reproduction of what is seen, but making whatever one senses through external stimulus (naturally internal, too) flow through one's entire body."⁸⁴ Itten placed sensory training at the core of his teaching, setting exercises in which students closed their eyes and explored a series of textures with their fingertips. "In a short time," he reported, "their sense of touch improved to an astonishing degree."⁸⁵ This tactile emphasis was only heightened in later preliminary-course training, with Moholy enthusiastically conducting what he called "tactility exercises" (*Tastübungen*).⁸⁶ In his book *Von Material zu Architektur* of 1929, widely known in English as *The New Vision*, Moholy outlined the principles of his Bauhaus teaching, arguing that touch is the foundation of sense perception — the "basic sensory experience, which, nevertheless, has been least developed within a discourse of art."⁸⁷ For Moholy, modernity posed a threat to tactile experience: "How neglected our tactile education is was demonstrated to me recently with the director of a training school of nurses who spoke of the difficulties she had encountered in teaching massage."⁸⁸ His attempts to rectify this situation in the preliminary course included the assignment of creating chartlike touch panels (*Tasttafeln*), data-gathering tools with which to record the psychological reactions of individuals to different textures.⁸⁹ The weaver Otti Berger, for example, made a grid of threads of various fibers holding small colored-paper squares (cat. 14). In other exercises, students were asked to produce optical translations of textural properties (cat. 15).



The sensory, material-based curriculum of the preliminary course nurtured a certain bodily focus in Bauhaus artmaking. It was in this context that Moholy could conceive of the photogram as a major form of avant-garde practice. Made without a camera, by laying materials of varying degrees of transparency on light-sensitive photographic paper, the photogram offered not an image of things seen but a trace of physical contact.

Moholy first experimented with photograms (and with photographic processes generally) in Berlin in 1922, shortly before coming to the Bauhaus the following year. Between 1923 and 1928, photograms became an intense preoccupation for him (cats. 280–85), part of a larger effort to reconceive painting as an art not of pigment but of light — a laboratory form of sorts. Moholy made his abstract photograms alongside his painting practice until 1928, when he abandoned the latter, only to return to it two years later.⁹⁰ He continued to make photograms throughout his hiatus from painting, and integrated them, as did Josef Albers, in the teaching of the preliminary course (cat. 16).

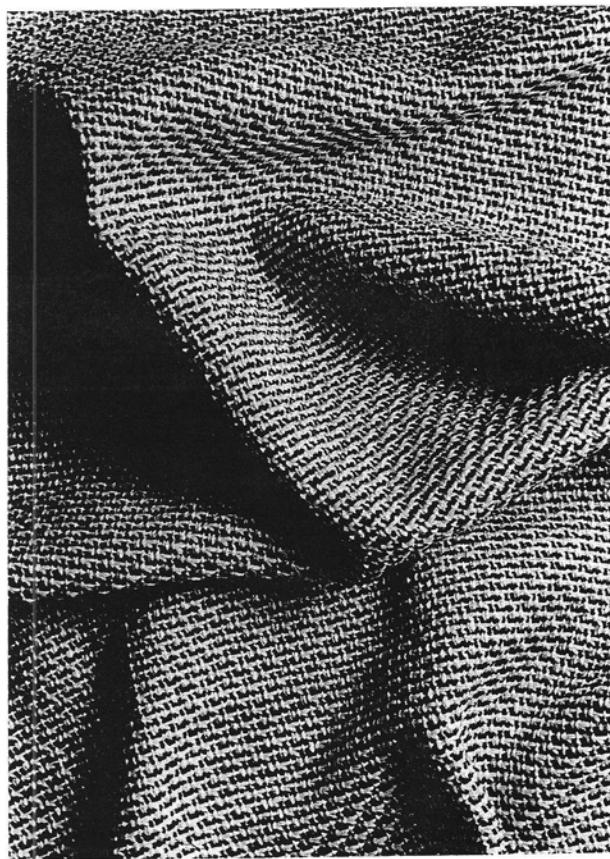
These ghostly images mapped an insistently nonperspectival field that fixed “light phenomena.”⁹¹ As many commentators have noted, photograms seem to have an intense claim on reality in that they are produced directly by the things they represent. But they also point to the transformative mediation of the artmaking process itself — of media in its primary form.⁹² Writing around the time of his first experiments with photograms in 1922, Moholy suggested that, along with abstract films like those of Viking Eggeling and Hans Richter, or experiments using phonographic “groove-manuscript scores,” the photogram could serve as a kind of training ground for developing the individual’s “functional apparatuses” — for bringing the senses in line with the demands of a new technological age.⁹³ Herein lay a rationale for abstraction in the context of the Bauhaus: stripped of representational or communicative functions, the dematerialized sensory framework of technological media could reshape human perception.

Tactility reached its apotheosis in the weaving workshop of the late Bauhaus period.⁹⁴ After Meyer’s appointment as the school’s director in 1928, the workshop moved away from large-scale wall hangings exploring grid compositions toward the production of tonally subtle, texturally rich fabrics with a wide variety of functional capacities — the muting of sound, the reflection of light. This subordination of design (with its appeal to the visual) in favor of overall structures and heightened textural qualities reflected the shift of regimes: in the politically charged rhetoric of the Meyer moment, and

16 Charlotte Voepel-Neujahr

Exercise for preliminary course taught by Josef Albers. c. 1927–29
Cyanotype (photogram)
11 9/16 x 11 7/8" (29.4 x 29.1 cm)

Bauhaus Archiv Berlin



in only partially veiled critique of the Gropius years, the “decorative” was attacked on a class basis, as a luxury, and a new mandate was issued for mass production. Indeed one of the key legacies of the school’s last years is the signing of licensing agreements for Bauhaus designs, with Körting & Mathiesen, operating under the tradename “Kandem,”⁹⁵ and Schwintzer & Gräff in 1928 (to produce lamps),⁹⁶ Gebr. Rasch & Co. in 1929 (to produce wallpapers), Polytextil in 1930 (to produce woven fabrics), and van Delden in 1931 (to produce printed fabrics). Tactility was also the basis on which these fabrics were publicized: a campaign promoting Bauhaus textiles was produced within the advertising course (cat. 388), which after the arrival of Walter Peterhans, in 1929, was offered with a concentration in either photography or printing. Peterhans’s (and his students’) characteristic photographic idiom brings structural detail into focus through extreme closeups and strong raking light, and shows the fabric in folds, highlighting its malleability (cat. 17), rather than as a flat plane with pictorial resonance.⁹⁷ “One has to be able to ‘comprehend’ [a fabric] with one’s hands,” wrote Berger, champion of this new functional approach, in 1929.⁹⁸

Lilly Reich’s arrival at the school in 1932 heralded a new conception of interior space in which textiles were not hung like paintings — as in Gropius’s office, where the cubic language of wall hanging and carpet corresponded with the architectural forms (cat. 20) — but diffused into an integrated, highly tactile interior space. In exhibition designs, Reich and Ludwig Mies van der Rohe had created a new model for the domestic interior as a set of flowing, open, sparsely furnished spaces featuring large spans of near-monochrome surfaces (cat. 18). Functional zones were differentiated by materials, such as sheer or nubby fabric drapes, room dividers of rich wooden veneers, plush monochrome carpets, subtly flecked wallpapers, and floor-to-ceiling glass walls that divided interior from exterior. In her time at the Bauhaus, Reich created the structural framework for the coordinated manufacture of the products needed for this new modern interior, presiding over the weaving workshop and the *Ausbau* (interior finishings) department, established in 1929 to integrate what had formerly been the cabinetry, metalwork, and wall-painting workshops. Much of the new mandate was for the creation of textured surfaces. Bormann produced wallpaper designs by rubbing chalk pastel over wove paper in a form of applied frottage (cat. 410), while Hajo Rose used a typewriter to create designs for printed fabrics, an area Reich made particular efforts to revive and modernize (cats. 387, 389, 390).⁹⁹ The script spoke of a fascination with the mechanical production of symbols: each letter a discrete unit, in an untethering of the running lines of handwritten script — each the sign of the machine’s impact, in language rendered as texture.

17

Eugen Batz and Tonja Rapoport
Photograph taken for photography course
taught by Walter Peterhans. c. 1930
Gelatin silver print
9 1/16 x 6 11/16" (23 x 17 cm)
Bauhaus-Archiv Berlin



Commemoration

Painting presented a critical paradox for the school. On the one hand, all of Gropius's first appointments were painters, and they played a critical role in the school as teachers and theoreticians, shaping one of its defining legacies: the setting of craft and design in dialogue with contemporary avant-garde artistic practice, in a formative conversation that fundamentally changed the terms of both. On the other, the relevance of the medium itself was suspect; only in 1927 did "free painting and sculpture" classes become part of the school's curriculum.

Despite the contested position of painting in the Gropius years, the medium (and its practitioners on the faculty) had an even less certain role after his departure. Under both Meyer and Mies, the primary focus was architecture. Kandinsky, Klee, Joost Schmidt, and Schlemmer were limited to teaching special subjects within the overarching framework of Josef Albers's preliminary course, and "free painting" classes were isolated from the workshop curriculum, in a kind of slow untwisting of the knotted strands of collaborative, reciprocal pedagogical and theoretical influence between art and design that had existed in the school's earlier years. The importance of the preliminary course itself was also contested, through accusations of "formalism" that echoed similar labels in the Soviet Union of those years. In July 1930, Communist students at the Bauhaus published a broadsheet condemning "the abstract, hence 'non-functional' use of corrugated cardboard, chicken wire etc." in the preliminary course as "a formal 'thing in itself'" and called for the course's abolition.¹⁰⁰ Kandinsky and Josef Albers were particular targets of scorn in this new era of theoretical skepticism, and as of 1930, matriculation in the preliminary course was no longer completely obligatory.¹⁰¹

Ultimately the dual pressures of leftist instrumentalism and the increasing efforts of first local, then national Nazi officials to disable the Bauhaus made teaching at the school untenable for many of the painters on the faculty. In 1929, Schlemmer took a position at the Staatliche Akademie für Kunst und Kunstgewerbe in Breslau; Klee left for an appointment at the Düsseldorf Akademie in 1931. At this moment, however, one can see the reemergence of one of painting's most traditional functions, played out against the antimnemonic tenor of the thrust of Bauhaus activities: that of commemoration.

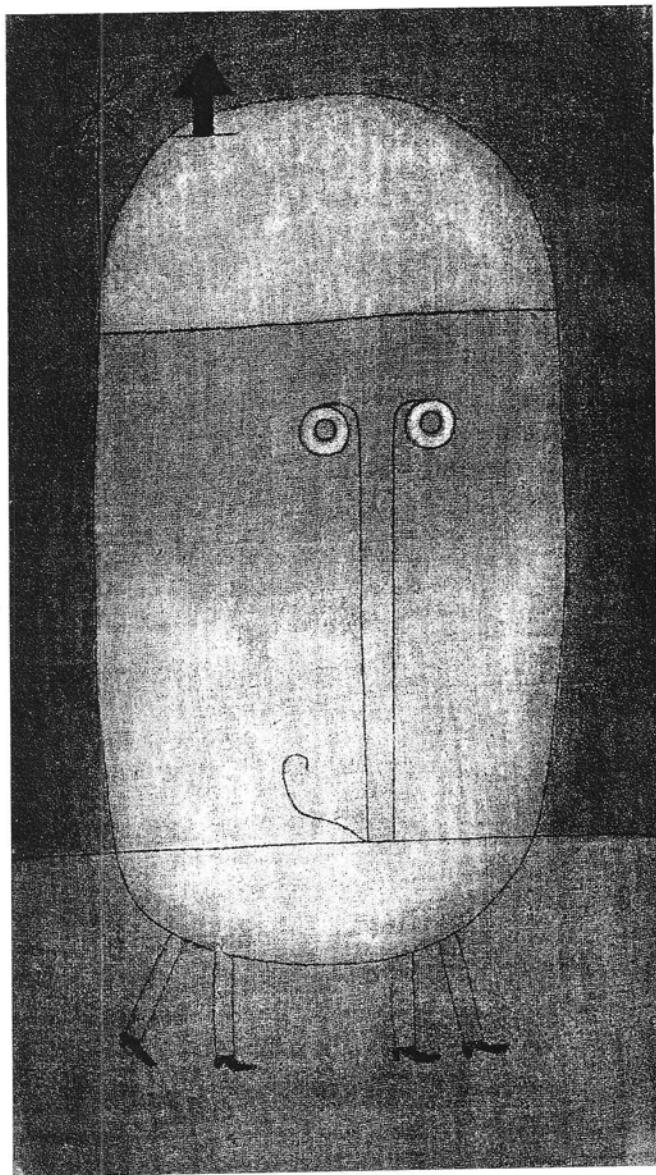
In 1932, the year after Klee's departure and on the eve of the school's flight to Berlin, Kandinsky painted a large gouache that seems so close to the style of Klee it could easily be mistaken for it. Called *Massiver Bau* (Massive building; cat. 326), the work deploys an architectural vocabulary: interlocking rectangles overlay a grid pattern that reads as both floor plan and facade, but in either case most recalls the double Masters' House that Klee and Kandinsky had shared in Dessau — a souvenir of a friendship and of a home, made as Kandinsky prepared to leave for Berlin.

Klee, in the same year but now in Düsseldorf, offered his own meditation on the Bauhaus. Called *Maske Furcht* (Mask of fear; cat. 19), it shows a mask that seems to be none other than the one by Schlemmer worn by the female figure photographed in Breuer's club chair (cat. 7). To this oversized egg-shaped head, Klee adds two pairs of little legs, to create an animated but affectless figure,

18

Lilly Reich

Ground Floor House, in *Die Wohnung unserer Zeit* (The dwelling of our time), Deutsche Bauausstellung Berlin (German building exhibition Berlin), organized by Ludwig Mies van der Rohe, 1930–31
View of the lady's bedroom
Photograph: photographer unknown, 1931.
Gelatin silver print, 6 11/16 x 9" (17 x 22.9 cm).
The Museum of Modern Art, New York. Mies van der Rohe Archive, gift of the architect



vulnerable in a Humpty Dumpty kind of way — an ironic reworking of the New Man or Woman of the Bauhaus. An arrow that seems plucked from the artist's 1924–25 watercolors (cat. 87) sprouts from the top of the figure's head, evoking — especially with the addition of a mustache curl — the *Pickelhaube*, the spiked helmet of the Prussian imperial army, relinquished with the collapse of the German empire at the end of World War I. Despite Klee's characteristic humor, the picture's title underlines the concealing function of the mask, and the countervailing emotions it may hide.

Perhaps the most famous of all Bauhaus paintings is Schlemmer's *Bauhaustreppe* (Bauhaus stairway; cat. 447). This too was made in 1932, when the artist, now a three-year resident of Breslau, heard about the school's imminent departure from its Dessau building after the National Socialist party's decree evicting it from the city in August of that year. Painted in the weeks following, the work opens a space — the space of memory itself — between Schlemmer's recollection of the stairwell in the Dessau building and the architecture as it actually was. The intertwining of built space and human form relates to the artist's ambition of the time to define a modern form of figurative history painting, but rather than a celebration of a vision of the integration of rationalized bodies in modernist space, the work is a memorial. This trio of paintings, by former colleagues now dispersed, all exhibit a profound nostalgia that speaks to the pressures of history. No longer aiming at "the summary of all that is contemporary," they offer ruminations on the past.

19

Paul Klee

Maske Furcht (Mask of fear), 1932

Oil on burlap

39 5/8 x 22 1/2" (100.4 x 57.1 cm)

The Museum of Modern Art, New York.

Nelson A. Rockefeller Fund

1. For an annotated bibliography on the reception history of the Bauhaus see Andreas Haus, ed., *Bauhaus-Ideen 1919–1994. Bibliographie und Beiträge zur Rezeption des Bauhausgedankens* (Berlin: D. Reimer, 1994). A short essay drawn from Winfried Nerdinger's important book *Bauhaus-Modern im Nationalsozialismus: zwischen Anbiederung und Verfolgung* (Munich: Prestel, 1993), on the relationship of the school and its students and products to Nazi cultural policy, appears in English in Kathleen James-Chakraborty, ed., *Bauhaus Culture: From Weimar to the Cold War* (Minneapolis: University of Minnesota Press, 2006). On the divided legacy of the Bauhaus in East and West Germany see Greg Castillo, "The Bauhaus in Cold War Germany," in James-Chakraborty, ed., *Bauhaus Culture*, pp. 171–93. Other sources include Rainer K. Wick, "Preliminary Remarks on the Reception of the Bauhaus in Germany," in *Teaching at the Bauhaus (Ostfildern-Ruit: Hatje Cantz, 2000)*, pp. 302–37; Paul Betts, *The Authority of Everyday Objects: A Cultural History of West German Industrial Design* (Berkeley, Los Angeles, and London: University of California Press, 2004); Margaret Kentgens-Craig, ed., *The Dessau Bauhaus Building 1926–1989*, trans. Michael Robinson (Basel: Birkhäuser, 1998); and Christian Grohn, *Die Bauhaus-Idee: Entwurf, Weiterführung, Rezeption, Neue Bauhausbücher* (Berlin: Gebr. Mann, 1991). On the reception of the Bauhaus in America see James-Chakraborty, "From Isolationism to Internationalism American Acceptance of the Bauhaus," in her *Bauhaus Culture*, pp. 153–70. Other sources include Margaret Kentgens-Craig, *The Bauhaus and America: First Contacts, 1919–1936* (Cambridge, Mass.: The MIT Press, 1999); Tom Wolfe, *From Bauhaus to Our House* (New York: Farrar, Straus, and Giroux, 1981); and William H. Jordy, "The Aftermath of the Bauhaus in America," in Donald Fleming and Bernard Baily, eds., *The Intellectual Migration: Europe and America, 1930–1960* (Cambridge, Mass.: Belknap Press of Harvard University Press, 1969).
2. See, among others, Frederic J. Schwartz, "Utopia for Sale: The Bauhaus and Weimar Germany's Consumer Culture," in James-Chakraborty, ed., *Bauhaus Culture*, pp. 115–38, and Anna Rowland, "Business Management at the Weimar Bauhaus," *Journal of Design History* 1, nos. 3/4 (1988):153–75.
3. The catalogue of The Museum of Modern Art's 1938 exhibition *Bauhaus 1919–1928*, organized by Walter Gropius, has strongly shaped American reception of the Bauhaus, reproducing many of the works we now consider iconic. Hans Maria Wingler's book *The Bauhaus: Weimar, Dessau, Berlin, Chicago*, trans. Wolfgang Jabs and Basil Gilbert, ed. Joseph Stein (Cambridge, Mass.: The MIT Press, 1969, and later editions) is a defining volume for the historiography of the Bauhaus; first published in German in 1962, as *Das Bauhaus* (3rd rev. ed. 1975), it includes a short narrative history and a vast compilation of documents. Other key histories include Magdalena Droste, *Bauhaus 1919–1933* (Cologne: Taschen, 1990); Jeannine Fiedler and Peter Feierabend, *Bauhaus* (Cologne: Könemann, 1999, Eng. trans. 2000); Marcel Franciscono, *Walter Gropius and the Creation of the Bauhaus in Weimar: The Ideals and Artistic Theories of its Founding Years* (Urbana: University of Illinois Press, 1971); Gillian Naylor, *The Bauhaus Reassessed: Sources and Design Theory* (New York: Dutton, 1985); and Frank Whitford, *Bauhaus* (London: Thames & Hudson, 1984).
4. On precedents to the Bauhaus in modern design reform movements see John V. Maciuika, "Wilhelmine Precedents for the Bauhaus," in James-Chakraborty, ed., *Bauhaus Culture*, pp. 1–25; John V. Maciuika, *Before the Bauhaus: Architecture, Politics, and the German State, 1890–1920* (Cambridge: at the University Press, 2005); Schwartz, *The Werkbund: Design Theory and Mass Culture before the First World War* (New Haven: Yale University Press, 1996); Joan Campbell, *The German Werkbund: The Politics of Reform in the Applied Arts* (Princeton: at the University Press, 1978); and Nikolaus Pevsner, *Pioneers of Modern Design from William Morris to Walter Gropius* (Harmondsworth: Penguin, 1960).
5. William Richard Lethaby's Central School of Arts in London, the technical workshops in Birmingham, the Glasgow School of Art, and Hermann Obrist's and Wilhelm Debschitz's private school of art and design in Munich all offered various forms of inspiration for Gropius's dual teaching model. Some of these models are discussed in Maciuika, *Before the Bauhaus*.
6. Gropius drew tightly from an Expressionist pool: all of the artists he invited to join the faculty had connections to *Der Sturm*, the magazine launched by Herwarth Walden in 1910, and to the Berlin gallery of the same name, which together served as the primary institutional structure for Germany's participation in broader avant-garde circles, publishing and exhibiting French modernist work in Germany and defining an Expressionist aesthetic as Germany's own brand of modernism internationally.
7. See Whitford, *Bauhaus*, pp. 29–30.
8. Throughout its history the school used various terms to describe the preliminary course, including *Vorunterricht*, *Vorlehre*, *Grundlehre*, *Grundbegriffe der Gestaltung*, *Allgemeine Vorbildung*, and *Vorkurs*. For a description of this shifting terminology see Adrian Sudhalter, "14 Years Bauhaus: A Chronicle," in the present volume.
9. Franciscono, *Gropius and the Creation of the Bauhaus*, p. 162, n. 32. Franciscono refers to the minutes of the *Meisterterrassitzung* of September 20, 1920, and of a meeting of faculty and students of October 13, 1920. Sammlung Gropius, Bauhaus-Archiv, Berlin.
10. See Wick, *Teaching at the Bauhaus*, p. 83.
11. Paul Klee, letter to Lily Klee, January 16, 1921, in Felix Klee, ed., *Paul Klee. Briefe und die Familie, vol. II, 1907–1940* (Cologne: DuMont, 1979), p. 970. Eng. trans. in Whitford, *The Bauhaus: Masters and Students by Themselves* (New York: The Overlook Press, 1993), p. 54.
12. Johannes Itten, *Gestaltungs- und Formenlehre. Vorkurs am Bauhaus und später*, 1964, Eng. trans. as *Design and Form: The Basic Course at the Bauhaus and Later*, 1963 (rev. ed. New York: Litton Educational Publishing, 1975), p. 9.
13. For a later articulation of this theory see Itten, *Design and Form*, pp. 10–12.
14. Ibid., p. 7.
15. On the influence of modern thinking about early-childhood education on the Bauhaus see Frederick M. Logan, "Kindergarten and Bauhaus," *College Art Journal* 10, no. 1 (Autumn 1950):36–43; Franciscono, *Gropius and the Creation of the Bauhaus*, pp. 180–81; J. Abbott Miller, "Elementary School," in Ellen Lupton and Abbott Miller, eds., *the abc's of ABC: The Bauhaus and Design Theory* (New York: Herb Lubalin Study Center of Design and Typography, the Cooper Union for the Advancement of Science and Art, 1991), pp. 4–21; and Wick, *Teaching at the Bauhaus*.
16. See Abbott Miller, "Elementary School," p. 5.
17. Josef Albers, "Creative Education," 1928, in Wingler, *The Bauhaus*, p. 142.
18. Walter Benjamin, "Experience and Poverty," in *Walter Benjamin: Selected Writings*, vol. 2, 1927–1934, eds. Marcus Bullock and Michael W. Jennings (Cambridge, Mass.: Belknap Press, 1999), p. 732.
19. Wick, *Teaching at the Bauhaus*, p. 235, and Clark V. Poling, *Kandinsky: Russian and Bauhaus Years, 1915–1933*, exh. cat. (New York: Solomon R. Guggenheim Foundation, 1983), p. 17.
20. Vasily Kandinsky, *Punkt und Linie zu Fläche*, 1926, published in English as *Point and Line to Plane*, 1947, trans. Howard Dearstyne and Hilla Rebay (reprint ed. New York: Dover, 1979), p. 20.
21. Kandinsky, *Über das Geistige in der Kunst*, 1911, published in English as *Concerning the Spiritual in Art*, trans. M. T. H. Sadler (New York: Dover, 1977), p. 36.
22. Kandinsky, *Point and Line to Plane*, p. 68.
23. Kandinsky, "Tanzkurven: Zu den Tänzen der Palucca," in *Das Kunstabblatt*, March 1926, p. 117–19, published in English as "Dance Curves: The Dances of Palucca," in *Kandinsky: Complete Writings on Art*, ed. Kenneth C. Lindsay and Peter Vergo (Boston: G. K. Hall, 1982), p. 520.
24. The modern choreographer Rudolph von Laban, for example, developed a notational system, first published in 1926, to transcribe body movements and thus permit the replication of otherwise ephemeral dance ideas. For an in-depth discussion of Laban's system see Matthew S. Witkovsky, "Staging Language: Mila Mayerová and the Czech Book 'Alphabet,'" *The Art Bulletin* 86, no. 1 (March 2004):114–35.
25. See, e.g., cat. 370, by Kandinsky's student Heinrich Bormann, or the musical diagrams in Kandinsky, *Point and Line to Plane*, p. 43.
26. See Robin Kinross, *Modern Typography: An Essay in Critical History* (London: Hyphen Press, 1992), p. 90.
27. Oskar Schlemmer, "The Staatliche Bauhaus in Weimar," from the publicity pamphlet *The First Bauhaus Exhibition in Weimar, July to September 1923*, reprinted in Wingler, *The Bauhaus*, p. 65.
28. Gropius gave his lecture "Kunst und Technik: Eine neue Einheit" on August 15, 1923, in the Bauhaus vestibule.
29. See Schwartz, "Utopia for Sale," and Rowland, "Business Management at the Weimar Bauhaus." On the figure of the technical expert in Weimar Germany see Schwartz, *Blind Spots*, pp. 37–101.
30. See Kai-Uwe Hemken's essays in Bernd Finkeldey et al., *Konstruktivistische Internationale Schöpferische Arbeitsgemeinschaft 1922–1927. Utopien für eine europäische Kultur* (Stuttgart: Gerd Hatje, 1992).

31. See Yve-Alain Bois's important essay "The De Stijl Idea," in Bois, *Painting as Model* (Cambridge, Mass.: The MIT Press, 1990), pp. 116–21. Also see his "Mondrian and the Theory of Architecture," *Assemblage* 4 (1987):102–30. It should be noted, though, that de Stijl was not alone in placing pressure on the boundary between painting and architecture: artists of the Russian avant-garde, especially those schooled in Suprematism, explored the architectural potential of painting from 1920 on.
32. On these two operations see Bois, "The De Stijl Idea."
33. See Anja Baumhoff, *The Gendered World of the Bauhaus: The Politics of Power at the Weimar Republic's Premier Art Institute, 1919–1932* (Frankfurt: Peter Lang, 2001); Dorothee and Manfred Ludewig, *Das Bauhaus Webt. Die Textilwerkstatt am Bauhaus. Ein Projekt der Bauhaus-Sammlungen in Weimar, Dessau, Berlin* (Berlin: G+H, 1998); Sigrid Wortmann Weltge, *Bauhaus Textiles: Women Artists and the Weaving Workshop* (London: Thames and Hudson, 1993); and T'ai Lin Smith, *Weaving Work at the Bauhaus: The Gender and Engendering of a Medium, 1919–1937*, Ph.D. thesis, University of Rochester, 2006.
34. See Jenny Anger, *Paul Klee and the Decorative in Modern Art* (Cambridge and New York: Cambridge University Press, 2004), pp. 179–80. On the relationship between Klee and the weavers also see Virginia Gardner Troy, *Anni Albers and Ancient American Textiles: From Bauhaus to Black Mountain* (London and Burlington, Vt.: Ashgate Publishing, 2002), pp. 80–89.
35. Exodus 25:31–40, 37:17–24.
36. Xanti Schawinsky, quoted in Sibyl Moholy-Nagy, *Moholy-Nagy: Experiment in Totality* (New York: Harper and Brothers, 1950), p. 38.
37. Bayer began experimenting with typography in 1922–23, inspired by Moholy's forays in the field, which in turn came out of earlier alphabetic explorations by the Russian Constructivists and de Stijl group as well as from Walter Porstmann's findings in the field of speech reform, publicized in his book *Sprache und Schrift* of 1920. Bayer published his "universal" lettering as part of his article "Versuch einer Neuen Schrift," *Offset. Buch und Werbekunst* no. 7 (July 1926):398–404. See Kinross, "Das Bauhaus im Kontext der neuen Typographie," in Ute Brüning, *Das A und O des Bauhauses*, exh. cat. (Berlin: Bauhaus-Archiv, and Leipzig: Edition Leipzig, 1995), pp. 9–14.
38. Herbert Bayer, "On Typography," in *Herbert Bayer: The Complete Works*, ed. Arthur A. Cohen (Cambridge, Mass.: The MIT Press, 1984), p. 350.
39. With thanks to Michael Siebenbrodt, of the Kunstsammlung Weimar, for pointing out this image. See Nele Heise, "Das Bauhaus in allen Taschen," in Patrick Rössler, ed., *bauhauskommunikation. Innovative Strategien in Umgang mit Medien, interner und externer Öffentlichkeit* (Berlin: Gebr. Mann Verlag, 2009), pp. 265–80.
40. Josef Hartwig, quoted in Anne Bobzin and Klaus Weber, *Das Bauhaus-Schachspiel von Josef Hartwig/The Bauhaus Chess Set by Joseph Hartwig* (Berlin: Bauhaus-Archiv Museum für Gestaltung, 2006), p. 7.
41. Ibid., p. 8.
42. In her important discussion of the Bauhaus fascination with automata, marionettes, and dolls, Juliet Koss also identifies this image as the embodiment of the new figure of the Bauhaus, though she discusses it in a different way. Koss, "Bauhaus Theater of Human Dolls," in James-Chakraborty, ed., *Bauhaus Culture*, pp. 99–100.
43. Alfred Arndt, "How I got to the Bauhaus in Weimar," 1968, quoted in Whitford, *The Bauhaus: Masters and Students by Themselves*, p. 57.
44. Kandinsky, *Concerning the Spiritual in Art*, p. 3.
45. Ibid., p. 2.
46. Ibid., pp. 29–30 and passim.
47. Ibid., p. 24.
48. Ibid., p. 15.
49. Reprinted in Kandinsky: *Complete Writings on Art*, 1:291–340.
50. Friedrich Kittler, *Discourse Networks 1800/1900* (Stanford: at the University Press, 1992), pp. 216–17. With thanks to Annie Bourneuf for pointing out Kittler's reference to Kandinsky in a discussion on the artist several years ago.
51. Paul Klee, *The Notebooks of Paul Klee*, vol. 1, *The Thinking Eye*, ed. Jürg Spiller, trans. Ralph Manheim (New York: George Wittenborn/Lund Humphries, 1961), p. 215.
52. Alfred H. Barr, Jr., identifies this pun in a letter to Alexander Sachs, October 5, 1955. Artist files, The Department of Painting and Sculpture, The Museum of Modern Art, New York.
53. Schlemmer, "Entry for September 1922," in *The Letters and Diaries of Oskar Schlemmer*, ed. Tut Schlemmer, trans. Krishna Winston (Middletown, Conn.: Wesleyan University Press, 1972), p. 127.
54. Ibid.
55. Schlemmer, *Die Bühne im Bauhaus*, 1925, published in English as *The Theater of the Bauhaus*, trans. Arthur S. Wensinger (Middletown, Conn.: Wesleyan University Press, 1961), p. 28.
56. "Not burdened with tradition like the opera and the drama, not committed to word, tone and gesture, [theatrical dance] is a free form, destined to impress innovation gently upon our senses: masked, and—especially important—silent." Schlemmer, "Entry for September 1922," p. 127.
57. Schlemmer, *The Theater of the Bauhaus*, p. 20.
58. László Moholy-Nagy, "Zeitgemäße Typographie," in Krisztina Passuth, *Moholy-Nagy* (London: Thames and Hudson, 1985), p. 294.
59. László Moholy-Nagy, *Malerei Photographie Film*, 1925, published in English as *Painting, Photography, Film*, trans. Janet Seligman, 2nd ed. (Cambridge, Mass.: The MIT Press, 1987), pp. 25–26.
60. Schwartz, *Blind Spots*, p. 48.
61. László Moholy-Nagy, *Painting, Photography, Film*, p. 40.
62. See Kinross, *Modern Typography*, pp. 92–93.
63. See Bayer, "typography and design at the bauhaus," in *Herbert Bayer: The Complete Works*, p. 215; Alan Bartram, *Bauhaus, Modernism and the Illustrated Book* (New Haven: Yale University Press, 2004), p. 48; and Brüning, "Herbert Bayer," in Fiedler and Feierabend, *Bauhaus*, p. 338.
64. Bayer, "Towards a Universal Type," *PM* 6, no. 2 (December–January 1939–1940):27–32, reprinted in Michael Bierut, Jessica Helfand, et al., eds., *Looking Closer 3: Classic Writings on Graphic Design* (New York: Allworth Press, 1999), p. 62, where it is incorrectly cited as *PM* 4.
65. See Kandinsky, "Program for the Institute of Artistic Culture," in *Kandinsky: Complete Writings on Art*, 1:455–72.
66. Gropius, "Program of the Staatliche Bauhaus in Weimar," in Wingler, *The Bauhaus*, p. 32.
67. Kandinsky, "The Abstract Synthesis of the Theater," in *Kandinsky: Complete Writings on Art*, 1:506.
68. Andor Weininger, quoted in András Koerner, *The Stages of Andor Weininger: From the Bauhaus to New York* (Budapest: 2B Kulturális es. Műv Alap, 2008), p. 172.
69. Ludwig Hirschfeld-Mack, *Reflected-Light Compositions*, a treatise privately published in 1925, reprinted and trans. in Wingler, *The Bauhaus*, p. 83.
70. Franz Ehrlich, "Bauhaus und Totaltheater," in *Wissenschaftliche Zeitschrift. Hochschule für Architektur und Bauwesen* 29, nos. 5/6 (1983):424.
71. Erwin Piscator, "Project: Total Theater for Erwin Piscator, Berlin," in *The Walter Gropius Archive: An Illustrated Catalogue of the Drawings, Prints and Photographs in the Walter Gropius Archive at the Busch-Reisinger Museum, Harvard University*, ed. Winfried Nerdinger (New York, London, and Cambridge, Mass.: Garland Publishing and Harvard University Art Museums, 1952), 1:152.
72. The text of the 1924 announcement is reproduced in Dorothee and Fiedler, eds., *Experiment Bauhaus* (Berlin: Bauhaus-Archiv Museum für Gestaltung, 1988), p. 167.
73. "Prospectus '8 Bauhaus Books' by the Albert Langen Press, Munich (1925)," in Wingler, *The Bauhaus*, p. 130, where it is incorrectly dated 1927.
74. László Moholy-Nagy, "Moholy Nagy's letter to Aleksandr Rodchenko, Weimar, 18 December 1923," in Passuth, *Moholy-Nagy*, pp. 392–93.
75. László Moholy-Nagy, "Prospectus," 1925, in Wingler, *The Bauhaus*, p. 130.
76. On this photograph see Schwartz, *Blind Spots*, pp. 37–101.
77. See Morgen Witzel, "Introduction," *Marketing* (Bristol: Thoemmes Press, 2000), pp. vii–xxxvii.
78. See Schwartz, "Utopia for Sale," pp. 119–25, and *Blind Spots*, pp. 91–94. See also Kinross, *Modern Typography*, and Jeremy Aynsley, *Graphic Design in Germany: 1890–1945* (Berkeley, Los Angeles, and London: University of California Press, 2000).
79. Standard paper sizes were another reform implemented by Porstmann at the Normenausschuss der deutschen Industrie. See Kinross, *Modern Typography*, p. 89.
80. See Gerd Fleishmann, *Bauhaus Typografie. Drucksachen. Typographie. Reklame* (Düsseldorf: Edition Marzona, 1984), p. 199.
81. The printmaking workshop was dedicated to advertising design and typography in 1925. In 1927, advertising was offered as one of four main areas of instruction, the others being architecture, theater, and free painting and sculpture. On the history of the adver-

- tising workshop see Brüning, *Das A und O des Bauhauses*. On the first years of the print workshop, when it was producing fine-art print portfolios, see Wingler, ed., *Graphic Work from the Bauhaus*, trans. Gerald Onn (Greenwich, Conn.: New York Graphic Society, 1965).
82. Hannes Meyer, notes for a lecture given in Vienna and Basel, 1929, in Meyer, *Bauen und Gesellschaft. Schriften, Briefe, Projekte*, ed. Lena Meyer-Bergner (Dresden: Verlag der Kunst, 1980), p. 54. This trans. from Schwartz, "Utopia for Sale," p. 118.
83. Albers, "Creative Education," from *VI. Internationaler Kongress für Zeichnen, Kunstunterricht und Angewandte Kunst in Prag*, 1928, published in Prague 1931, quoted in Wingler, *The Bauhaus*, p. 142.
84. Gunta Stölzl, quoted in Whitford, *The Bauhaus: Masters and Students by Themselves*, p. 54. Stölzl's original notebook is in the Bauhaus-Archiv Berlin.
85. Itten, quoted in Whitford, *The Bauhaus: Masters and Students by Themselves*, p. 57.
86. Wick stresses the "haptic" aspect of Moholy's pedagogy in his *Teaching at the Bauhaus*, pp. 149–54.
87. László Moholy-Nagy, *The New Vision*, trans. Daphne M. Hoffman (New York: Wittenborn, Schultz, 1947), p. 23.
88. Ibid., p. 24.
89. Ibid., p. 25.
90. See Passuth, *Moholy-Nagy*, p. 52.
91. László Moholy-Nagy, "Produktion Reproduktion," in *De Stijl* 7 (1922), published in English as "Production Reproduction," in Passuth, *Moholy-Nagy*, p. 289.
92. See László Moholy-Nagy, *Vision in Motion* (Chicago: Paul Theobald, 1947), p. 188.
93. László Moholy-Nagy, "Production Reproduction," p. 289.
94. Smith explores the tactile preoccupation of the Bauhaus weavers after Gropius's departure from the school in "Limits of the Tactile and the Optical: Bauhaus Fabric in the Frame of Photography," *Grey Room* 25 (Fall 2006):6–31. I would however qualify the opposition she sees between this tactile interest and what she describes as the purely optical qualities of Moholy's photography by suggesting a more complex relation between the two, given the tactile focus of Moholy's teaching and the broad sensory basis for perception consistently described in his writing.
95. The brand name "Kandem" derived phonetically from the initials of the last names of the company's founders, Max Körting and Wilhelm Mathiesen—"Ka" [u]nd "eM."
96. See Wingler, *The Bauhaus*, p. 458. This agreement was preceded by earlier collaborations with Kandem by Marianne Brandt and Wilhelm Wagenfeld as early as 1927. See Weber, "'Vom Weinkrug zur Leuchte.' Die Metallwerkstatt am Bauhaus," in *Die Metallwerkstatt am Bauhaus*, exh. cat. Bauhaus-Archiv Berlin (Berlin: Kupfergraben Verlagsgesellschaft, 1992), pp. 28–31.
97. See Smith, "Limits of the Tactile and Optical," p. 7.
98. Berger, "Stoffe im Raum," in *bauhaus—dessau*, special issue of *ReD. Internationale Monatsschrift für moderne Gestaltung* (Prague) 3, no. 5 (1930):143–45, reprinted in Droste and Ludewig, eds., *Das Bauhaus Webt*, p. 224.
99. Hajo Rose's designs won a competition for printed-fabric designs run under the administration of Lilly Reich. On Reich's efforts to revive printed fabrics see Wortmann Weltge, *Bauhaus Textiles*, p. 118; Droste, *Bauhaus 1919–1933*, p. 224; and Fiedler and Feierabend, *Bauhaus*, p. 477.
100. "Demand for the Abolition of the Preliminary Course," 1930, in Wingler, *The Bauhaus*, p. 172.
101. See Wick, *Teaching at the Bauhaus*, p. 83.