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The "Bauhaus Idea" in Robert Rauschenberg's Blueprints

I never taught art, I think. What I have taught is philosophy. [...] I have never taught painting. Instead I have taught seeing. Josef Albers¹

The illiterate of the future will be the person ignorant of the use of the camera as well as of the pen. László Moholy-Nagy²

In the Fall of 1948, when Robert Rauschenberg enrolled at Black Mountain College, Josef Albers, who had taught at the institution since 1933, would only spend one more year teaching there before leaving for Yale University. Despite this short overlap in time, Albers's influence upon the young artist is well acknowledged, perhaps most adamantly by Rauschenberg himself, who referred to Albers as his "most important teacher." While many accounts of the relationship between the two highlight its significance on the development of Rauschenberg's practice, little has been said of Albers's impact on the production of Rauschenberg's blueprints, which he began making with his thenwife, Susan Weil, in 1949. The blueprints, which are life-size blue and white cyanotype photograms, were among the first of Rauschenberg's works to be recognized as art, and they provided him with a fundamental basis for his oeuvre, leading him to his famed Combines and later silkscreen works (fig. 1).4 Although Weil has stated that it was her grandmother who exposed her to the blueprint technique as a child, which Weil later showed Rauschenberg, formally the blueprints exemplify Albers's instruction, which was rooted in the Bauhaus idea Albers brought with him to America.5

The notion of the "Bauhaus idea," put forth by Hal Foster, proposes that elements of the Bauhaus discourse were transferred to American artists of the postwar era by the Bauhaus artists who immigrated to the United States as a result of the rising tensions in Europe leading up to World War II.⁶ The expression broadly encompasses many principles shared by the prominent émigrés with regard to artistic and pedagogical methodology. Most notably, Albers and his former colleague László Moholy-Nagy implemented reiterations of the legendary *Vorkurs* they both taught at the Bauhaus into the foundational coursework of the American institutions they later helped to establish independently in North Carolina and Illinois, respectively. Originally

- 1 Albers, interviewed on BBC radio, June 21, 1968, quoted by Danilowitz, "Teaching Design," in: Horowitz and Danilowitz 2006: 22.
- 2 Moholy-Nagy, from "Photography is Creation with Light" (1928), reprinted in: Passuth 1987: 303.

3 Rauschenberg, in: Tomkins 1968: 199.



Fig. 1 Robert Rauschenberg and Susan Weil: *Untitled*, 1951. Exposed blueprint paper. 72×48 in.

4 Rauschenberg and Weil made blueprints together from 1949 to 1951. An article on Rauschenberg's blueprints appeared in the April 9, 1951, issue of *Life* magazine, one month before his first one-man show at the Betty Parsons Gallery. Furthermore, the blueprint *Female Figure* (1951) was included in the MoMA exhibition *Abstraction in Photography*, curated by Edward Steichen in the Spring of 1951.

5 Susan Weil remembers, "My greatgrandfather was Dankmar Adler of the architectural firm Adler and Sullivan. Once when our unruly family visited my grandmother in Chicago, she showed us a blueprint she had made in her father's architecture office when she was eight years old. She had placed a glass negative of herself on the blueprint paper and developed it." Weil, "My Blue Journey," in: Gribaudo 2010: 11.

6 See Hal Foster, "The Bauhaus Idea in America," in: Borchardt-Hume 2006: 92–102.

7 Albers 1934: 5.

8 Albers 1928: no page.

9 Weil, in: Gribaudo 2010: 10.

10 Ibid.

11 Cf. Ellert 1972: 144.

12 John A. Rice quoted in Louis Adamic: "Black Mountain: An Experiment in Education," in: Lane 1990: 60.

launched in 1920 by Johannes Itten, the required preliminary course superseded the traditional fine-art pedagogical practice of copying old masters and models by engaging students in workshop-based exercises that promoted unconventional formal and material investigations. To stress the importance of material tactility and learning-by-doing, Albers renamed the course *Werk-lehre a*t Black Mountain College, explaining:

In *Werklehre* we cultivate particularly feeling for material and space. [...] *Werklehre* is a forming out of material (e.g. paper, cardboard, metal sheets, wire), which demonstrates the possibilities and limits of materials. This method emphasizes learning, a personal experience, rather than teaching. And so it is important to make inventions and discoveries.⁷

Albers encouraged students to produce work not with the intent to create art, but rather "to share experience gained through tinkering," and such was the approach that led Rauschenberg and Weil to the creation of their blueprints.⁸ Weil, who also studied with Albers at Black Mountain College, introduced Rauschenberg to the blueprint process in the summer of 1949, while they were both vacationing at her family's home on Outer Island, Connecticut. In their first attempt to capture a full-body image, the artists enlisted the help of Weil's six-year-old brother, Jim, who laid upon cyanotype paper as they "surrounded him with leaves, grasses and flowers." They then used a handheld sunlamp to expose the paper to the necessary ultraviolet light, as cyanotype photograms do not react to ordinary light. "We were thrilled with the results," Weil recalled, "and in the next couple of years we made many full-scale blueprints." ¹⁰

Up until the closure of the Bauhaus under the Nazis in April 1933, Albers had been its longest-serving member, first enrolling as a student in 1920, and then becoming an instructor in 1923. He was the first of the Bauhaus masters to immigrate to the United States, arriving in late November 1933 at the request of John Andrew Rice, the founder of Black Mountain College. Disillusioned by the system of standard higher education, particularly with regard to the control exerted by wealthy trustees and donors, Rice set forth to establish an egalitarian college, entirely owned and managed by its faculty, that embraced the democratic and pragmatic approach to education espoused by the philosopher John Dewey, who helped to shape the new liberal arts institution. Hoping to prepare students to engage with life and become active participants in society, Rice foregrounded the arts in the curriculum, explaining:

This then is the kind of man we should like to produce, one in whom there is a nice balance of forethought, action and reflection. [...] This is why we at Black Mountain begin with art. The artist thinks about what he himself is going to do, does it himself, and then reflects upon the thing that he himself has done.¹²

While not a continuum of the Bauhaus, Black Mountain College similarly opposed traditional education methods and promoted the synthesis of art and life. Its aim, however, was to foster a holistic liberal arts education. In contrast, the state-funded Bauhaus emphasized the unity of art, craft, and technology, often producing commercially viable designs for industrial production. Although Black Mountain nurtured some of the most influential postwar artists, Rice actually stated, "It is not expected that many students will become artists; in fact, the college regards it as a sacred duty to discourage mere talent from thinking itself genius." According to Howard Dearstyne, who was both Albers's student at the Bauhaus and instructional colleague at Black Mountain College, this attitude was in line with Albers's own methodology as "he never used the word 'art." 14

Assuming a leadership role at Black Mountain College, Albers reoriented the Bauhaus idea to place emphasis less on the practical application of design principles and more on their employment as aids in developing an overarching sense of epistemological doubt. He refuted the practice of retrospection in education and demanded that his students learn through conducting experiments, claiming, "invention – and also reinvention – is the essence of creativity. Once experienced, invention becomes a lasting spiritual possession, and gaining this experience for oneself is the training one needs to create form, to work at the language, the expression of the time." ¹⁵

The spiritual overtones in Albers's pedagogy have affinities with Itten's more transcendental approach to the instruction of the Vorkurs, which Albers experienced as a student before it shifted toward utilitarian considerations under the tenure of Moholy-Nagy. In his book, Design and Form: The Basic Course at the Bauhaus and Later, Itten describes how, in the creation of form, if "heart and hand are at one, this form will become the expression of an intellectual, spiritual content. If this form is able to convey this content to the viewer, it will have the impact of a work of art."16 Albers shared Itten's belief that an immaterial power, the "essence" of art and life, could be conveyed through the creation of form, which he encouraged his students at Black Mountain College to develop: "We want a student who sees art [...] as a spiritual documentation of life; one who sees that real art is essential life and essential life is art."¹⁷ Indeed, Rauschenberg and Weil capture a spiritual essence in the ethereal nature of their blueprints, which are composed of disembodied materials that *Life* magazine described as "vaporous fantasies" in 1951.¹⁸ In this respect, the blueprints also have compelling titles: Spiritual Safari, Light Borne in Darkness, Sun Dancer, and Suspended Shadow Declared Eternal by the Death of Time (fig. 2).

Itten often incorporated Eastern practices into his pedagogy, even beginning classes by performing yogic exercises with his students. ¹⁹ While Albers promoted an almost scientific analysis of forms and materials, both artists drew upon the ideas of Chinese philosopher Lao Tzu, especially in forming their beliefs regarding the significance of the immaterial in material constructions. In several correspondences, Albers referred to Lao Tzu's eleventh say-

13 Ibid: 58-59.

14 Dearstyne 1986: 90-91.

15 Albers 1928: no page.

16 Itten 2003: 110.

17 Albers 1935: no page.

18 Kirkland 1951: 22-24.

19 Cf. Dickerman, in: Bergdoll and Dickerman 2009: 16.



Fig. 2 Robert Rauschenberg and Susan Weil: *Sun Dancer*, circa 1951. Exposed blueprint paper. 12 1/8×4 5/8 in.

20 Albers discusses Lao Tzu's eleventh saying from *The Way of Life* (or the *Tao Te Ching*) in several of his correspondences with the art historian Franz Große-Perdekamp. Itten also reportedly used the maxim in his lectures and writings. See Danillowitz, in: Horowitz and Danillowitz 2006: 19–21 and footnote 65.

21 Albers 1928: no page.

22 Rauschenberg: "I had been working for some time at erasing, with the idea that I wanted to create a work of art by that method." In: Tomkins 1964: 66.

23 Albers 1928: no page.

24 Ibid.

Fig. 3 Robert Rauschenberg: This Is the First Half of a Print Designed to Exist in Passing Time, 1948. 14 woodcuts on paper. 12 1/8×8 7/8 in.

ing from *The Way of Life* (or the *Tao Te Ching*) to describe how a void could be form creating:²⁰

Thirty spokes meet at the hub

But the void within them creates the essence of the wheel,

Clay forms pots,

But the void within creates the essence of the pot.

Walls, with windows and doors, make the house.

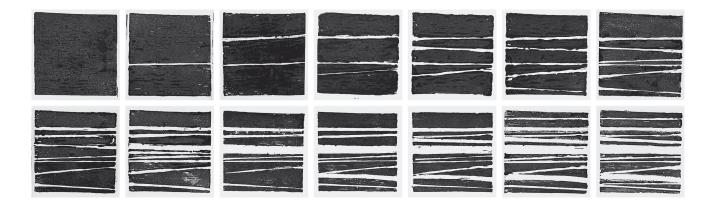
Fundamentally,

The material contains utility,

The immaterial contains essence.

Albers coined the term *negativa* to describe the activation of such "negative values" in forms, and it is precisely the absence of material, or absence of light, the creative material, that produces the forms in Rauschenberg and Weil's blue-prints.²¹ In making these images, the artists placed objects on photosensitive paper that obscured the light to which the paper was later exposed, thereby creating shadows that developed as positive forms. One can see parallels to this approach in Rauschenberg's *This Is the First Half of a Print Designed to Exist in Passing Time* (1948), which he made for Albers's *Werklehre* course (fig. 3). For this work, Rauschenberg methodically carved lines into a wood block, making prints of the block after cutting each line. The "negative values" created by the removal of wood become "positive values" of white forms that appear to emerge from the printed black background. One could also say that Rauschenberg had a similar objective in mind when he decided to erase a drawing by Willem de Kooning in 1953, since he claimed to do so in order to see if he could make a drawing through erasure.²²

In understanding form, Albers promoted an in-depth examination of materials in exercises he called *Materie* studies, in which students generated assemblages of disparate materials to analyze their *matière*, a word Albers derived from French to emphasize his combined visual and tactile approach to texture.²³ He encouraged students to work with the appearances of materials as if painting with them in order to develop "interesting relationships," likening the relationships among materials to those among col-



ors.²⁴ Open to the use of any material, Albers had his students work with such non-traditional materials as corrugated paper, sand, and egg shells. At Black Mountain College, he took advantage of the school's location in the lush Blue Ridge Mountains, leading classes into the woods to collect leaves, moss, and bark, which might have inspired Rauschenberg and Weil to use natural materials in their blueprints (fig. 4).²⁵

Albers wanted his students to attain a "finger-tip feeling for material," and preferred that they worked with as few tools as possible. ²⁶ He also taught them how to handle materials differently from their typical uses in the world. He stressed that the purpose was, "Not to make something different (in which case we would be focused mostly on the norm), but rather to make it in a different way (whereby we stress method)." ²⁷ Indeed, Rauschenberg and Weil made their blueprints differently than any previous photograms, as they were the first to capture one-to-one ratios of entire human bodies. ²⁸ Furthermore, the novel use of a handheld sunlamp allowed the artists to easily manipulate the light's intensity on different areas of the blueprint, creating more nuanced compositions than would have been afforded by a single, static light source. This dynamic generated the "vaporous" forms that seemingly emerge from a haze rather than stark darkness, helping to unify the image.

It is known that Albers used photograms in his instruction of the Bauhaus *Vorkurs*, and a cyanotype blueprint made by his former student Charlotte Voepel-Neujahr indicates how he employed the medium as an aid in *Materie* studies (fig. 5).²⁹ Exposed to a likely static source of light, the blueprint captures a variety of geometrical and manmade forms, which appear to include gauze, nails, and wire mesh. Lacking any real sense of formal cohesion, the image might have been intended merely as a technical study and not a finished work of art. Nonetheless, comparing this example with a blueprint of inanimate objects by Rauschenberg and Weil highlights the care with which the American artists took to create "interesting relationships" among the more whimsical yet still disparate materials of leaves, netting, lace, and keys (fig. 6). For instance, the teardrop-shaped leaves share a formal affinity with the curved edges of the lace and the curvilinear handles of the keys. The netting, which overlaps with many of these elements, also lacks rigidity, appearing to float in the blue vapor that consolidates the forms.

The aforementioned blueprint was made during the 1951 photoshoot for the "Speaking of Pictures" spread in *Life* magazine, shot by Wallace Kirkland (fig. 7). His photographs highlight how much thought Rauschenberg and Weil put into their compositions, especially by showing the various poses tried by Weil and Pat Pearman, their friend and model. Perhaps the most organic material with which to experiment, their bodies actively engage with the medium, not only in terms of composition, but also in the manner in which the artists work with the sunlamp, leaning over, and sometimes standing upon, the blueprint paper. Kirkland's photographs evoke the famous images captured by Hans Namuth of Jackson Pollock for the magazine just two years earlier. Similar to Pollock's technique, the life-size photogram process pioneered by



Fig. 4 Josef Albers: *Leaf Study III*, circa 1940. Leaves mounted on paper. 23×23 1/2 in.

25 Ibid.

26 Albers 1934: 5.

27 Albers 1928: no page.

28 Cf. Hopps 1991: 25.

29 Cf. Dickerman, in: Bergdoll and Dickerman 2009: 33.



Fig. 5 Charlotte Voepel-Neujahr. Exercise for preliminary course taught by Josef Albers, circa 1928. Cyanotype (photogram). 11 9/16×11 7/16 in.



Fig. 6 Robert Rauschenberg and Susan Weil: *Untitled*, 1951. Exposed blueprint paper.

30 Cf. Borchardt-Hume 2006: 67.

31 Albers quoted by Hugh M. Davies, in: Hunter 1971: 7.

32 Cf. Kirkland 1951: 23.

33 Albers 1928: no page.

34 Cf. Weber/Redensek/Martínez de Guereñu/Toledo/Fontán 2014: 346.

Fig. 7 Robert Rauschenberg demonstrating the blueprint process for *Life* photojournalist Wallace Kirkland, 1951.

Rauschenberg and Weil could also be viewed as a performance, where the blueprints are the ephemera that remained once their act was completed.

Albers's preoccupation with materials seems to stem from his early practice, as seen in his *Scherbenbilder* (1921), which are assemblages of shards of colored glass, metal, mesh, and other detritus found on the streets of Weimar (fig. 8).³⁰ He recounted, "Equipped with a knapsack and a hammer, I scouted the town dump. [...] The bottles I found there provided me with all kinds of glass I needed for making glass paintings."³¹ In a similar fashion, Rauschenberg gathered found objects to incorporate into his art, and one of the first instances of this was for the blueprints. In "Speaking of Pictures," the reader learns that the artists salvaged the leaves, ferns, and other objects from a florist's shop to make the blueprints for the photoshoot.³² The idea of economy in art, such that neither labor nor materials should be wasted in a work's creation, is not only a philosophy Albers preached, it is also a quality inherent in the photogram, as the only material that cannot be re-used is the blueprint paper itself.³³

The specific focus in Albers's *Scherbenbilder* was on the perception of light and color, a theme that would remain with him for his entire life.³⁴ Light is precisely the creative agent in a photogram, which, depending upon the transparency of the objects involved in the composition, filters through them in a similar way it filters through Albers's glassworks. By employing materials with different degrees of transparency, in addition to varying the intensity of the light source as well as the frequency of exposure, Rauschenberg and Weil explore the effects of light transmission in their blueprint compositions. A notable example can be seen in the blueprint of Susan Weil holding a cane, in which she appears to wear a sheer skirt that allows for light to pass through, thus imposing an image of her body on the image of the skirt, and thereby giving the work the illusion of an x-ray (fig. 9). In actuality, Weil's



body was added to the image after the print had first been exposed to the skirt.³⁵ Hence, the viewer can see the details of the skirt, such as its pleating and top edge, which would have been obscured by her body had the image been captured in one exposure. Like Albers, light is a material that pervades Rauschenberg's oeuvre, and he can be seen explicitly working with it in his photography and *White Paintings* of the 1950s, as well as his *Carnal Clocks* series of 1969, which exude a similar x-ray sensation. In fact, in 1967, Rauschenberg did indeed make a real, full-body x-ray of himself, which he reprinted in the silkscreen work, *Booster*.

Influenced by the abstract formality of Constructivism, which promoted compositional relationships in works lacking in representational references, Albers eventually conformed his glass compositions to a grid format in order to focus on the effects that shapes and colors have on one another. The medium of glass enabled him to erase any personal touch while still creating a work that could lead to spiritual uplift, as evidenced by his sandblasted glass pieces, like *Fugue* (circa 1926) (fig. 10).³⁶ *Fugue* is also the title of one of Rauschenberg's blueprints, which is likely a reference to Albers's work, as it bears a formal resemblance to the composition's grid-like structure (fig. 11). In the blueprint, Rauschenberg creates swatch-like shadows of varying intensities that mimic the visual counterpoint generated by the rhythmic spatial arrangement of Albers's black and white rectilinear color bars, which are set against a red background.

In 1923, Albers became a Bauhaus master, and in some capacity, he shaped the *Vorkurs* with Moholy-Nagy, who had been hired that year as Itten's replacement.³⁷ The *Vorkurs* was stripped of Itten's expressionist, mystical methodology, concentrating instead on the concrete investigation of materials and visual training. Despite differences in their practices, both Moholy-Nagy and Albers were advocates of abstraction and both adapted Constructivist principles through the use of ordinary materials and subject matter. They also had similar pedagogical aims: to open eyes, which they stressed in the ambiguities of optical creation.

It is hard not to think of Moholy-Nagy when discussing Rauschenberg's blueprints. After all, he was one of the first artists to advocate for the photogram as an artistic medium. In the *New Vision*, Moholy-Nagy proposes that photography, and specifically the photogram, could create new ways of seeing. He also prophesized that future literacy would depend upon knowledge of photography, and he declared, "Photogram experiments are of basic importance for both the layman and the photographer" since they "furnish richer and more significant information concerning the nature of the photographic process than camera photographs." Photosensitive material is "the main instrument of the photographic process," and without the mediation of a camera obscura, it can directly record light phenomena generated by hand. Understanding this exposes the artifice of the image, which is often concealed in the reflective nature of a photograph.

35 For more information on Rauschenberg and Weil's blueprint process, see Lobel 2016: 184–97.



Fig. 8 Josef Albers: *Rheinische Legende*, 1921. Glass, copper, metal, wood, epoxy putty, paint and wood particle board. 28× 24×2 in.

36 Cf. Nicholas Fox Weber, in: Morris 1994: 10.



Fig. 9 Robert Rauschenberg and Susan Weil: *Sue*, circa 1950. Exposed blueprint paper. 69 3/4×41 5/8 in.

37 According to Brenda Danilowitz, chief curator at the Josef and Anni Albers Foundation, Albers had a very strong hand in developing the Vorkurs after Itten's resignation. Based on the minutes of a Formand Werkmeister meeting on May 26, 1923, Gropius intended for Albers to assume the bulk of Itten's teaching responsibility. Albers also recounted how Gropius approached him to teach the Vorkurs in the wake of Itten's absence: "Gropius suddenly discovered my knowledge of art and craft [...] when Itten left [...]. So Gropius [...] told me [...], 'You are going to teach the basic course." In January 1924. Albers needed to resume his teaching post in Westphalia for one semester. While he was away from the Bauhaus, Moholy-Nagy taught the Vorkurs, which probably has led to some erroneous claims that Moholy-Nagy taught the course before Albers. See Danilowitz, in: Horowitz and Danilowitz 2006: 21 and footnote 66.

38 Moholy-Nagy, from "From Pigment to Light" (1936), reprinted in: Goldberg 1988: 344.

39 Moholy-Nagy, from "Photography is Creation with Light" (1928), reprinted in Passuth 1987: 302.

40 Moholy-Nagy, from "Light: A medium of plastic expression" (1923), reprinted in: Passuth 1987: 292.

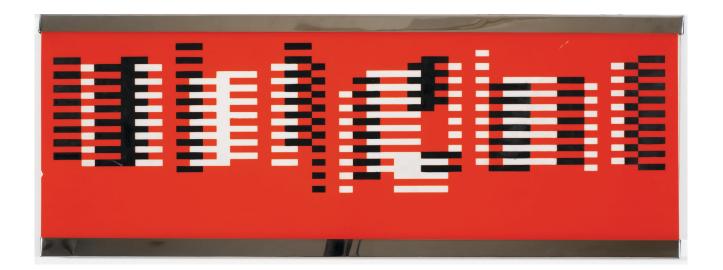
41 Albers 1934: 4.

Fig. 10 Josef Albers: *Fuge*, ca. 1926. Sandblasted flashed glass with black paint. 9 3/4×25 7/8 in.

Moholy-Nagy also notes that there is a disjuncture between one's intellectual interpretation of optical phenomena and physical facts, the latter of which the camera reproduces as a purely optical image: "our intellectual experience complements spatially and formally the optical phenomena perceived by the eye and renders them into a comprehensible whole, whereas the photographic apparatus reproduces the purely optical picture (distortion, bad drawing, foreshortening)."40 Albers echoed these ideas, which, in general, have their underpinnings in Gestalt psychology, such that the mind considers objects in their entirety before recognizing their individual forms: "We recognize that although our optical vision is correct, our overemphasis on the psychic vision often makes us see incorrectly. For this reason we learn to test our seeing."41

To highlight the distinction between physical fact and psychological interpretation, Albers created works that tested visual perception through optical illusions, which he began making during the time Moholy-Nagy was publishing his theories on photography. For example, Albers's sandblasted glasswork, *Glove Stretchers III* (1928), depicts three glove-shaped forms: one a solid white, another black with a white outline, and the third a mixture of the first two (fig. 12). These are suspended at various heights against a uniform background of diagonally parallel gray and black lines. The black lines change to gray as they overlap with the gloves, making it ambiguous as to whether the gloves should be perceived as on top or beneath the lines. Formally, this bears a resemblance to a 1926 photogram by Moholy-Nagy, which depicts a hand and grid-like apparatuses, and once again, it is ambiguous as to which of these elements is above or below the others (fig. 13).

Moholy-Nagy suggested that he arrived at his photogram technique through Kurt Schwitters's *Merz* constructions, especially as he, like Schwitters, endeavored to create visual ambiguities by "dematerializing" objects.⁴² For Moholy-Nagy, the photogram disembodies the materials placed in front of the light-sensitive medium as it does not capture lifelike representations, but rather abstracted light effects in gradations of black, white, and gray. This, in turn, generates a "direct optical experience," opening up the image to "as many in-



terpretations as it has viewers."43 Schwitters also believed that "a significant art product" should no longer bear "an outward relationship to the material elements that formed it," which is a quality expressed in the otherworldly imagery of Rauschenberg and Weil's blueprints.⁴⁴ Regarding his own practice, Schwitters remarked, materials "receive their evaluation through the creative process. That is why I use discarded cogwheels, tissue paper, can tops, glass splinters, labels and tickets. By being balanced against each other, these materials lose their characteristics – their personality poison. They are dematerialized [...]."45 He not only juxtaposed various found objects in his Merz compositions, but he layered them as well, making use of transparent materials such as gauze, veils, and nets, thereby producing an optical interpenetration of forms. The influence of Schwitters's practice upon the development of the New Vision, which in turn impacted the pedagogical approaches of Moholy-Nagy and Albers, and, as a result, Rauschenberg's own practice, was acutely perceived by the American artist, who, after first seeing a Merzbild in 1953 at the Sidney Janis gallery, exclaimed, "I felt like he made it all just for me." 46

Albers was particularly skeptical of photography as a reproductive device, and it is this skepticism, especially of one's knowledge of the visual world, that pervades his oeuvre, most notably in his later color-theory works.⁴⁷ It was also a belief Albers transferred to his students at Black Mountain College, as Rauschenberg recounted:

He didn't teach you how to "do art." The focus was on the development of your own personal sense of looking. [...] Don't trust your own ideas, because things are more specific than that. [...] I'm still learning what he taught me. What he taught had to do with the whole visual world, and it applies to whatever you're doing.⁴⁸

42 Moholy-Nagy: "Under the influence of cubist collages, Schwitters' 'Merz' paintings and dadaism's brazen courage, I started out with my photomontages, too. This led me in the same period to the rediscovery of the technique of the photogram (cameraless photography)." In: Moholy-Nagy 1947 (The New Vision): 72. Moholy-Nagy's second wife, Sibyl, also notes: "After Schwitters' collages had opened Moholy's eyes to the Gestalt value of integrated symbolic elements, he discovered the photogram, a creation of pictorial compositions in black and white through the photographic printing process." Sibyl Moholy-Nagy 1950: 25.



Fig. 11 Robert Rauschenberg and Susan Weil: Fugue, circa 1950. Black and white photograph of full-scale original blueprint exposed on blueprint paper 10 1/8×5 1/2 in.

43 Moholy-Nagy, from "Photography is Creation with Light" (1928) reprinted in Passuth 1987: 302, and Moholy-Nagy 1947 (*Vision in Motion*): 188.

Fig. 12 Josef Albers: *Glove Stretchers III*, 1928. Sandblasted opaque flashed glass. $15\ 1/2 \times 21$ in.



Fig. 13 László Moholy-Nagy: Untitled, 1926. Gelatin silver print. 9 3/8×7 in.

44 Schwitters: quoted in Moholy-Nagy, Sibyl 1950: 24.

45 Ibid.

46 Rauschenberg, in: Seckler 1966: 74.

47 Cf. Josef Albers, "Photos as Photography and Photos as Art" (1943), in: Hermanson Meister 2016: 130.

48 Rauschenberg, in: Tomkins 2005: 29.

Fig. 14 Josef Albers teaching photography at Black Mountain College, 1944.

Albers began to experiment with photography after Moholy-Nagy left the Bauhaus in 1928, which was also the same year that photography entered into the Bauhaus curriculum. 49 Although an official program in photography was not established at Black Mountain College until 1949, Albers taught his students about the medium in his Werklehre course (fig. 14). Despite this, he considered photography to be "first a handicraft," and he used the medium more as a tool than an art.50 In his early photographs, Albers explored abstraction made by the sharp contrasts between negative and positive forms. A particular photograph by Albers taken of a tree at night, such that the tree is illuminated while its background is dark, captures the tension between appearances and actuality to which photography lends itself, especially as the picture appears as if it could be a negative of a daytime photo since the elements that should be dark are light and vice versa (fig. 15). A similar paradox is at play in Rauschenberg and Weil's blueprints, where light creates the dark areas, and the absence of light creates the light areas. This is also a theme that Rauschenberg explores within his Night Blooming (1951) series, in which white forms emerge from black backgrounds.

Moholy-Nagy once said, "Whoever obtains a sense of writing with light by making photograms without a camera, will be able to work in the most subtle way with the camera as well."⁵¹ Indeed, Rauschenberg's awareness of the photogram process informed his photographic work.⁵² Similar to his blueprints, Rauschenberg's photographs explore composition and form through light, or sometimes, rather, the lack of light, as can be seen in his photograph of a *Ceiling + Light Bulb*, where the source of light is in fact not the bulb itself, but instead comes into the image from an unknown source on the left (fig. 16). As per Albers's instruction, Rauschenberg's photographs concentrate on the study of materials and their properties, especially when exposed to various light conditions. Using the camera as a tool like his teacher, Rauschen-



berg said, "I think of the camera as my permission to walk into every shadow or watch while any light changes." He also experimented with the process of double exposure in his photographs, which is a technique he first used in his blueprints.

The approach of combining various materials to form a unified blueprint composition is one that Rauschenberg later took when making his Combines, the three-dimensional assemblages of found matter that bridge the gap between painting and sculpture. Rauschenberg significantly put a copy of his photogram, *Female Figure* (circa 1950) into his Combine *Odalisk* (1958), a work composed of images of influential women in his life. Despite Albers's criticism of the young artist, years later he acknowledged the significant degree to which Rauschenberg's work was indebted to his instruction:

What he is doing now is much more a part of my classes he participated in than he will ever recognize. [...] We played a lot with combination of materials, "combination" was a great word in our [vocabulary]—and changing surface qualities, [...] changing of articulation, that was a very exciting study at Black Mountain. And I think that is what lives on in his work now.⁵⁴

As Rauschenberg broke down formal boundaries in art, he also sublimated the detritus of everyday life into his work, which was the result of Albers's insistence upon art as an experience and not merely an object to be made. The perspectival challenge that Rauschenberg's work demands of its viewer is the same challenge Albers posed to his student—to develop new ways of seeing, which was also advocated by Moholy-Nagy and the *New Vision*. Furthermore, the influence of Constructivism and Dada on the Bauhaus helped to instill within its artists the refusal for traditional definitions of art. This refusal, in turn, would be transmitted to and reinterpreted by the postwar American artists that learned from the Bauhaus émigrés. These elements, which collectively could be said to comprise the Bauhaus idea, were integral to Rauschenberg's development, and they are explicitly expressed in his blue-prints—the works that sparked his oeuvre.

49 Cf. Borchardt-Hume 2006: 72.

50 Albers, in: Hermanson Meister 2016: 129.



Fig. 15 Josef Albers: *Pine trees*, no date. Gelatin silver print. 9×6 1/4 in.

51 Moholy-Nagy, from "Photography is Creation with Light" (1928) reprinted in: Passuth 1987: 303.

52 Rauschenberg's photography practice was notably influenced by Hazel Larsen Archer, who was first a fellow student at Black Mountain College (1944–1949) and then his teacher (beginning in 1949).

53 Rauschenberg 1981: 2.

54 Albers (with Anni Albers) interviewed by Martin Duberman on November 11, 1967: 13. Typescript, Black Mountain College Records, North Carolina State Archives, Raleigh, N.C. Quoted in: Díaz 2008: 282.



Fig. 16 Robert Rauschenberg: Ceiling + Light Bulb, 1950. Gelatin silver print. 15×15 in

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Figures

Figs. 1, 2, 3, 6, 9, 11, 16 Robert Rauschenberg Foundation.

Figs. 4, 10, 15 The Josef and Anni Albers Foundation/Artists Rights Society (ARS), New York. Photo: Tim Nighswander/Imaging4Art.

Fig. 5 Bauhaus-Archiv Berlin. Cecilia Neujahr-Schoemann.

Fig. 7 Photo: Wallace Kirkland. Wallace Kirkland Papers, Special Collections and University Archives, University of Illinois at Chicago.

 $\it Fig.~8~$ The Metropolitan Museum of Art. Image source: Art Resource, New York.

Fig. 12 The Josef and Anni Albers Foundation/Artists Rights Society (ARS), New York Photo: Georges Meguerditchian. CNAC/MNAM/Dist. RMN-Grand Palais / Art Resource, New York.

Fig. 13 Los Angeles County Museum of Art, Ralph M. Parsons Fund (M.86.23). Digital Image: 2019 Museum Associates/LACMA. Licensed by Art Resource, New York.

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