ABSTRACT

Title of Thesis:	"A NEW UNITY!" THE ART AND PEDAGOGY OF JOSEF ALBERS
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Josef Albers had an extensive and prolific career, both as an artist and a teacher. He was a crucial member of the faculties of the Bauhaus, Black Mountain College in North Carolina, and Yale University, producing a varied and ground-breaking body of his own work simultaneously. Albers's pedagogical philosophies were remarkably consistent throughout his teaching career, and all of his artwork reflects these philosophies to some degree. However, the artist's early engraved glass works, created while at the Bauhaus, and his later, architecturally-based sculptures were by far the most successful in communicating his message of the orderly, reasoned world he hoped transform through his art. Josef Albers was intent on challenging his viewer's "way of seeing," and he was able to accomplish this through his works with underlying architectural connections. These works allowed him to control the way they were perceived, and, by extension, the world seen figuratively through them.

“A NEW UNITY!”
THE ART AND PEDAGOGY OF JOSEF ALBERS

By

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Introduction

In 1967, Josef Albers was 79 years old and had been creating works of art for most of his life. It was also in this year that Eugen Gomringer published his major monograph on the artist. In his introduction to the book, Gomringer is explicit in warning readers that they "will look here in vain for an account of Albers as a pedagogue. This has been omitted intentionally and by agreement with the artist. May the present volume also help dispel a misconception that is sometimes encountered, to the effect that Albers as a teacher is more important than Albers as an artist." [1] Despite his advanced age and prolific artistic production, by 1967 Albers had yet to be widely recognized as an important member of the international avant-garde. Yet as Gomringer's statement implies, Albers was not unknown. His distinguished role as a teacher often eclipsed his personal artistic accomplishments, and this is not altogether surprising - he had served on the art faculty at three prestigious institutions, the Bauhaus, Black Mountain College, and Yale University; he had served as a visiting lecturer at countless others; he had received numerous honorary degrees and various teaching awards. Many artists teach as a means of supporting themselves financially while establishing independent careers, but it seems clear that for Albers, art education was not merely a way to pay the bills, but as much his chosen profession as that of painter, printmaker, and sculptor.

It would be unproductive to look at Albers's production as an artist solely in terms of his teachings, or as complex illustrations of the ideas and working methods he tried to

[1] Eugen Gomringer, Josef Albers: His work as contribution to visual articulation in the twentieth century (New York: George Wittenborn Inc., 1967) 9. In a 1970 publication on Albers, Werner Spies also notes that Gomringer "almost completely passes over Albers as a teacher. This did not happen by chance. It was based on a decision to give full recognition to Albers the artist. Only a strict separation between his actual artistic work and his pedagogic work (which in the artistic world has never been fully recognized) seemed to make this possible." Werner Spies, Albers (New York: Harry N. Abrams, Inc., 1970) 66, note 19.

convey to his students. That the artist himself would resist this type of simplistic interpretation is evident from Gomringer's introduction. Yet there is no doubt that Albers's work and pedagogy were inherently connected – the fact that efforts were made during his lifetime to segregate the two reflects scholarly attempts to simplify, and hence popularize, his diverse and complex career. Albers believed deeply in the importance of teaching, as proven by his lifelong dedication to it, and his educational goals informed not only his artwork, but his approach towards life in general. All artists can be perceived as teachers in the sense that their work presents their thoughts and ideas to their audience; this is particularly true in the case of Albers, for his personal artistic philosophy was centered around beliefs that were applicable far beyond the realm of the classroom or art gallery. It was the artist's hope that the sensitive viewer would apply theprinciples of order and experimentation that characterized his visual compositions to their own lives and relationships within society, turning the world into an Albers classroom.

So strong were these beliefs that they can be traced consistently throughout Albers's entire career. And yet, the artist's methods of conveying his message to the viewer would change over time, affected by circumstance as well as by his own personal exploration of different forms and media. His glass pictures from the years he spent as a student and teacher at the Bauhaus, which he would regard as his first "professional" works of art, were uniquely suited to his utopian pedagogy. Their medium, construction method, and presentation possibilities posit them as perfect pedagogic tools. Their design was aimed at affecting viewers in the same ways that Albers would affect countless students in the classroom, and yet their links to architectural features, namely windows, allowed them to act as subtle communicators rather than as overt manifestos. This

element of subtlety, closely linked with the contemporary architectural ideas that Albers would have encountered at the Bauhaus, makes the glass works a didactic success, and that would be lost once he left Germany for Black Mountain College in North Carolina in 1933. Once there, the artist would turn to paintings and works on paper, as well as to more optically demanding compositions, hence losing the structural relevance and pedagogic possibilities of works that were seamlessly i ntegrated into everyday spaces. And yet Albers would not abandon his original success entirely – later in his career, after his departure from Black Mountain for Yale University, he would turn back to architecturally-linked materials and would accept numerous site-specific projects, transforming the interiors and exteriors of numerous prominent buildings. Albers's career is one of great diversity in terms of production, but remarkable consistency in terms of thought; by tracing the path of his life and the accompanying changes in his work, we can judge the effectiveness of the multiple art forms he would explore in communicating the utopian message behind them all.

Chapter 1: The Beginning - Albers's Pedagogy and Early Glass Works

As much as the Bauhaus shaped Albers, he did not arrive there in 1920 as a blank slate. He was, in fact, already thirty-two-years old and had been teaching for twelve years in the German public schools. He received a teaching certificate from the Teachers College of Büren in 1908 and taught primary school in Bottrop, his birthplace, until 1913, when he moved to Berlin. There he completed training at the Royal Art School and earned certification as an art teacher in 1915, which led to a move back to Bottrop, where he would continue teaching until just before his departure for Weimar.[2] But the Bauhaus would not provide Albers's first purely artistic training either – he had enrolled as a part-time student at the Kunstgewerbeschule in Essen in 1916, taking late-day classes which would not conflict with his own teaching responsibilities. In 1919, he gave up this career only briefly to attend the Art Academy in Munich, occasionally observing classes at the Hans Hofmann School there.[3] It is not altogether surprising, then, that as the oldest student at the Bauhaus with a host of practical experience behind him, Albers would have some initial difficulties adjusting to his subordinate role there. After completing the mandatory preliminary course with Johannes Itten, who had established it as a requirement for progression through the program, Albers was intent on receiving his applied training in the glass workshop.[4] His interest in glass will be explored in depth later, but it was certainly influenced at this early stage by his formative experiences with his father, a craftsman whose interests included stained glass, [5] his training with Johan

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[2] Irving Leonard Finkelstein, The Life and Art of Josef Albers, diss., New York University, 1968 (Ann Arbor, Michigan: University of Microfilms, Inc., 1979) 8-11.

[3] Finkelstein 8-11.

[4] Finkelstein 13.

Thorn Prikker, a Dutch painter and stained glass window designer at the Kunstgewerbeschule, and finally the fact that in 1917-18 he had completed a stained glass window as a commission from St Michael's Church in Bottrop.[6] But Albers's preference was ignored, and he was instead placed in the wall painting workshop.

Rather than accept this disappointment, he openly defied the decision of the Bauhaus's Council of Masters and began an unrecognized and unsupported independent study. The result was a series of what he would refer to as "window pictures" (Fig. 1), or "shard pictures." In an often quoted anecdote, the artist revealed that "equipped with a knapsack and a hammer, I scouted the town dump; the bottles I found there provided me with all the kinds of glass I needed for making my glass paintings."[7] His working methods, shaped by the difficult economic situation at the Bauhaus but more so by his insistence on a renegade course of study,[8] are certainly evident in the finished objects, many of which are complex assemblages of a variety of glasses and other decorative materials held together by wire and mounted on pieces of discarded tin and other detritus. Despite his obvious defiance of the supervisors of the Bauhaus, the "window pictures" sufficiently impressed them, and they not only allowed Albers to continue as a student, but asked him to restart the school's glass workshop, which had been temporarily closed. Shortly thereafter, he began to receive commissions for architectural projects, and

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[5] Nicholas Fox Weber, "The Artist as Alchemist," Josef Albers: A Retrospective (New York: The Solomon R. Guggenheim Museum, 1988) 15.

[6] Nicholas Fox Weber, "A New Light: Josef Albers's Work in Glass," Josef Albers: Glass, Color, and Light (New York: The Solomon R. Guggenheim Museum, 1994) 10.

[7] Gomringer 27.

[8] Finkelstein 45.

continued to experiment with his own independent works.[9] Although the glass workshop was combined with that of wall painting in 1924, and discontinued completely when the Bauhaus moved from Weimar to Dessau in 1925, Albers continued to produce glass works for the duration of his career there. His own commitment to this art form, even after it had effectively been abandoned by his own institution,[10] speaks to the possibilities Albers saw in glass, and suggests a special place for this body of work within his oeuvre.

In step with his personal artistic accomplishments is Albers's upward journey through the Bauhaus system. In 1922 he was promoted to the level of journeyman, a Bauhaus distinction appropriated from the medieval craftsman/apprentice tradition,[11] and in 1925, having relocated with the school to Dessau, he was made a Master, one of the first Bauhaus students to earn this distinction.[12] Yet even before this point, in 1923, Walter Gropius, founder and then director of the institution, asked him to help teach the mandatory preliminary course, first in conjunction with fellow master László Moholy-Nagy and, after 1928, on his own.[13] It was his teaching methods, which fully developed within this preliminary course, for which Albers would be renowned as one of the most influential art educators of the twentieth century.

In 1963 Albers published the book Interaction of Color as a "record of an experimental way of studying color and of teaching color,"[14] and although this is

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[9] Gomringer 27.

[10] Rainer K. Wick, Teaching at the Bauhaus (Ostfildern-Ruit, Germany: Hatje Cantz Verlag, 2000) 168.

[11] Wick 52-53, 64.

[12] Weber, Josef Albers: A Retrospective 22.

[13] Wick 176-77.

[14] Josef Albers, Interaction of Color, 3rd ed. (New Haven: Yale University Press, 1971) 1.

certainly Albers's best known pedagogical text, it is only one of many written during his career. Completed thirty years after its author left Germany, its main focus on issues of color perception and relations, which also dominated much of Albers's artwork from this time, is not necessarily representative of all earlier interests. While evidence of a fascination with color can be found throughout Albers's work, his teachings at the Bauhaus revolved mainly around explorations of form and material.[15] His methods were not entirely new – as a student emerging from the Bauhaus, there is no question that he was immensely influenced by his own experience in the preliminary course taught by Johannes Itten, by his colleague Moholy-Nagy, with whom he would teach the class, and by all of the Masters at the institution. His inclusion within the course of "exercises with matière" (Fig. 2), which encouraged students to consider the apparent surface qualities of different materials and their relationships, to recognize that "just as one color influences another by its value, hue and intensity, so surface qualities, both tactile and optical, can be related,"[16] was a continuation of the instruction that had come before him.[17] Yet Albers's unique contribution to the Bauhaus agenda can be found in his "material exercises" (Fig. 3), which "were concerned with exploring immanent features of the materials, such as stability, load-bearing capacity, strength, and so on . . . ."[18] Using paper, cardboard, or metal, for example, he would create a design problem to be solved by his class, but would strictly limit the available resources. As described by a former

[15] Wick 176-185.

[16] Josef Albers, "Concerning Fundamental Design," Bauhaus: 1919-1928, eds. Herbert Bayer, Walter Gropius, and Ise Gropius (New York: Museum of Modern Art, 1938) 118.

[17] Wick 177-179.

[18] Wick 179-180.

student, Albers began one new semester with a pile of newspapers and the following instructions:

> "All art starts with a material, and therefore we have first to investigate what our material can do. . . . Economy of form depends on the material we are working with. Notice that often you will have more by doing less. Our studies should lead to constructive thinking. All right? I want you now to take the newspapers you got and try to make something out of them that is more than you have now. I want you to respect the material and use it in a way that makes sense – preserve its inherent characteristics. If you can do without tools like knives and scissors, and without glue, the better. Good luck." . . . He returned hours later and asked us to put the result of our efforts on the floor. . . . He pointed then at a study of extreme simplicity, made by a young Hungarian architect. He simply had taken the newspaper and folded it lengthwise so that it was standing up like a folding screen. Josef Albers explained to us how well the material was understood and utilized – how the folding process was natural to paper, because it resulted in making a pliable material stiff, so stiff that it could stand up on its smallest part . . . The paper had lost its tired look – its lazy appearance. After a while we caught on to his way of seeing and thinking. Fascinating studies in all kinds of materials, like paper, corrugated cardboard, kitchen matches, wire, metal, were produced.[19]

While seemingly limiting, Albers's control over the circumstances of his classes actually led to increased experimentation and creativity among his students. As one scholar has pointed out, ". . . the works created in Albers's preliminary course reveal a variety that demonstrate . . . namely, that for creative people, despite external restrictions – which are, of course primarily pedagogically motivated here . . . the number of possible solutions is almost unlimited."[20]

This brief consideration of Albers's teaching methodology brings to light several important points that I would like to emphasize. The first is his insistence on economy of form and material: "As the proportion of effort to achievement is a measure of the result, an essential point in our teaching is economy. Economy is the sense of thriftiness in labor

[19] Hannes Beckmann, "Formative years," Bauhaus and Bauhaus People, ed. Eckhard Neumann (New York: Van Nostrand Reinhold, 1993) 206-207. Quoted in Wick, 181.

[20] Wick 184.

and material and in the best possible use of them to achieve the effect that is desired."[21] This principle is generally associated with what is now regarded as the "Bauhaus style," but is particularly evident in the work of Albers's students, in their purely paper constructions that become voluminous and free-standing, and their spiraling sculptures cut from a single sheet of metal in one continuous motion. This goal of an ultimate result attainable through a minimum of output, what Albers would define as "The Measure of Art: The ratio of effort to effect,"[22] would affect his own work as deeply as that of his students.

As important as this principal is the obvious goal of allowing his students to learn through their own artistic experimentation. While at the Bauhaus, Albers wrote:

> The ability to construct inventively and to learn through observation is developed – at least in the beginning – by undisturbed, uninfluenced and unprejudiced experiment, in other words, by a free handling of materials without practical aims. To experiment is at first more valuable than to produce; free play in the beginning develops courage. Therefore, we do not begin with a theoretical introduction; we start directly with the material . . . Sometimes the results of these experiments represent innovations in the application or treatment of material. But even when we evolve methods which are already in use, we have arrived at them independently, through direct experience and they are our own because they have been re-discovered rather than taught.[23]

Again, this theory is not Albers's alone, but can be traced to the founding principles of the Bauhaus, contemporary educational reform movements, and even to the American philosopher and teacher John Dewey.[24] Yet it is a principle that the artist would uphold throughout his teaching career: a 1935 article written in English by Albers during his early years at Black Mountain College stated that "[R]ules are the result of experience

[21] Albers, Bauhaus: 1919-1928 118.

[22] Finkelstein 309.

[23] Albers, Bauhaus: 1919-1928 116.

[24] Wick 174.

and come later, and discovering the rules is more life-full than their application,"[25] and the introduction of Interaction of Color explains that "[T]he aim of such a study is to develop – through experience – by trial and error – an eye for color. . . This book, therefore, does not follow an academic conception of 'theory and practice.' It reverses this order and places practice before theory, which, after all, is the conclusion of practice."[26] Again, it is important to keep this goal of education through experience in mind when we turn to consider Albers's own artistic production.

Finally, perhaps the ultimate goal of Albers's teachings was to shape and challenge his students' notions of seeing. As specified by the Bauhaus student quoted earlier, after completing Albers's material exercises, classmates "caught on to his way of seeing and thinking." Although he knew no English when he arrived in North Carolina in 1933 to teach at Black Mountain College, Albers was still able to articulate his main goal as a teacher: "to open eyes."[27] To quote again from Interaction of Color: "What counts here – first and last – is not so-called knowledge of so-called facts, but vision – seeing."[28] This educational and artistic goal trumps all others in Albers's vocabulary, but all three of the points emphasized here have specific relevance to Albers's glass pictures created at the Bauhaus, and the possibility of their role as educational tools.

We have already briefly considered the early stages of the artist's experimentation in glass – his "window" or "shard" pictures, which led to initial success as a student at the Bauhaus and resulted in several commissions for stained glass windows to be included in

[25] Josef Albers, "Art as Experience," Progressive Education 12 (1935): 391.

[26] Albers, Interaction of Color 1.

[27] Weber, Josef Albers: A Retrospective 31.

[28] Albers, Interaction of Color 2.

buildings designed by Walter Gropius. While the earliest independent pictures, with their assemblage technique, reflect a certain expressionism (perhaps due more to the circumstances under which they were created than artistic preference), Albers would quickly turn to the modernist grid (Fig. 4). Virtually all of his architectural commissions reflect this aesthetic as well, despite the fact that they essentially utilized the age-old stained glass technique of positioning colored panes between lead lines. While this may have had a certain appeal given the early references to medieval craft traditions within the Bauhaus's founding manifesto,[29] Albers would soon produce his first glass work using an original and technologically advanced method of shaping the medium. This was done in 1925, the same year that the school moved from Weimar to Dessau, hence bringing his work in line with the institution's developing agenda, encapsulated in the new slogan "Art and technology, a new unity!"[30]

The new work, which Albers would now refer to as "glass murals" or "wall glass paintings" (Fig. 5), was based on a single piece of "flashed" glass – that is, a piece of opaque glass, most often a frosted white, on top of which a thin layer of glass of a different color, often red, had been fused. In Albers's own words,

> The glass to be sandblasted has to be covered with an especially [sic] prepared stencil paper or rubber pasted air-tight upon the pane. Into this stencil cover the design has to be cut out. First the forms to appear white. These must be engraved through the front layer of the flashing coat into the milk glass body of the glass. The sand blown with great pressure from the sandblaster will grind a relief into the glass wherever it is uncovered.[31]

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[29] Albers, Bauhaus: 1919-1928 18, and Wick 64.

[30] Bauhaus: 1919-1928 82, Wick 37. According to Finkelstein, the architectural project *Red and White Window*, 1923, was the first glass work to utilize these new methods (Finkelstein 54), but Albers would not explore them extensively through independent works of art until 1925.

[31] Josef Albers, "A New Type of Glass Picture," Josef Albers: Glass, Color, and Light (New York: The Solomon R. Guggenheim Museum, 1994) 141.

The result was a relief carving of sorts, with a pattern emerging from the different colored layers of glass. Albers would then add detail to the design with black paint, which was then fused to the original pane of glass in a kiln.[32]

Albers's serious exploration of the possibilities of glass shows an unwavering devotion to the material, and his interest in it can be linked to several influencing factors. As mentioned earlier, the artist's father, a multi-talented craftsman, had instructed him in stained glass techniques as a child. Far more influential, however, must have been Albers's experiences with Johan Thorn Prikker while studying at the Kunstgewerbeschule in Essen from 1916-18. Although Thorn Prikker had begun his career as a Symbolist painter in the late nineteenth century, upon his arrival in Germany from the Netherlands in 1904 he soon turned to the applied arts, including mosaic work, fresco painting, and stained glass.[33] In 1910 he began to create religiously-themed windows, and although many of the works are necessarily figurative, they do display areas of abstract form (Fig. 6). These works are an obvious source for Albers's earliest window design, his *Rosa mystica ora pro nobis* for St. Michael's Church in Bottrop (Fig. 7), which was realized by the same man who executed many of Thorn Prikker's works in glass.[34] A fascinating comparison can be made, however, between Thorn Prikker's later work from the early 1920s (Fig. 8), and that which Albers would eventually create at the Bauhaus. The artists had parted ways by this time, and it is unclear whether Thorn Prikker would have been experimenting in pure abstraction while Albers was his student,

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[32] Weber, Josef Albers: A Retrospective 23.

[33] Robert Kehlmann, "The Legacy of Johan Thorn Prikker," American Craft 45.2 (1985): 27.

[34] Neal David Benezra, The Murals and Sculpture of Josef Albers, diss., Stanford University, 1983 (New York: Garland Publishing, Inc., 1985) 43.

or whether both were simultaneously influenced by contemporary artistic developments several years later. Regardless, it would seem that Thorn Prikker must have done something to inspire his student to pursue his own chosen medium so many years after leaving his classroom, despite the fact that "Albers later complained when art historians overemphasized his connection to Thorn Prikker – the artist never admitted freely to his influences . . . ."[35]

It is interesting to consider the fact that Wassily Kandinsky, who joined the faculty of the Bauhaus in 1922 and would remain affiliated until its closure, executed paintings on glass before his arrival at the school (Fig. 9). Yet as they are heavily influenced by the tradition of Bavarian folk paintings on glass and often partially figurative or organically abstract,[36] it seems unlikely that these works are specifically linked with those of Albers, if they were even known to him. Unquestionable, however, is the influence of another man with whom Albers was in contact while at the Bauhaus: Theo van Doesburg. This artist/architect/philosopher, a founding member of the Dutch De Stijl movement, was in Weimar in 1921-22 and delivered private lectures which were attended by many students of the Bauhaus, especially those with mixed feelings about the "expressionistic and spiritually informed" tendencies dominating the methods of some Masters.[37] Van Doesburg's relationship with the Bauhaus was strained – as stated in a 1938 volume edited by Herbert Bayer and Walter and Ise Gropius, "Doesburg's preoccupation with problems of pure form was not in harmony with the Bauhaus ideal of

[35] Weber, Josef Albers: Glass, Color, and Light 11.

[36] Vasily Kandinsky: Painting on Glass (Hinterglasmalerei) (New York: The Solomon R. Guggenheim Museum, 1966) 8.

[37] Wick 38.

educating the individual in the interests of the whole community, nor with its emphasis on technical training. His influence on a group of the students gradually waned . . ."[38] Albers himself would spar with Van Doesburg: "We had right away a clash . . . my interest included also an open form. That cruel insistence on just straight lines and right angles. It was for me just mechanical decoration. So we came apart . . . no, better . . . we never joined."[39] Yet as admitted in the 1938 anthology, "there is little doubt that his visit to Weimar helped to clarify the problem of creative design;"[40] today it is generally recognized that Van Doesburg's influence greatly contributed to a major shift in the Bauhaus ideology, which will be discussed later. Relevant here is his production in stained glass, which is often credited with leading to Albers's transition from the more organic "window pictures" to the strict geometry of the "wall glass paintings," despite the apparent discord between the two artists. Van Doesburg's first window commission of 1916-17, for the house of the mayor of Broek in Waterland, is far from the De Stijl style he would ultimately adopt and propagate, but by the time he reached Weimar several years later, his glass work was strictly geometric, dominated by primary colors, and an obvious influence on Albers (Fig. 10).

Yet while the works are linked visually, Van Doesburg's interest in stained glass may have been quite different than that of Albers. His decision to turn to this medium may have stemmed from a conversation with the architect J.J.P. Oud, who would later be closely associated with the De Stijl movement as well:

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[38] Bauhaus: 1919-1928 38.

[39] Neil Welliver, "Albers on Albers," Art News 64.9 (1966): 50. Also quoted in Finkelstein 57, note 22.

[40] Bauhaus: 1919-1928 38.

> The architect's growing friendship with Van Doesburg resulted in a commission for a stained-glass window, of which mention is made to [Anthony] Kok on August 4: "I have my first commission from that architect, but still have to master the technique." From this passage it may be deduced that the idea to make a stained-glass window came from Oud. Nothing of the kind is to be found in either Van Doesburg's work or statements prior to this time.[41]

While this does not challenge the effect that Van Doesburg's stained glass designs must have had on Albers, it does suggest the artists' different attitudes towards the medium itself. Van Doesburg's experimentations in interior design were not limited to windows – he would execute tiled floors, ornamental wall borders, and eventually entirely coordinated spaces. It seems that for Van Doesburg, stained glass was only one of several means to a desired end. Albers, on the other hand, must have seen distinct possibilities in glass – he would remain faithful to the medium throughout his time at the Bauhaus, despite the closure of the glass workshop in 1925, as mentioned earlier. I would like to suggest that this steady exploration of a single material is due to the didactic properties that the artist might have associated with it, and his desire to exploit a viewer's instinctive reaction when encountering a flat pane of glass. Given its dominance in the architecture of Albers's day, I would argue that any pane of glass displayed on a wall would have been perceived by contemporary viewers, at least on some level, as a window. Albers would manipulate this reaction, and the resulting expectation to see into a different, separate space and to process what is seen there, to challenge and control a viewer's perception of the world beyond and, by extension, his or her relation to others and society at large. In turning from translucent "window pictures" to opaque "wall glass paintings," and by strictly controlling what would be seen "through" these paintings,

[41] Evert Van Straaten, Theo Van Doesburg: Painter and Architect (The Hague: SDU Publishers, 1988) 26.

Albers would "open eyes" more easily, utilizing his particular pedagogic approach, and yet preserving the notion of a window on the world – a world of his design.

Figure, from 1921 (Fig. 11), is the artist's earliest Bauhaus glass work. Although made up of glass attached to a brass sheet, a photograph of the school's glass studio in 1923 (Fig. 12) clearly shows how Albers intended this work, and others like it, to be displayed and how they functioned in the presence of natural light: "They are in effect independent miniature stained glass windows."[42] Also seemingly apparent in this picture is *Untitled* from 1921 (Fig. 13), and it glows in the same manner when placed by a window. A modern day photo of *Window Picture* (Fig. 14), also from that year, clearly shows the effect the artist desired – although many of the pieces of glass are attached to an opaque metal plate, he has punched geometric designs into this metal to allow controlled patterns of light through to the surface.[43] This element of visual control is, therefore, already evident in Albers's earliest works, regardless of their links to traditional stained glass constructions.

Even when Albers began to design actual windows for realized architectural sites, he would experiment with this idea of light and controlled vision. *Red and White Window* (Fig. 15), created for and installed in a reception area outside of the Bauhaus Director's office in 1923, was the first instance of the artist's use of the sandblasted flashed glass technique, found in a checkerboard pattern in the lower left-hand section of the

[42] Finkelstein 46.

[43] In 1938, *Window Picture* was set within a traveling lightbox/frame, perhaps in preparation for the 1939-40 traveling exhibition Bauhaus: How it Worked, organized by the Museum of Modern Art. This was undoubtedly done to preserve the stained glass-window effect that Albers had pursued more than a decade earlier. Josef Albers: Glass, Color, and Light Cat. 3; Conservation report, exhibition history, and hand-written notes contained in Hirshhorn Museum and Sculpture Garden archival file on *Fensterbild*, accession number 72.6.

window.[44] Also executed that year was a black and white drawing, *Windows* (Fig. 16), in which

> . . . Albers reversed the window concept or principle that governed his transparent, assembled glass compositions to the time of the *Red Window*, namely that the window lets in the light from the other side. Here, on the other hand, the window panes are black; they admit no light, as all the light comes from outside the buildings or from the front of the work of art, and is therefore reflected, not transmitted from behind.[45]

This principle of "reflected" rather than "transmitted" light carries directly over to the opaque "wall glass paintings" that he began to produce in 1925. Albers would create these works by sanding through a top layer of colored glass that had been fused to a piece of opaque "milk-glass." Because of the color of the ground layer, as well as the general visual properties of glass, it can seem as if light is emanating from the work itself, as if it were, in fact, a window to the outdoors: "Albers outdid nature in these flashed-glass pieces. He used opaque glass to create an apparent translucency more powerful than actual translucency, and he made reflected light appear to be light coming from a direct source."[46] Again, what is striking about the effect of these works, emphasized by the scholarly statements about them, is the element of artistic control that they display – Albers is manipulating our vision, taking into account the instinctual recognition of a flat pane of glass against a wall as window, and making it seem as if we were, perhaps, looking through one when, in fact, we are looking at an image of his own creation.[47] The

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[44] Josef Albers: Glass, Color, and Light 139, Finkelstein 54.

[45] Finkelstein 55-56.

[46] Weber, Josef Albers: A Retrospective 23.

[47] It is interesting to note that six of these opaque glass works, all from 1929, include unmistakable window imagery – four of these works are entitled *Interior*, while the remaining two are actually called *Windows* (Fig. 17). Finkelstein suggests that Albers was interested in the window shape for solely formal reasons

titles, and by inference the subject matter, of some of the works further emphasizes this: *Factory* (Fig. 5), *Pillars* (Fig. 18), *City* (Fig. 19), *Skyscrapers* (Fig. 20)– all things that could potentially be seen outside of a contemporary window.[48]

Albers's pedagogical goals, as summarized earlier, would seem to link perfectly with the idea of an opaque glass window that would control and shape the viewer's perceptions. To begin with, these glass works are the epitome of "economy of form and material." By fusing layers of glass, Albers had succeeded in creating viable artwork from a single material, even a single pane of that material, and had done so solely by utilizing its own innate properties.[49] The works could stand as an example for his students in the Bauhaus preliminary course, although it is unlikely that he would have presented them as such. More complex is the question of how Albers's goals of learning through experimentation and shaping vision are reflected in the opaque panels. In a way, these goals are combined in the experience of looking at/through one of these "windows." The act of looking in itself is a form of experimentation, as the viewer struggles to reconcile the relief effects of the works, the shifting of ground and foreground elements, the possible figurative or narrative associations in works with loaded titles, and the numerous ambiguities these pieces present. At the same time, by ensuring this experimentation in the context of looking at a piece of glass, beyond which viewers

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(Finkelstein 78), but it seems as likely that the artist was aware of the unique possibilities a window presented, both in terms of architectural innovation and in the ability to shape and control vision.

[48] There is no question that, upon entering the Bauhaus, Albers chose to reject figurative art and embrace the abstract. However, the titles of these glass works suggest a connection to realism, as do the clearly recognizable forms in many of the works dated to 1930 and afterwards. The theories and methods that Albers propagated are not linked specifically with abstraction – there is no reason they could not be applied to figurative art as well. That he chose to apply them to abstract forms in his own work is, perhaps, a reflection of personal choice and the era in which he lived.

[49] Although Albers would often paint colored detail onto the glass panes, they would be fired yet again after this process, fusing the paint with the glass and, in essence, making the entire work a single pane of glass. Weber, Josef Albers: A Retrospective 23.

would normally expect to find the real world apart from their own space rather than an idealized vision of the future, Albers has guaranteed that he will affect his viewer's "way of seeing" not only the work itself, but the world seen figuratively through his controlled "window."

Contradicting all of this is the fact that while Albers referred to his earliest glass works as "window pictures," the works that I have just characterized as opaque windows were called "wall glass paintings." The artist's choice of language here is somewhat paradoxical, given his absolute refusal to enter into the wall painting workshop as a Bauhaus student. But in a1972 statement which refers to this refusal, the artist specifies that "to me wall painting deals with colors as reflected light, but glass painting with color as direct light . . ."[50] Given his adoption of opaque glass in 1925, Albers must have resolved his objections to "reflected light" and, as already discussed, had begun to utilize it in his own work, hence connecting it with wall painting. As these works were no longer dependent on exterior illumination, as the early "window pictures" had been, the title change may simply be a reflection of this fact. In a different statement regarding his glass works, Albers hints at how they might have been displayed (Fig. 21): "By using opaque glass and only one pane for a picture I achieved the movability of a small easel painting permitting [it] to be hung on a wall, as well as to be mounted into the wall as a fixed architectural part, both indoors and outdoors."[51] As "fixed architectural parts"

[50] Re: Untitled Glass Assemblage of 1921, statement by Josef Albers from 1972, contained in Hirshhorn Museum and Sculpture Garden archival file on *Fensterbild*, accession number 72.6.

[51] Albers, Josef Albers: Glass, Color, and Light 141. The scale of all of Albers' glass works is remarkably consistent – a typical example is *Factory*, 1925, which measures 11 9/16 x 14 3/16 inches. As the quoted statement suggests, this intimate size made the works versatile in terms of display options, but also undoubtedly reflected the artist's goals for the work. If a glass picture/window was to affect a viewer's way of seeing, it had to be immediately and easily accessible. A small scale glass panel seems more suited for this purpose than a larger one.

made of glass which would be placed "into the wall," these panels would undoubtedly be perceived as windows – even when hung on a wall they retain this association, given instinctual perceptions of flat panes of glass as openings to the world beyond. Regardless of how Albers meant for these works to be regarded, however, they would have had the same didactic goals. They would never have been used as educational tools strictly in a classroom setting,[52] but rather their pedagogical effects were undoubtedly aimed at a wider audience – that of post-World War I Germany. In using glass towards this aim, Albers was very much in keeping with, and undoubtedly influenced by, the architects around him both at the Bauhaus and in wider circles.

In 1914, Paul Scheerbart's Glass Architecture was published, providing a comprehensive statement of this particular writer/architectural philosopher's dream for the future as well as hinting at the general ideas about the possibilities of glass which were in fashion at that time. In a relatively concise text, belied by its division into 111 chapters, Scheerbart unveils a world where everything, from homes to factories to airplanes, is made out of colored glass, and where mankind has fully embraced a "glass culture."[53] His ideas would find a physical manifestation in the Glass House designed by Bruno Taut, also in 1914 (Fig. 22), for the German Werkbund Exhibition in Cologne – Scheerbart and Taut were friends and each dedicated their work of that year to the other.[54] Although the Glass House was created for the same exhibition as Walter

[52] "It has been repeatedly confirmed by former students that Albers' art was always a completely private affair, and that his classes never had knowledge of his artistic activity outside the classroom." Finkelstein 284.

[53] Paul Scheerbart, Glass Architecture, 1914, trans. James Palmes (New York: Praeger Publishers, 1972) 74.

[54] John. A. Stuart, Introduction, The Gray Cloth: Paul Scheerbart's Novel on Glass Architecture (Cambridge, Massachusetts: MIT Press, 2001) xxi.

Gropius' Hall of Machinery, Scheerbart's visual ideals were not quite the same as those emphasized by the Bauhaus founder and director: " . . . let me make it clear that colours in glass can produce a most glowing effect, shedding perhaps a new warmth. . . I should like to resist most vehemently the undecorated 'functional style,' for it is inartistic." Scheerbart's interest runs towards glass as a decorative as well as functional building material, and it is here that a link with the glass works of Albers can be suggested. Although Scheerbart's buildings would be made entirely out of glass and iron, they would not be transparent: "It will seem very natural that ventilators should have a principal part to play in a glass house, and will supplant everything window-like. When I am in my glass room, I shall hear and see nothing of the outside world. If I long for the sky, the clouds, woods and meadows, I can go out or repair to an extra-veranda with transparent glass panes."[55] As colored glass would insulate a person from the chaos of the outside world, so would Albers's opaque glass windows, presenting idealized visions of an ordered world beyond as if they were, in fact, already a reality. Scheerbart's ultimate goal in his theorizing was to convince others that "glass architecture will also improve mankind in ethical respects. It seems to me that this is a principal merit of lustrous, colourful, mystical and noble glass walls. This quality appears to me not just an illusion, but something very real; the man who sees the splendours of glass every day cannot have ignoble hands."[56] As a world of "glass architecture" would change future societies for the better, so too would Albers's windows, with their ability to "open eyes" to the possibilities of a structured, orderly world that he presented to them, and that he hoped would one day be seen through truly transparent panes of glass.

[55] Scheerbart 52.

[56] Scheerbart 63.

Scheerbart's text was widely read within architectural circles after the First World War, and Albers must have been aware of it.[57] In general, however, the "wall glass paintings" and their possible pedagogical function can be situated firmly in the general trend of increased use of glass in architecture. Arthur Korn's 1929 book Glass in Modern Architecture of the Bauhaus Period celebrated this phenomenon with photographs of many of the most striking of these new buildings, including the Dessau Bauhaus designed by Gropius. Three pages of the book were dedicated to Albers's glass paintings at the end of a section on household glassware and mosaics. Korn attempted to define the attraction of the medium by suggesting "Glass is noticeable yet not quite visible. It is the great membrane, full of mystery, delicate yet tough."[58] He praised "its hygienic, hard and protective surface."[59] Korn also noted the avenues glass opened for advertisers (Fig. 23): "Novel developments followed in the area of large-scale advertisements and hoardings in the townscape. Today, it is possible to show these to similar advantage by daylight and during the night with the aid of glass bricks and large sections of sheet glass which can be covered by signs and lettering up to fifty feet high."[60] It is interesting to think of Albers's work in terms of these glass billboards – both use the medium as vehicles for constant communication with the viewer.

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[57] Stuart xx. Also interesting is an acquaintance between Scheerbart and Gottfried Heinersdorf, (Stuart xxi), the same man who executed Albers' first glass window project in 1917. Whether the two men knew each other is uncertain, but this fact clearly demonstrates the interconnectedness of the architects, artists, and philosophers interested in glass at this time.

[58] Arthur Korn, Glass in Modern Architecture of the Bauhaus Period (1929; New York: George Braziller Inc., 1968) 6.

[59] Korn 8. The "hygienic" properties of glass were celebrated by many of its proponents. Scheerbart, for examples, would point out "That in a glass house, if properly built, vermin must be unknown, needs no further comment." (Scheerbart 54.) One can see this hygienic principal in Albers' rejection of roughly shaped glass materials taken from the town dump for the "clean" lines of sandblasted flashed glass.

[60] Korn 7.

Albers's opaque glass pictures, and their didactic possibilities, stand parallel with the lofty ambitions of the architects of his day – to transform society through the Gesamtkunstwerk, the total work of art. Indeed, Albers's works from this time can be seen as a tangible result of this aim – they are both architectural elements and independent works of art that engage and, hopefully, change the viewer. That their visual characteristics – primary colors, straight lines and ninety degree angles – are clearly influenced by other artists working towards this same goal speaks further to the point. Yet it seems that Albers's goal would develop over time. While the opaque glassworks from 1925, the year of their inception, through 1929 would retain these qualities, from 1930 onwards we begin to see an increase in the artist's own experimentation with form.[61] His subject no longer seems to be the ideal world outside the window, but rather that within his own mind. A certain playfulness is evident in works like *Cables*, and *Six and Three* (Figs. 24 and 25), both from 1931, with their emphasis on optical illusion. While they certainly still challenge the viewer's way of seeing, they lack the didacticism of early works – *Keyboard* of 1932 (Fig. 26) is less likely to change society. Furthermore, as one Albers scholar has observed, works such as *Cables* present spatial impossibilities. They force the viewer to try to resolve visual contradictions that could not, in fact, exist in three-dimensional reality, seemingly distancing these works even further from any functional aims.[62] The fact remains, however, that Albers continued to visualize these experimentations in glass, a medium that, as has been argued, has specific and perhaps even inherent didactic qualities. Had his underlying goal, the educating of

[61] Two works created before 1930 would also seem to represent this shift – *Glove Stretchers*, 1928, and perhaps *Beaker*, 1929.

[62] Finkelstein 90-94.

the viewer through controlled vision, really changed drastically, he could easily have shifted his efforts towards painting or print-making, as he would do later in his career. In this particular instance, then, the visual shift in these glass works can be at least partially explained by events at the Bauhaus during Albers's career, and changes in the institutions ideology.

The scholar Friedhelm Kröll has divided the development of the Bauhaus into three phases,[63] and while they are far too complex to be evaluated in any depth here, it is interesting to note the development of Albers's work in relation to these phases. The period of 1919-1923 comprises the Founding Phase, and it is during this time that Albers came to the school and began his first experimentation with his "window pictures." The Phase of Consolidation, 1923-28, encompasses the school's move to Dessau, and the artist's move to opaque glass and geometricized form. This post-Van Doesburg Bauhaus would reflect a new dedication to technology and universality: "The notion of mechanical reproduction now became a universal guiding principle for action, with the result that the production of individual works of art was by and large banished to the sphere of the private studio. With the gradual elimination of the medievalizing romanticism of crafts and the expressionist cult of the unique object, a rigorous, sober functionalism began to develop . . . ."[64] Motivation clearly existed for Albers to explore new methods of working in glass, methods that would not recall a gothic stained glass tradition, but rather that of a new architecture. The artist himself would emphasize that "the production of the veneer pictures in an exact process permits the possibility of exact replicas. The consequence is that the pictures need not remain unique pieces. Here, as in etchings or

[63] Wick 34.

[64] Wick 40.

molded sculptures, increased production volume reduces unit costs and we can avoid the snobbish cult of the unique."[65] In fact, after the Bauhaus glass workshop was closed in 1925, the pictures were created by commercial sandblasting, although designed and supervised by Albers.[66]

Walter Gropius resigned as Director of the Bauhaus in 1928, ushering in the Phase of Disintegration. He was replaced by Hannes Meyer, under whose direction "the Bauhaus had broken once and for all with the original idea of a unified art school" and "the idea of a production site for satisfying social needs was now dominant."[67] Even when Ludwig Mies van de Rohe took over in 1930, "the Bauhaus retained the features of an architectural academy with several courses for design, two classes for fine arts paintings, and one class for photography."[68] As the Bauhaus drifted away from the notion of incorporating fine arts with architecture, Albers seems to have been drawn back to the appeal of the independent art object, as attested to by his last works in glass, works that, at first glance, lack obvious over-arching social goals. This subtle distancing of himself from the Bauhaus suggests that architecture was not, in fact, the artist's ultimate goal – it was to affect the viewer's way of seeing, and the visual arts provided the best opportunity for this. Yet the glass works have strong links to contemporary architectural ideals and would function subtly in a coordinated spatial context, and it is this element that is key to their success. Although Albers would never turn to a career of designing

[65] Josef Albers, "Zu Meinen Glas-Wandbildern," A bis Z: Organ der gruppe progressiver Künstler 3 (February 1933) 117. Translated for the author by Carl Stoll, Washington DC.

[66] Finkelstein 75, note 49.

[67] Wick 47.

[68] Wick 48.

functional spaces,[69] his art was at its most powerful when it retained this link with architecture, and the works in glass, by the very nature of their medium, exemplify this.

[69] Albers did produce a few architectural schemes, including a design for a hotel room and a store front. He would also design some furniture and household items. These efforts would seem to be a reflection of the all encompassing climate of the Bauhaus and its various workshops rather than an indication of Albers's own dominant interests – see Weber, Josef Albers: A Retrospective 25 – 27.

Chapter Two: "Opening Eyes" – Josef Albers at Black Mountain College

In 1933, Josef Albers was forty-five years old, and had been at the Bauhaus in some capacity for thirteen of its fourteen year history, longer than anyone else. The school had served as the impetus for a complete change in his artistic style and thought, as a background for developments within his personal life (he married Bauhaus student Anni Fleischmann in 1925),[70] and as the testing ground for the distinct teaching style for which he is now widely known. Yet by the time of the institution's essentially forced closure that year,[71] the world outside of its windows was far from the state of order and balance that Albers's glass pictures indicated. The artist's "espousing of the causes" and "active support of the Bauhaus, which was a germ-cell of bolshevism," had been "defined as 'political activity'" by the German government, and Anni Albers's Jewish heritage sealed the new and perilous situation of the couple in their native country. [72]

Escape came in the form of a telegram from Philip Johnson, then curator of architecture at the Museum of Modern Art, offering a teaching position to Albers on behalf of the founders of the newly established Black Mountain College in North

[70] The relationship between Josef and Anni Albers goes beyond that of husband and wife. As a talented student of textile arts, Anni entered the Bauhaus in 1922, and began a lifelong exploration of modern materials and weaving practices. The similarities between her textiles from this period and Josef Albers' glass works are undeniable, clearly speaking to the mutual influences of the artist's on each other, as well as their simultaneous absorption of the work of other Bauhaus colleagues. Both artists would also be deeply affected by the ancient arts of South America, encountered on their frequent trips to Mexico beginning in 1935, and comparable influences can be seen on both of their bodies of work. Beyond her role as translator, representative, and general supporter of her husband throughout his career, Anni Albers is now recognized as a groundbreaking modern artist in her own right – a major retrospective of her work was organized by the Peggy Guggenheim Collection in Venice in 1999, and her textile works can be found in major public collections.

[71] The Bauhaus was actually dissolved by a vote of the faculty, including Albers. Weber, Josef Albers: A Retrospective 30.

[72] Weber, Josef Albers: A Retrospective 30.

Carolina.[73] The offer was quickly accepted, and months later the couple arrived in America, which would be their home for the remainder of their lives. Through necessity more than free choice, Albers had left a European urban community of notable artistic activity for the rural American South, and there is no question that this change in circumstances and influences affected the artist deeply - as a teacher, an artist, and as a human being. However, as an examination of his teaching career and artistic production while at Black Mountain will show, Albers would remain committed to all he had learned and created at the Bauhaus. Although his own visual language would change and develop, his teaching philosophy, and subsequently the pedagogical aims crucial to his artwork, would remain remarkably consistent. The result is a body of work that has much in common intellectually with the early glass works, but that does not retain the visual power to educate and shape viewers to the same degree.

Although not comparable in scale or gravity to the upheaval that characterized the Alberses' situation, 1933 was also a time of unrest for the scholars who would ultimately found Black Mountain College. That year, John Andrew Rice, along with several of his supporters, was dismissed from Rollins College in Winter Park, Florida, essentially for his fundamental disagreement with the educational policies of its president, Hamilton Holt.[74] This was not surprising, given Rice's disapproval of the traditional structure and perceived aims of the American institution of higher learning in general. It was the concept of a new way of teaching and learning that fueled the establishment of Black Mountain College, and that would sustain it for at least the earliest of its twenty-three

[73] Weber, Josef Albers: A Retrospective 31, and Martin Duberman, Black Mountain: An Exploration in Community (New York: Anchor Press, 1973) 41-43.

[74] Official charges were levied at Rice, but his utter incompatibility with Holt seems to have been the real cause of his dismissal. See Duberman 1-10.

years. While this manifested itself organizationally in an institution that was decidedly un-institutional, lacking a board of trustees or governing body other than the faculty, with significant input from students, and insisting on open community participation in all aspects of the college, it was the progressive educational policy that lay at the heart of the venture. As articulated by Rice, Black Mountain would be a "a sort of second womb"[75] for students, a place where they were not merely forced to memorize and regurgitate dates and events, but to interact with ideas and each other, in preparation for the challenges of the world outside their seemingly idyllic community:

> We're trying, with increasing (though, off and on, faltering) success to teach method as against content. Our emphasis is on process as against results. To us, the way of handling facts is more important than facts themselves. Facts change, while the method of handling them– provided the method is life's own free, dynamic method which evidently works on the principle that nothing is permanent save change – remains the same; and so, if stability or order is what is wanted in this world (and I take it that it is), it can only be got by putting facts, results, the alleged content of life in the past in second place, and placing stress on the way of handling facts now and in the future, on the method, the process of life.[76]

The products of a such an educational experience, as emphasized by Rice, would not be

> potential political and financial schemers and go-getters to whom politics and finance are ends in themselves, but *artists*. Not necessarily – in fact preferably not – professional painters, sculptors, musicians, or writers of novels and poetry, but people who will have the artistic approach to life as a whole and to everything in life; whose values will be qualitative, not quantitative; who will be eternally modern and as such distinguished not by what they will know, but by what they will do with what they know . . . .[77]

Despite the disclaimer regarding the training of professional artists, fine art classes (as opposed to art history classes) were at the center of the Black Mountain curriculum, yet

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[75] Rice, as quoted in Louis Adamic, My America: 1928-38 (New York: Harper & Brothers, 1938) 615.

[76] Rice, as quoted in Adamic 617.

[77] Rice, as quoted in Louis Adamic, "Education on a Mountain," Harper's Magazine 172 (April 1936): 519.

another educational innovation when considered in light of traditional American colleges, where the arts were often classified as frivolous or less-important electives.[78] Classes in "Dramatics, Music, and the Fine Arts" were deemed essential to all students, especially to those new to Black Mountain; it was through the creative exploration of these fields that an effective approach towards all subjects, and in fact life, could be fostered.[79] As spelled out in the college's first catalogue, "through some kind of art-experience . . . the student can come to the realization of order in the world; and, by being sensitized to movement, form, sound, and other media of the arts, gets a firmer control of himself and his environment than is possible through purely intellectual effort."[80]

It was this community, that not only embraced the arts but considered them key to any further educational development, that the Alberses joined in November of 1933. Their arrival did not go unnoticed by those beyond Black Mountain – thanks to the public relations efforts of the Museum of Modern Art, announcements appeared in The New York Times and New York Herald Tribune, among other major publications, with some predicting a forthcoming revolution in American art education. [81] Albers's teaching methods, upon which so much of his international reputation was based, as well as his own artistic goals were a perfect fit with the aims of Black Mountain College, as expressed by Rice and his colleagues. Even in the context of the Bauhaus, a clear training

[78] Duberman 39, Mary Emma Harris, The Arts at Black Mountain College (Cambridge: The MIT Press, 1987) 7.

[79] Harris 17.

[80] Harris 16.

[81] Harris 9, L.H.O., "A Teacher From Bauhaus," New York Times 29 November 1933: 17, "German Professor to Go to Black Mt. College," New York Herald Tribune 10 December 1933: 10. The New York Times proclaimed "New principles of art teaching will be introduced in this country by Professor Josef Albers, who formerly taught at the famous Bauhaus at Dessau, closed by the Nazi government. The coming of Professor Albers, who arrived last week on the Europa, is heralded by his sponsors at the Museum of Modern Art as the beginning of a new era here in the teaching of art."

ground for art professionals, Albers had never simply taught drawing or painting, but rather an approach to materials and the visual world, a balanced way of seeing and subsequently reacting. His dedication to process and experimentation, and to the shaping of vision, as elaborated earlier, were a clear endorsement of Rice's determination "to teach method as against content," and his insistence on economy of materials must have made his approach particularly suited to the newly formed college with few financial resources.[82] Albers implemented an art curriculum immediately, holding classes aimed at beginners.[83] Fulfilling the promise to place the arts at the center of things, the general education schedule was arranged around these classes to ensure that all those who were interested could attend, and the drawing class in particular was consistently full of not only new students, but faculty and community members (Fig. 27).[84] A contemporary visitor to the college declared Albers's classes "the largest and, with Rice's, the most dramatic, exciting, emotionally and intellectually satisfying, and important."[85]

While Albers's circumstances had undoubtedly changed, had they affected his teaching methods and ideas? In a 1965 interview regarding his time at Black Mountain, the artist would emphasize " . . . I was not just repeating Bauhaus stuff. I tried in a new part of the world with another part of youngsters, another mentality, to develop

[82] The perfect match of Rice's educational aims and Albers' practices as described here would seem to raise questions of influence. Rice's statements quoted here appeared in a Harper's Magazine article written by Louis Adamic, who visited the school in 1936 and must have recorded the sentiments then. Albers, who had joined Black Mountain soon after its inception, had been with the college nearly three years at that point, and it seems likely that his approach to education and the role of the arts shaped the institutional attitudes of Black Mountain, even those expressed as early as the winter of 1933, in the college's first catalogue (see Harris 16 and Duberman 48-49). This is not to suggest that Albers was a more crucial figure in developing the mission of Black Mountain than Rice – in this case, it is more important to recognize the tenets of that mission rather than who originated them.

[83] Harris 17.

[84] Harris 17, Adamic, "Education on a Mountain" 521.

[85] Adamic, "Education on a Mountain" 527.

something independent. . . . Here, in this new part of the world, I felt obliged to start a new life on my own, and a new life that was related to the mentalities here, and so I developed drawing."[86] The artist's retrospective need to separate his own accomplishments from those of the larger epoch of which he was a part is obvious here, but so too is his insistence on continual development; his courses at Black Mountain were not directly transplanted from the Bauhaus curriculum.

Although active in numerous Bauhaus workshops, Albers's main responsibility was the preliminary design course – at Black Mountain, as head of the art department, his attentions were more diversified, leading to separate classes in drawing and color as well as Werklehre, or basic design.[87] He developed drawing exercises that forced students to retrain their hands in order to reflect accurately what they saw through graphic means, as well as to shape their vision through the performative acts of the hand, as when asked to write letters or numbers in the air forwards, backwards, and upside-down (Fig. 28).[88] He devoted a separate class to the study of color, its appearance and the myriad influences of one tone on others,[89] an investigation that would, later in life, become a passion that would dominate his own artistic production. Yet, as important as these developments may have been to Albers, and as groundbreaking as they must have seemed to his students and colleagues, they cannot really be seen as drastically different from his work done at the Bauhaus. In his Black Mountain Werklehre course, he continued to encourage an

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[86] Josef Albers, "March 1965 Interview," Black Mountain College: Sprouted Seeds, ed. Mervin Lane (Knoxville: University of Tennessee Press, 1990) 35-37.

[87] Harris 17.

[88] Albers, "Marcy 1965 Interview" 35-37. While Albers may not have utilized this type of exercise in his teachings until he reached Black Mountain, the glass work *Six and Three* of 1931 (fig 25) clearly reflects his own experimentation with these ideas.

[89] Harris 20.

exploration of a variety of materials, and the studies produced by his students are very similar to those done by their Dessau counterparts several years earlier (Fig. 29).[90] Even the new drawing and color exercises, with their emphasis on controlled seeing and creating, and forced recognition of previously unnoticed visual realities, arise from the same goal as the previous Bauhaus work – to "open eyes," Albers's stated goal upon arriving in America.

Although Albers had transitioned from a predominantly art-based program into a more general educational situation by joining Black Mountain, his teaching role was not ultimately diminished, nor were his methods greatly affected. Though his students at the Bauhaus had chosen to pursue careers in the arts, his instruction had never been strictly directed at developing painters or architects, per say, but at preparing all of his students for whatever their chosen profession would be – in a 1928 statement explaining his teaching principles, Albers emphasized that "the *inductive* method of instruction proposed here has as its goal self-discipline and responsibility toward ourselves, toward the material and toward the work. It helps the student, in choosing his vocation, to recognize which field of work is closest to him."[91] Even early on, Albers perceived his teaching as being the first step towards the development of the visually aware, responsive person, a person who was as well equipped to deal with the challenges beyond the

[90] According to Harris, as Albers' career at Black Mountain progressed, he began to focus more on "matière" exercises, the juxtaposing of different materials in order "to 'fool the eye' and in so doing to educate the eye" (Harris 78). This seems somewhat unusual given that this type of exercise was adapted by Albers from earlier Bauhaus instructors and was not part of his own contribution to the shaping of the preliminary course. Perhaps he found this type of exercise more appropriate for students who would not ultimately make a career in the arts and hence not need the same type of technical material awareness, or perhaps he found these exercises more and more relevant to his personal artistic output, as will be discussed later. Regardless, however, the general goal of these exercises remains consistent with all others implemented by Albers, and does not indicate a shift in methodology or purpose.

[91] Bauhaus: 1919-1928 120.

workshop as those within it. This did not change upon his transition from the Bauhaus to Black Mountain, and subsequently his methods and goals did not change significantly either.

As argued earlier, Albers's pedagogical approach and the stated goals of that approach, namely to force people "to see," undoubtedly affected his own artistic production, despite the distance he attempted to insert between his studio and the classroom. His single-pane glass pictures in particular reflect this, perhaps serving as pedagogical tools in themselves, and have particular relevance to the aims of the Black Mountain community. Just as the glass works would shape society through the control of the individual viewer's vision, so too would the Black Mountain student – as Martin Duberman suggests:

> It was hoped that a double sense of responsibility would emerge out of the varied contacts and opportunities Black Mountain provided: that which an individual owes to the group of which he is a member, and that which he owes to himself – with neither submerging the other. From the beginning Black Mountain emphasized the social responsibilities that come from being part of a community, yet tried to see to it that personal freedom wouldn't be sacrificed to group needs.[92]

At Black Mountain, Albers's creative energies were aimed at the design of people as much as works of art, although both would share a similar function within society. It would seem reasonable to assume, then, that his artistic development followed the consistency of his pedagogical aims, and that he continued to create the glass pictures so suited to his purposes. This, however, is not the case – Albers would produce no glass works after leaving Germany.[93] Logistical and financial circumstances undoubtedly played a large role in this decision – neither the facilities nor the economic resources for

[92] Duberman 27.

[93] The exception to this is *Rolled Wrongly*, originally made in 1931, and then refabricated in New York sometime after 1956. See Josef Albers: Glass, Color, and Light cat. 47.

sandblasting glass were available to Albers at Black Mountain or in the surrounding North Carolina communities. Although hesitant to abandon a medium that had proven to be so crucial to his artistic aims, the artist chose instead to pursue the stability of a tenured position and a guaranteed income (however meager),[94] and the result was a profound shift in his own art.

The artist did not, however, abandon his work from the Bauhaus completely – some of his earliest American pieces, the *Treble Clef* series of paintings (Fig. 30), were begun in Germany, with one executed as a glass picture in 1932, perhaps an indication of the artist's original intention for the more than eighty thematic explorations.[95] The fact that even after switching to the infinitely more flexible medium of gouache, Albers maintained the limited palette of black, white, and gray characteristic of flashed glass further indicates his reluctance to set aside the medium or its inherent qualities. A series of woodcuts and other prints also date to this transitional period, created both in Germany after the closure of the Bauhaus and in America, with works like *Sea*, 1933 (Fig. 31) having precedents in the previous glass compositions, such as *Im Wasser*, 1931 (Fig. 32).[96] Yet the complete change of circumstances resulting from the move to North Carolina must have heightened the artist's sense of experimentation, resulting in several oil paintings completely unlike anything created, or perhaps even conceived of, at the Bauhaus. Works like *Etude: Hot-Dry* (Fig. 33) and *Etude: Red-Violet (Christmas Shopping)* (Fig. 34), both of 1935, and *Almost Four (color étude)* of 1936 (Fig. 35) could

[94] Harris 10.

[95] The artist ultimately destroyed many of the *Treble Clef* works, keeping thirty. Gerald Nordland, Josef Albers: The American Years (Washington, D.C.: Washington Gallery of Modern Art, 1965) 12.

[96] Faye Hirsch, "Albers Prints of the '30s & '40s: Artist's Cheat," The Print Collector's Newsletter 26.4 (September-October 1995): 122.

not be further from the artist's preceding geometricized, color-blocked compositions. Such is also the case with a later series of drypoints, including the rendering of a friend's young son *Eh-De*, 1940 (Fig. 36), and *Maternity*, 1942 (Fig. 37). While it is visually obvious what distinguishes these works within Albers's oeuvre, it is interesting to note how seemingly antithetical they are to the main tenets of his pedagogy, as defined earlier – the ragged brushstrokes and layered colors of the paintings and the playful curlicues of the prints can hardly be considered "economy of form," nor are the works structured in such a way as to reveal previously hidden visual ambiguities or truths, despite the arguments of some Albers scholars.[97] And yet with these experimental works the artist fulfilled his own requirement of learning through personal exploration, and shaped his own artistic vision, coming to the realization of the inadequacy of this particular visual language for his own aims. The fact that these works stand out as isolated examples within the artist's prolific production further emphasizes the constant link between Albers's educational goals and his artworks – abandoned because of their inability to communicate with and shape the viewer, they still managed to serve as a learning opportunity for their creator.

Albers's career at Black Mountain is characterized by numerous works that indicate a shift in his visual language, resulting in a corresponding shift in their ability to communicate his ideas to his viewer. Nowhere is this more obvious than in the *Graphic Tectonic* series of zinc lithographs, dated 1941-42 (Figs. 38-45), which can be seen as exemplifying many of the tendencies present in an otherwise diverse body of work. As with his earlier glass works, Albers's choice of medium was deliberate and meaningful:

[97] Weber, Josef Albers: A Retrospective 32, 35-36.

> . . . these lithographs do not emphasize the graphic characteristics of lithographs. I choose the zinc-litho process as the most appropriate way of achieving both the directness and precision of lines and the exact proportions of black and white, that I had developed in preparatory studies. . . . These results require the use of ruler and drafting pen and establish unmodulated line as a legitimate artistic means. In this way they oppose a belief that the handmade is better than the machine-made, or that mechanical construction is anti-graphic or unable to arouse emotion. In this age of industrial evolution both methods have their merits.[98]

Albers's language clearly links this series of eight lithographs with the glass works that came before it rather than with any of his later paintings – the emphasis on precision of line links back to the results gained by sandblasting glass through a specially sealed stencil, while the mention of the creative possibilities of "mechanical construction" recalls the fact that the sandblasting was often done by industrial professionals outside of the Bauhaus. The images are entirely linear constructions, consisting of straight lines of varying widths which meet strictly at right angles, recalling the glass works from the 1925-29 period. The images themselves, as well as their titles, seem to suggest architectural references – Albers would note "As the term 'tectonic' implies, the abstract compositions shown here are constructed, being built with elements that are produced by mechanical means and arranged in an emphasized mechanical order,"[99] as if the lithographs themselves were modern buildings of glass and steel. Some of the titles of the individual prints reinforce this connection with constructed spaces (*Sanctuary*, Fig. 44), while also suggesting another source of inspiration - *To Monte Alban* (Fig. 39) refers to an archaeological site in Oaxaca, Mexico. The Alberses visited Mexico for the first time in 1935 and would return frequently throughout their lives,[100] developing an enormous

[98] Josef Albers in François Bucher, Despite Straight Lines (New Haven and London: Yale University Press, 1961) 10.

[99] Albers, Despite Straight Lines 10.

respect for the arts and architecture of that country's ancient cultures. Both of the above-mentioned prints seem to echo the pyramidal forms they would have encountered at numerous archaeological sites, with white or black rectangles suggesting the flat plateaus at the top of each structure, and vertical or horizontal lines forming the downward-sloping sides. It is, in fact, this feeling of climbing and dropping in and out of the images that makes the works in the *Graphic Tectonic* series uniquely powerful. Through strict configurations of black lines on white paper, Albers managed to create works that pulse into the viewer's space, and then seem to recede beyond the back of the picture plane. Forms shift endlessly in front of and behind each other, making it difficult to distinguish boundaries, and beginnings or endings. Even with extended viewing, the images remain in constant motion, and it is this visual effect that is the key to the works and that most clearly highlights the ideas behind them. As emphasized again and again, both in his own words and in my own, Albers aimed to shape and develop his audiences' sensory perceptions, forcing them to discover what is truly there by continually employing techniques that would "fool the eye." The intangibility of the *Graphic Tectonic* lithographs encourages close study as an effort to solidify them, and this process inevitably leads to a realization of the minimal technique utilized in their creation, a point the artist was certainly intent on making.

The pedagogical aims behind this series of works are undoubtedly the same as those of the glass panels of the artist's Bauhaus era, and the links between the works themselves are clear – it could even be argued that the constant movement within the *Graphic Tectonic* images is comparable to the activity that might be seen while looking

[100] Finkelstein 116-117. It is interesting to note that Anni Albers' weaving *Monte Alban* was created just a year after this initial visit to Mexico, and reflects the same sense of rising and falling pyramids that would surface in her husband's lithograph years later.

through a window, as if observing the works on paper revealed the viewer's world beyond. Yet ultimately, the prints, and arguably most of the work Albers would produce during the remainder of his career, were not the effective tools the glass pictures had been, despite the consistency of the mind behind them. In a 1965 series of lectures given at Hartford's Trinity College, now considered one of the most complete records of Albers's educational philosophies, the artist would make the point that "the example, the indirect and unobvious influence, is the strongest means of education, that the unintentional influence of the teacher's being and doing is more effective than many like to believe."[101] Although referring specifically to the educator's role within the classroom and community, Albers's statement can be applied just as accurately to his body of work. The glass pictures were uniquely suited to their creator's didactic purposes not only because they physically embodied his working ideals, but because they did so unobtrusively. Even the works from the last Bauhaus years, which began to exhibit some degree of frivolity and dealt with the spatial impossibilities that can be traced to later works, managed to fulfill this purpose because of the inherent characteristics of glass – as noted earlier, "Glass is noticeable yet not quite visible. It is the great membrane, full of mystery . . . ."[102] Their medium allowed the early works to fade into the architectural context out of which they were born, and it was this unconscious subtlety that made them effective. The *Graphic Tectonic* prints, however, hold no such mystery – even as multiples, the works stand out as distinct art objects, and by design they are obvious in demanding viewer participation. While the zinc lithograph process combined with a

[101] Josef Albers, Search Versus Re-Search (Hartford: Trinity College Press, 1969) 14.

[102] Korn 6. Previously quoted on pg 21 of this paper.

bolder and more insistent design agenda seemed an effective tool for the artist, it ultimately diminished his ability to educate and affect the viewer.

The same argument applies to the variety of paintings Albers executed before, after, and simultaneously with his prints. Works like *Gate* of 1936 (Fig. 46) and *Concealing* of 1940 (Fig. 47) clearly highlight the artist's growing interest in the application of color and its ability to suggest motion and transparency of seemingly opaque planes. *Bent Black (B),* 1940 (Fig. 48), and several closely related works, retain the strict black/white/gray palette of the graphic works but are still explorations in the manipulation of space through flat areas of pigment. Despite the variety of his forms and approaches, however, Albers's work from this period remains hampered by its medium, and sometimes by its overt didacticism: "His paintings have the feel of scientific demonstration, sharing with certain scientific procedures a systematic approach which eliminates all possible variables."[103] The convergence of this development in his work with his new position at Black Mountain College would seem to be linked: perhaps once he left the design-driven Bauhaus, an environment where he was consistently surrounded by experimentation in art and architecture, Albers lost the drive to make artworks that would function within total design schemes. As he would recall later in life, "Black Mountain was so off in the trees. . . . These were fairly free years. I painted and painted. It was in some ways a very monkish life."[104] The rural landscape of North Carolina was very different than that of Dessau or Berlin, and the lack of a constant reminder of urban realities and the design innovations created to meet them must have affected the artist. But as a progressive college, Black Mountain was far from isolated from contemporary

[103] Eric Gibson, "Josef Albers: in the engine room of modern art" The New Criterion 4.8 (April 1986): 35.

[104] Welliver 51.

artistic thought, and even architectural developments, especially in its later years. Albers himself provided a link with his exiled Bauhaus colleagues, and as early as 1936 Black Mountain was included in an Architectural Review article dedicated to the "Education of the Architect," despite its lack of an official architecture program.[105] In 1939, Walter Gropius and Marcel Breuer were commissioned to design new buildings on the Lake Eden property purchased by the college.[106] Whereas the school had been founded within a series of vaguely neo-classical wooden structures dominated by the white-colonnaded Robert E. Lee Hall, all rented from the Blue Ridge Assembly of the Protestant Church,[107] the Gropius/Breuer plan for the new Black Mountain campus (Fig. 49) was, not surprisingly, decidedly modern:

> The designs provided for a group of buildings connected by covered walkways . . . . The units . . . were to be placed at irregular angles and levels according to the levels and curve of the shoreline and to take fullest advantage of the sunlight. . . . The studies building, supported by columns, was to extend over the lake. The wall of the general meeting room facing the lake was to be of a single piece of curved glass, permitting a panoramic view of the lake and the mountain range; and the roof, which could be used as a sunroof, had a freestanding parabolic wall for protection against wind and to reflect the sun.[108]

The cutting-edge design proposal cannot have come as a surprise to the Black Mountain community, given that they had hired the founder of the Bauhaus, and this fact alone indicates the openness of the community to modern design tenets. Even after the

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[105] "Education of the Architect," The Architectural Record 80.3 (September 1936): 212. The fact that A. Lawrence Kocher, who would eventually join the faculty of Black Mountain, was the managing editor of The Architectural Record at the time this article was written probably accounts for the school's inclusion.

[106] "Gropius Finds a College Run by Teamwork," New York Herald Tribune 10 January 1940: 11, Duberman 153-155, Harris 56.

[107] Duberman 14.

[108] Harris 56.

Gropius/Breuer plans were abandoned for lack of funding,[109] modern architecture continued to play a role at the school. A. Lawrence Kocher joined the staff as Professor of Architecture in 1940, having already designed a simpler and less-expensive studies building that would be built on the Lake Eden property.[110] His Harrison House, designed with Albert Frey in 1931, had been featured in the 1932 Museum of Modern Art International Style exhibition, and its "skeleton of aluminum" and "walls thinner than are permitted by urban building laws" provide clear examples of Kocher's interest in the possibilities of modern materials.[111] This interest must have been shared with his students at Black Mountain who, under his direction, constructed the studies building (Fig. 50) in an attempt to save on labor costs.[112] The combination of hands-on building experience with exposure to modern design tenets, in addition to Albers's preliminary design courses, made the Black Mountain architectural curriculum a unique one, so much so that Gropius, as head of the architecture department at Harvard, encouraged his own students to participate.[113]

The influence of modern architects on the Black Mountain community would persist even after Kocher's departure in 1943. Paul Beidler, a former student of Frank Lloyd Wright, replaced him in 1945, and soon thereafter designed and supervised the

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[109] Harris 56, Duberman 155.
[110] Lawrence Wodehouse, "Kocher at Black Mountain," Journal of the Society of Architectural Historians 41.4 (December 1982): 329.

[111] Henry Russell Hitchcock and Philip Johnson, The International Style (1932; New York: W. W. Norton & Company, 1966) 162

[112] "Student-Built Campus Ready for Black Mountain College," New York Times 14 September 1941: 6D, Harris 60, Duberman 155-57.

[113] Harris 84.

construction of a music studio.[114] In 1947, despite the absence of any architectural staff, several students designed and erected "Minimum House" (Fig. 51), made of aluminum, stone, wood and glass and costing only $1000.[115] Despite its rural setting, Black Mountain seems to have been a natural environment for the exploration of modern architecture - as Beidler would note, "The atmosphere of courageous inquiry into a new and better educational environment both permits and invites new buildings to venture boldly into untried forms."[116] Albers's glass works, then, would not have been out of place, and would most likely have retained the subtle architectural connotations that linked them with the Bauhaus. The fact that circumstances prevented their continued production clearly affected the artist's subsequent development, and despite obvious efforts, he was ultimately unable to match their success through the design and media of his later works.

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[114] Harris 65, Paul Beidler, "Architecture at BMC," Design 47.8 (1946): 20 -21.
[115] "Minimum House, Black Mountain College, North Carolina: A Student Project," Arts & Architecture 66 (April 1949): 30-31, and Harris 137.

[116] Beidler 20.

Chapter Three: Full circle - the late works of Josef Albers

Despite its idyllic setting, Black Mountain College was rarely the peaceful center of learning that many visitors glimpsed from the outside. While it strove to be a new and different type of institution, it was still characterized by the internal power struggles frequently found in academia. In fact, college politics may have played a larger role at Black Mountain than at traditional schools because of its emphasis on community participation and consensus, and its lack of an external governing body. This was certainly the case for the duration of the Alberses' sixteen years there, and by 1949 they had had enough. The forced departure of Theodore Dreier, a founding member of the college then serving as acting Treasurer, by vote of a bare majority of the Black Mountain faculty but in concordance with a significant portion of the student body, triggered the resignations of Josef and Anni Albers, along with several other faculty members. The couple would officially leave the college after the spring semester of that year.[117]

Albers's departure did not hinge solely on this event – several other factors undoubtedly led to his willingness to cut ties with the institution that had been his home for longer than even the Bauhaus. He had grudgingly accepted the position of Rector of the college during the summer of 1948, and undoubtedly resented the time-consuming administrational and development duties that such a job necessarily entails.[118] Perhaps more indicative of his eventual departure, however, was Albers's unfulfilled ambitions for Black Mountain. In 1948, in a funding application to the Whitney Foundation, he spelled out his plans for a reorganization of the college:

[117] Harris 164-65, Duberman 326-328.

[118] Duberman 316-317, 330-331.

> Instead of offering a more or less complete curriculum of a liberal arts college program – which would need at least 30 teachers – we plan to concentrate on those fields which have developed most strongly here, are known best, and which draw most of our students, namely the arts and music. In order to still offer a curriculum for general education – we do not believe in a one-sided art-music school here – these fields will be supplemented by selected academic fields and practical work.[119]

Albers was not secretly planning a hostile takeover of Black Mountain – as rector he was specifically charged with the reorganization of the school, a move aimed at avoiding future political and financial crises. His proposal was partly in response to Black Mountain's limited resources, which made it chronically impossible to offer the range of course options customary at a standard liberal arts institution, and reflected what he perceived as the dominant interests of current students: namely the visual arts and music.[120] The fact that his Summer Art Institutes had generated such positive publicity for the college (a special issue of Design magazine exclusively detailed the 1945 summer)[121] only further supported his viewpoint. And yet Albers's personal vision for Black Mountain was clearly different than that of its original founders. Despite his stated desire to avoid a "one-sided art-music school," the obvious goal of his planned reorganization was to establish "a place where an artist could get a well-rounded education."[122] While Albers undoubtedly still believed in the importance of the arts to general education, he was now interested in training practitioners, people who would continue the cycle of learning started at Black Mountain through their own visual production, rather than through work in the social sciences, for example.

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[119] Duberman 322.

[120] Harris 164.

[121] Harris 142, and "Special Issue: Black Mountain College," Design 47.8 (1946).

[122] Beaumont Newhall, a prospective Black Mountain Trustee, as quoted in Duberman 326.

Other changes that Albers proposed included the addition of administrational staff to perform duties that had previously been handled by faculty members, and the election of a Board of Trustees, certainly the most controversial idea as investing a group outside of the faculty with any governing power was directly antithetical to the founding principles of Black Mountain.[123] Taken as a whole, Albers's reorganization plans speak to his desire to transform the college into a more traditional, arts-based institution, something much closer to the Bauhaus than to the free-spirited (and, to a certain extent, necessarily chaotic) center of experimental learning he had originally joined upon arrival in the United States. This was undoubtedly due in part to exhaustion after more than a decade of dealing with constant conflict and uncertainty,[124] but it may signify a change in Albers's thinking regarding his own life and work. Albers vehemently believed in the power of art to shape people and society, and it is logical that he would want to pass this belief and the techniques behind it on to artists who could continue his work visually. His acceptance of the position of chair of the Yale University Department of Design, part of the School of Fine Arts there, in 1950 further indicates his desire to return to a primarily art-focused program. This was not a contradiction of the underlying beliefs that led Albers to Black Mountain in the first place - his goal of forcing people to see accurately and sensitively remained the same, with only his means of propagating that message shifting from liberal arts students to those pursuing careers in the visual arts.

Established and historic Yale University could not have been more different from Black Mountain College. And yet despite this, Albers's pedagogic methods and goals remained essentially the same, extending the continuity that had characterized his move

[123] Duberman 323-324.

[124] Duberman 330.

from the Bauhaus to North Carolina into a new phase of his career. Statements regarding the mission of the newly established Department of Design, transformed from the more traditional Departments of Painting and Sculpture, echo those made by the artist throughout his life, regardless of the time or place: "The foundation of all art courses is based on a practical exploration of basic design problems underlying and connecting all art production. The dominant aim of the professional specialization which follows is, beyond the acquisition of technique and skill, the development of vision and judgment, of discipline and self-criticism."[125] Albers's revamping of the curriculum included the addition of courses in "Basic Design, Elementary Drawing, and Color,"[126] in keeping with his insistence that all students explore a variety of media and learn to "see" before limiting themselves to a specific field of interest. His goals, and the idealism behind them, had not changed since his time as a student at the Bauhaus: "Since our aim is to encourage invention and discovery on the individual's part, the development of technical skills must be subordinated to the development of a flexible imagination. Like other liberal disciplines, art is also concerned with the development of the whole man."[127]

Despite this continuity, however, the shift in Albers's situation coincided yet again with a change in his own work. Interestingly, just as his preference for a learning environment aimed at the training of artists reflected a return to Bauhaus ideals, so too would this new work, which has much in common with the sandblasted glass pictures created in Germany. In general, the work would re-introduce the artist's dialogue with

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[125] Yale Collects Yale, eds. Sasha M. Newman and Lesley K. Baier (New Haven: Yale University Art Gallery, 1993) 18

[126] Yale Collects Yale 19.

[127] Yale Collects Yale 20.

architecture, and hence the subtlety of communication missing from the paintings and works on paper created while at Black Mountain. This is not to suggest that Albers abandoned his explorations in paint – while at Yale he would begin his *Homage to the Square* series of color explorations (Fig. 52),[128] which he would obsessively pursue until his death in 1976 and for which he is best known today. By juxtaposing three or four seemingly stacked squares of color (in fact, bands of pigment directly from the tube applied around each other) Albers played with the relative effects each exerted on the other, with warm colors appearing colder because of the tones surrounding them, or two squares of the same color appearing different because of the tone separating them. The *Homages* are very much in keeping with Albers's pedagogy and its forced recognition of influence and constant change, but although subtler than works such as the *Graphic Tectonics*, they are still essentially too didactic to affect subtly the viewer in the manner of the glass works, despite their window-like shape.[129]

Better suited for this purpose are the *Structural Constellations* (Figs. 53 and 54), begun the year that Albers left Black Mountain. Not only does their name indicate a return to architectural interests explored through the *Graphic Tectonics*, but they too are ambiguous linear compositions that move before the viewer's eyes. What distinguishes these works is not their design, but rather their medium – they are engraved on sheets of

[128] Weber, Josef Albers: A Retrospective 290. Albers would also continue to work on another series of paintings which he had begun at Black Mountain, the *Variants*, which are related to the *Homage* works in their revelation of color effects, and have been viewed by some as their precursor. See Weber, Josef Albers: A Retrospective 36-39.

[129] The recurrence of the window theme in Albers's work has been noted by several scholars – see Finkelstein 2 and Benezra 80, among others. What has been neglected is the impetus for this interest, which I have argued is the pedagogical implications of a window, a device through which people perceive the outside world.

Vinylite plastic.[130] Albers had first explored this technique as early as 1948, and would execute over thirty *Constellations* in plastic by 1952.[131] The engraving process was remarkably similar to that of sandblasting glass: under Albers's instructions, industrial fabricators incised his design into the black top layer of the plastic sheets, revealing the white surface below. Occasionally, shades of gray were added through sandblasting.[132] The artist's move back to an industrial material with obvious architectural links clearly indicates a desire to redirect his work towards its point of origin in the Bauhaus glass pictures. The engraved *Constellations* have the potential to become invisible teaching guides, melding seamlessly into unsuspecting viewers' surroundings and yet confronting them with forms in constant flux, much like the world around them. They are arguably better equipped to "open eyes" than the majority of Albers's paintings and works on paper, and the artist's return to architecturally applicable materials after an extended period of time may indicate his recognition of this fact.[133]

Plastic was the object of many of the same Utopian dreams that had been applied to glass during Albers's time in Germany. Durable, lightweight and easily cleaned, it was thought to have endless applications. In 1933, the Union Carbide Company presented the

[130] The specific medium is Vinylite mounted on board – see Josef Albers: A Retrospective cats. 171-176.

[131] Elaine de Kooning, "Albers Paints a Picture," ArtNews 49.7 (1950): 43. Also quoted in Finkelstein 211-214. Albers would also execute various *Constellations* as works on paper, and as large scale sculptures, which will be discussed later.

[132] Finkelstein 211-212.

[133] The concurrence of Albers's departure from Black Mountain for New Haven and the creation of the engraved plastic works may indicate that factors of circumstance played a role in this development in his career. New Haven, Connecticut, is closer to several major urban areas than Black Mountain, and the artist may have had a renewed opportunity to explore such interests after moving. However, the first plastic work, *Structural Indication*, was executed in 1948, before Albers's departure from North Carolina, perhaps indicating that the resources for such a work were available to him even then.

three-room Vinylite House at the Century of Progress Exposition in Chicago,[134] showcasing the myriad possibilities of the material which Albers would use for his etchings a decade and a half later:

> Living room, kitchen, and bath were enclosed within modular walls made of two layers of aluminum coated with Vinylite lacquer surrounding an inner insulating layer of Vinylite. Interior doors were of Vinylite panels on pressed board. Vinylite floor tiles . . . proved so durable that they were taken up when the exposition closed and installed at Union Carbide headquarters, where they remained more than twenty-five years.[135]

By the time Albers turned to it in the late 1940s, the dreams of a perfect plastic world had faded, but the material was widely used in American homes and often went unnoticed by the inhabitants. This was, in part, because of the trend of making plastic look like more traditional materials,[136] something Albers and his Bauhaus colleagues would undoubtedly have despised. Regardless, however, the pervasiveness of plastic within the American interior made it an obvious messenger of Albers's subtle pedagogy.[137] It is easy to imagine the engraved *Sculptural Constellations* serving as wall or floor tiles, or even as counter or desk tops, constantly challenging viewers by means of visual puzzles with underlying societal applications, but within an everyday, even mundane, environment.

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[134] Jeffrey L. Meikle, American Plastic: A Cultural History (New Brunswick: Rutgers University Press, 1995) 84.

[135] Meikle 85.

[136] Meikle 167-173.

[137] Albers was at least exposed to the "miracle" of plastic through a variety of popular cultural sources, including magazines such as *Life* and *House Beautiful*, if nowhere else (see Meikle 167-174.) Also of note is Albers' interaction with Buckminster Fuller, who he had invited to join the guest faculty of the 1948 Summer Arts Institute at Black Mountain. Fuller would attempt to erect his first geodesic dome that summer, and although it employed aluminum rather than plastic, Fuller had already attempted a construction out of polyester fiberglass by that time, and would explore the possibilities of plastic in the years to come. The coinciding of his time at Black Mountain with Albers' first Vinylite engraving may indicate a dialogue between the two men. See Duberman 297-298, Harris 151-154, Stephen Fenichell, Plastic: The Making of a Synthetic Century (New York: HarperCollins, 1996) 243-247.

Albers's interest in modern materials clearly lasted throughout his lengthy career, but did not limit his means of exploration. His first truly architectural project in twenty-two years (he had last designed three windows for the Ullstein Publishing House in 1928) was executed simply in brick and mortar. Asked by Walter Gropius to provide a work for the back wall of an independent brick fireplace placed in the Harkness Commons building, part of the newly constructed Graduate Center at Harvard designed by Gropius's The Architects' Collaborative, Albers responded with *America* (Fig. 55), a brick mural of sorts.[138] By creating an image from carefully arranged voids left intentionally in the masonry of the wall, Albers preserved the architectural integrity of his surface, creating a work that is very much a part of its architectural setting. This was an emphatic aim of the artist in designing *America*:

> I believe that any design organically connected with an architectural structure should be related to that structure no matter whether the design is to emphasize or complete, to change or correct, the appearance or function of the building or space concerned. . . . I decided to make a real mural in which the murus (Latin for wall) was respected and preserved to the last degree possible.[139]

Albers's insistence on maintaining the visual honesty of his working surface is a clear reflection of his Bauhaus training and its lasting impression on him, but also speaks of his need to insert his art, and its inseparable message, into easily accessible spaces where it would be encountered, consciously and unconsciously, by people during their daily routine. In *America*, Albers had finally fulfilled the possibilities of his early glass works by linking his art directly with architecture in a permanent yet subtle manner. By relying entirely on the existing characteristics of the brick wall with which he was required to work, Albers's "mural" became an obvious yet understated part of the Harkness

[138] Benezra 23-25.

[139] Josef Albers, Untitled statement on *America*, reprinted in Benezra, 216.

Commons, unlike a print or painting hung on the wall, and hence gained an advantage in communicating with the passing viewer.

With *America* having revealed the possibilities of prominent, architecturally based artwork, Albers would continue to pursue similar opportunities, executing nineteen other projects before his death in 1976.[140] In 1955, his*White Cross Window* (Fig. 56) was installed in a chapel at the St. John's Benedictine Community in Minnesota, designed by Marcel Breuer.[141] Consisting of thirty-one panels of Corning photo-sensitive glass set into an existing wooden framework, the window is made up entirely of varying shades of gray. Albers's choice of photo-sensitive glass, which had been chemically treated and therefore reacted to light, allowed the artist to juxtapose areas of different tonality without the expected lead lines of traditional stained glass windows.[142] In general, its simple design, exploitation of a single material to its fullest effect, and, of course, the fact that it is made of glass, links *White Cross Window* with Albers's Bauhaus "wall glass paintings." This is true with a majority of the artist's architectural commissions – *America*, with its relief-like design and vertically stacked bands of horizontal planes, recalls the single pane glass constructions, and *Manhattan* (Fig. 57), Albers's 1963 mural for the Pan Am building in New York City, was based directly on the 1928 work *City*.[143]

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[140] Benezra 1. *Stanford Wall* was begun by Albers as early as 1971, but was not completed until 1980, after the artist's death. Such is also the case with *Wrestling*, developed in 1973 but not installed until July 1976 (Benezra 154).

[141] Benezra 39.

[142] Benezra 40-41.

[143] Benezra 85-89. The mural remained in its original spot within the PanAm building (now the MetLife building) until 2001, when it was removed during building renovations. There was discussion in 2003 regarding the possibility of reinstalling the mural on the façade of a building owned by the New School University in New York, but those plans seem to have stalled. See Derek Thompson, "Transportation Icon Must Move On," ArtNews 100.8 (2001): 52, and Carol Vogel, "An Albers Mural May Reappear," New York Times 21 February 1003: E40.

The artist's ongoing *Homage to the Square* series would also affect his large scale, architectural work. His 1961 mural for the Time and Life Building in New York City, *Two Portals* (Fig. 58), recalls the signature squares, recreated in bronze and nickel and surrounded by bands of tan and white carrara glass.[144] As its title suggests, the image was meant to endow the wall on which it appeared with a sense of space extending beyond the confines of the building, both through the specific juxtaposition of color and the divisions at the corners of each square.[145] As I have repeatedly emphasized, the ultimate goal of these techniques was not simply to fool viewers or impress them with optic antics, but rather to force them to recognize the myriad forms of what would appear to be stable and constant, with the hopes that they would extend this new found knowledge to their own lives and relationships.[146] What better way to make this point than by transforming the massive wall of a skyscraper into a series of receding planes?

The *Structural Constellations*, identified earlier as a signal of Albers's return to Bauhaus architectural and social ideals, would prove to be perfectly adaptable for his grander building schemes. The artist would select two of them to be engraved in gold leaf into the marble lobby wall of the Corning Glass building, New York, in 1959-60 (Fig. 59). It is fitting that Albers was chosen for such a commission, for as one scholar has stated, "Corning Glass is a showcase for the architectural potential of glass. The shimmering, twenty-eight story façade, consisting of slim mullions and transparent green glass, has long been recognized as one of New York's most accomplished designs in

[144] Benezra 76-77.

[145] Benezra 79-81.

[146] Benezra makes a similar point regarding this particular work, referring to the mural as "a structural framework for guiding the actions of man." See Benezra 80–83.

glass."[147] Albers's clean, simple compositions of floating planes fit perfectly into this International Style icon, becoming architectural features unto themselves. And yet even when not carved directly into existing surfaces, the *Structural Constellations* were the perfect tool for shaping notions of space. In 1963, the artist executed *Repeat and Reverse* (Fig. 60), a stainless steel, sculptural recreation of a *Constellation* mounted above the entrance of the Art and Architecture Building at Yale.[148] He would create two more for installation on the exterior wall of the Landesmuseum fur Kunst und Kulturgeschichte in Munster, Germany (*Two Supraportas*, 1972, Fig. 61), two for the interior of the Grand Avenue National Bank in Kansas City (*Gemini*, 1972, Fig. 62), and a single *Constellation* measuring sixty feet high for the east face of a seventy-story office building, part of the MLC Center in Sydney Australia (*Wrestling*, 1976, Fig. 63).[149]

These linear sculptures follow the lines of Albers's graphic creations in carefully fabricated metal bars, retaining the geometric precision of the original compositions but expanding their effect through increased scale and the choice of a reflective material. Albers seemed to consider these among his most effective architectural works: "For me, it is a document of a new union of architecture and sculpture: the new two-dimensional sculpture which is more sculptural than anything three-dimensional, and especially than anything figurative. . . . In all, I am happy that finally my *Constellations* have been executed in the appropriate scale . . ."[150] The artist clearly thought of these works as sculpture rather than as architectural elements, and yet they manage to serve the same

[147] Benezra 70.

[148] Benezra 121-127.

[149] See Benezra 127-137, 144-149, and 154-162.

[150] Josef Albers, as quoted in Benezra 133.

purpose as the works built directly into their surroundings. The *Constellation* sculptures were, in all cases, mounted directly on building surfaces, both exterior and interior. A viewer looks through the linear design, with the wall behind it serving as the surface of the various planes suggested. Albers managed to dematerialize monumental architectural forms by superimposing his sculptures of shifting, ambiguous, and often impossible forms on them. As in the early Bauhaus glass works, he was creating windows, this time suggesting views into the structures, replacing the contents to be viewed inside with his own abstract narratives about movement, change, and the relationship of elements, both artistic and social.

Albers's last architectural work, the *Stanford Wall* completed in 1980 after his death, confirmed the artist's intentions with all previous projects. In designing his own, free-standing wall as a display for his works, he had assumed the role of both architect and artist. One side of the fifty-four-foot long independent structure reveals its brick construction (Fig. 64), with precisely placed steel rods forming a design similar to that of the *America* Mural – in fact, at certain times of day, shadows cast by the rods on the wall create the appearance of voids in the construction, reminiscent of the technique employed at Harvard.[151] Sheets of black granite cover the opposite side of the wall (Fig. 65), which serves as the backdrop for four stainless steel *Constellations*.[152] In the *Stanford Wall*, Albers had reached the culmination of not only his architectural projects, but of the current that had run through his work since his early days at the Bauhaus. He had not only created his own structure, however minimal, but had applied his designs to that structure in such a manner that they seamlessly melded into it, still drastically changing

[151] Benezra 163, 175.

[152] Benezra 163-164.

how it appears to viewers. This mix of contextual subtlety and visual insistence is what ultimately makes Albers's works effective pedagogical tools, and it is the single pane glass works and the architectural projects, bookends to an extensive career, that are the most successful in communicating with the viewer.

Conclusion

Josef Albers died in 1976 at the age of eighty-eight. By any account, he had lived a remarkable life – he began his career at one of the most influential European artistic centers of the twentieth century, moved to rural America where he was crucial to the development of an experimental college into what is now recognized as a thriving and influential art community, and eventually ended up in the Design Department of an Ivy-League university that, even half a century later, has a respected reputation. It is an accomplishment in itself that he was able to produce any of his own work, given the enormous responsibilities he took on at each of these institutions. And yet Albers would create art throughout his entire life, exploring a vast array of forms and media. Despite the line I have attempted to draw between his earliest "professional" works and those made in his last years, it is important to recognize that Albers never limited himself to a single format or idea. He was constantly experimenting with both traditional and contemporary media, and created a vast body of diverse work, some of which has been treated superficially here or not mentioned at all. And yet even at times when his production seems a visual departure from his more common approach, it was motivated by the same pedagogical imperatives that the artist developed at the Bauhaus, and shared with generations of students, both in the United States and internationally. Albers's ultimate goal was to promote positive growth in people by forcing them to see things clearly and with an open mind, by encouraging them to learn through experimentation and try new things, and by proving to them the countless possibilities of elements in front of them. His genuine belief in the ability of his art to communicate these ideas to sensitive viewers informed all of his work, but it was not all equally successful. In

working with architectural materials and, in some cases, actual buildings, Albers was able to insert his message subtly and effectively into contexts where it would be repeatedly accessed, both consciously and subliminally. It is the early glass works from the Bauhaus period, which can be viewed as opaque windows, and the engraved plastics and architectural commissions from his later career, which challenge the spatial realities of implied or actual structures, that serve as the artist's most effective educational tools, despite the renown of his prints and paintings exploring both line and color. This is not an indictment of Albers – even the works that are less suited to this purpose reveal the artist's goals. Albers's steadfast conviction regarding the power of his art, and the inventive and intuitive manner in which he pursued it, are perhaps his greatest accomplishments.

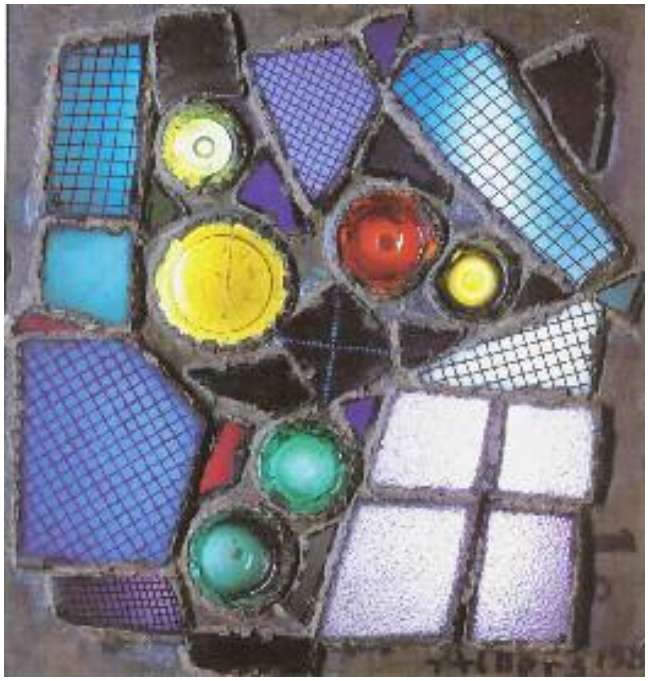

Fig. 1 Josef Albers. *Rhenish Legend*, 1921.
Glass assemblage mounted on copper sheet.
19 ½ x 17 ½ inches. The Metropolitan Museum of Art.

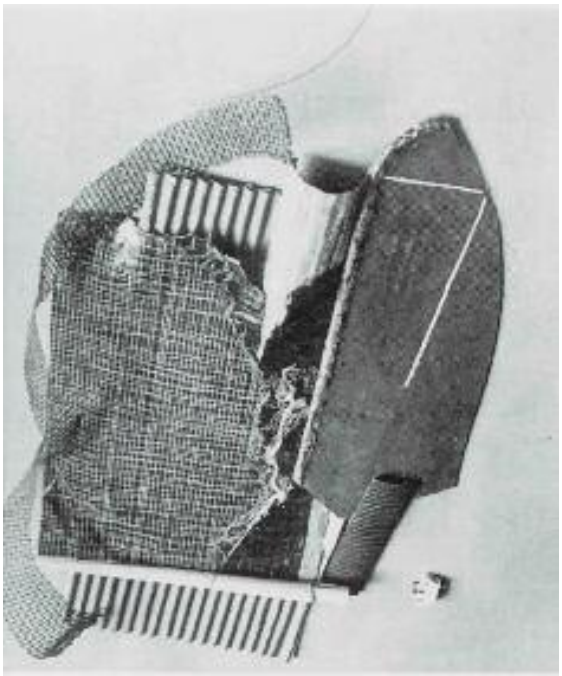

Fig. 2 Matière exercises with paper, tracing paper, glass, wire, machine wire, sandpaper, gauze, circa 1928.
Reproduced in Rainer K. Wick, Teaching at the Bauhaus.

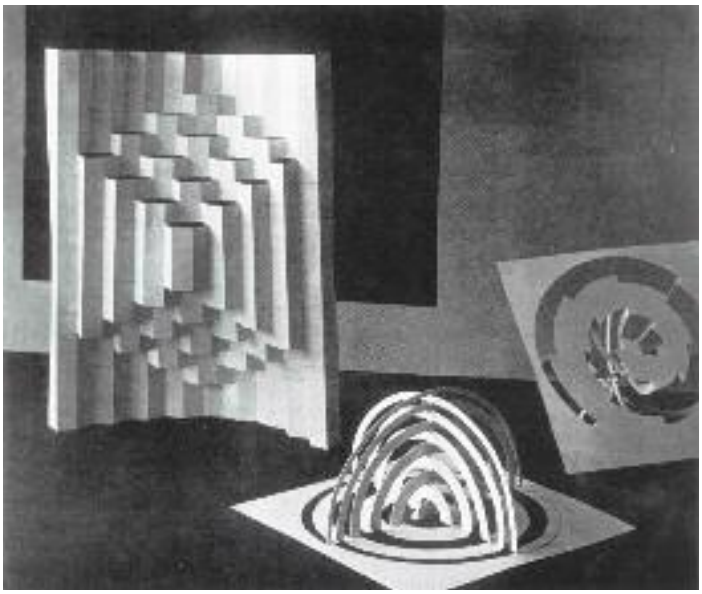

Fig. 3 Walter Tralau and Arieh Sharon.
Material exercises in paper.
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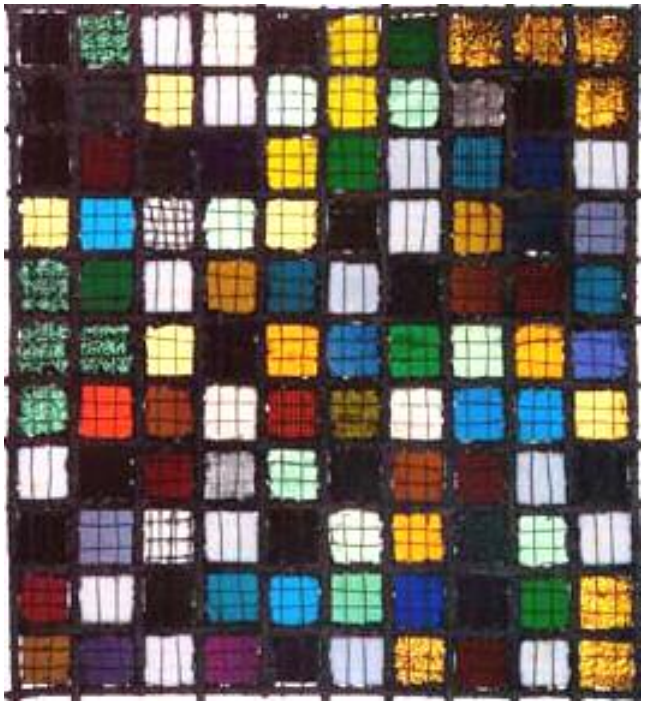

Fig. 4 Josef Albers. *Grid Mounted*, 1921.
Glass pieces interlaced with copper wire,
in a sheet of fence latticework.
12 ¾ x 11 3/8 inches. The Josef Albers Foundation.

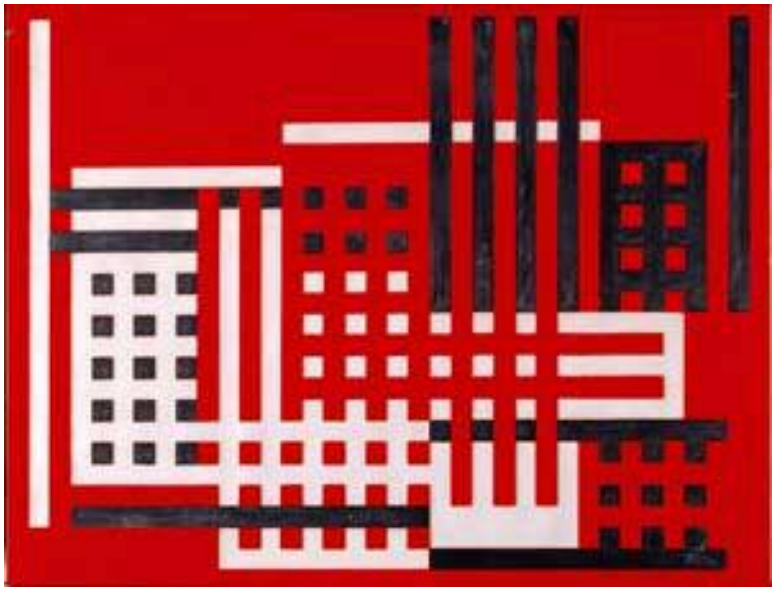

Fig. 5 Josef Albers. *Factory*, 1925.
Sandblasted opaque flashed glass with black paint.
11 9/16 x 14 3/16 inches. The Josef Albers Foundation.

Fig. 6 Johan Thorn Prikker.
Detail, series of three stained glass windows.
Gesellenhaus Neuß, 1912.

Fig. 7 Josef Albers. *Rosa mystica ora pro nobis*, 1917-18.
St. Michael's Church, Bottrop. Destroyed.

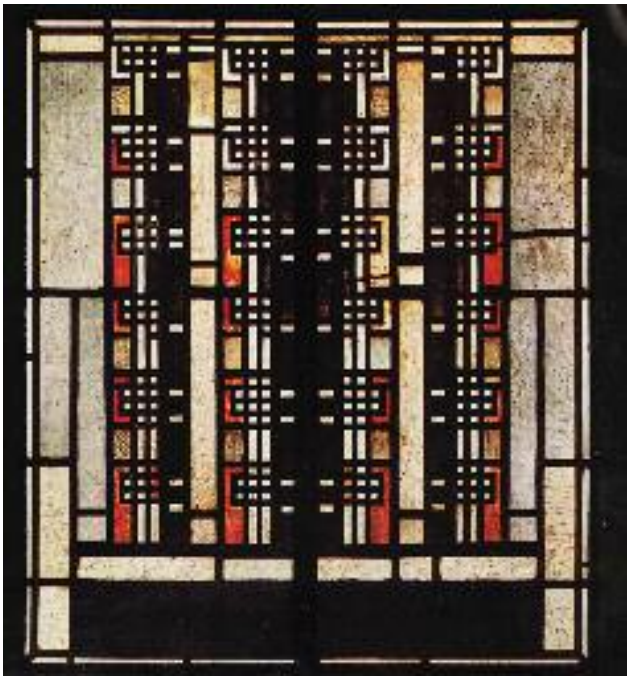

Fig. 8 Johan Thorn Prikker. *Rasterstreifen Orange*, 1924/25. Reproduced in Paul Wember, Johan Thorn Prikker: Glasfenster, Wandbilder, Ornamente 1891-1932.

Fig. 9 Wassily Kandinsky. *Sancta Francisca*, 1911.
Painting on glass. 6 ¼ x 4 5/8 inches.
The Solomon R. Guggenheim Museum.

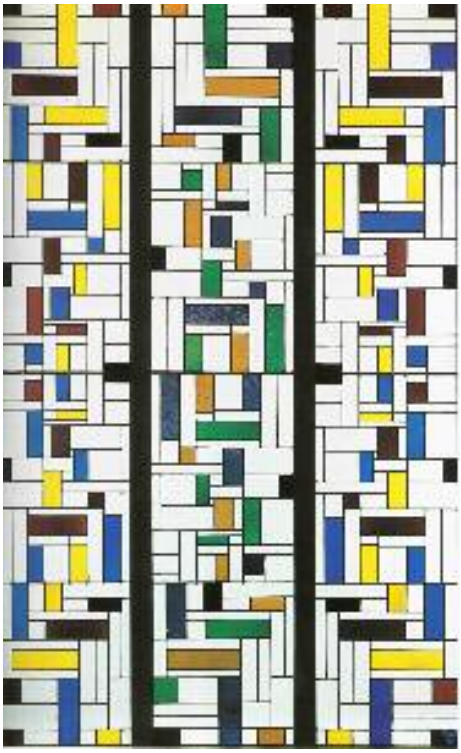

Fig. 10 Theo van Doesburg.
Stained-Glass Composition IV (Triptych), 1917.
Netherlands Office for Fine Arts, The Hague.

Fig. 11 Josef Albers. *Figure*, 1921.
Glass assemblage mounted on brass sheet.
21 ½ x 15 ½ inches. The Metropolitan Museum of Art.

Fig. 12 Josef Albers's glass workshop at the Bauhaus, 1923.
Reproduced in Bauhaus: 1919-1928,
edited by Herbert Bayer, Walter and Ise Gropius.

Fig. 13 Josef Albers. *Untitled*, 1921.
Glass, wire, and metal, set in metal frame.
14 ¾ x 11 ¾ inches. The Josef Albers Foundation.

Fig. 14 Josef Albers. *Window Picture*, 1921.
Glass, wire, painted metal, nails, mesh, imitation pearls,
and brush and ink, on painted wood box. 23 x 21 ¾ inches.
Hirshhorn Museum and Sculpture Garden.

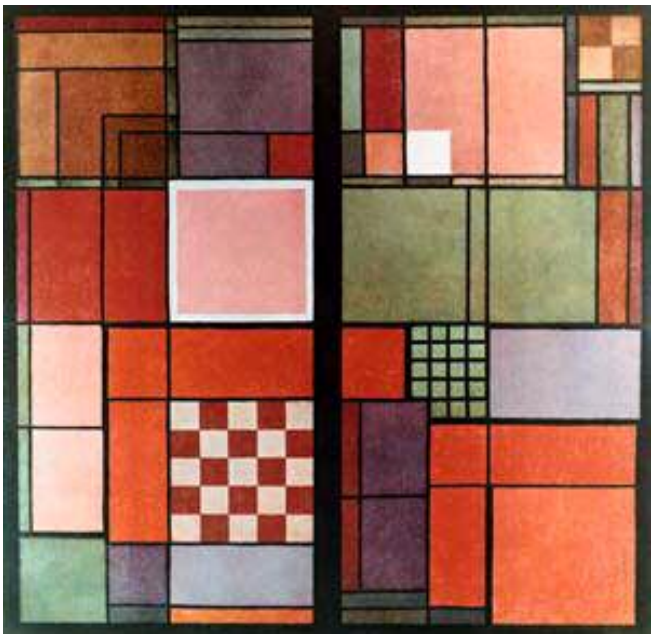

Fig. 15 Josef Albers. *Red and White Window*. Bauhaus,Weimar, 1923. Destroyed.

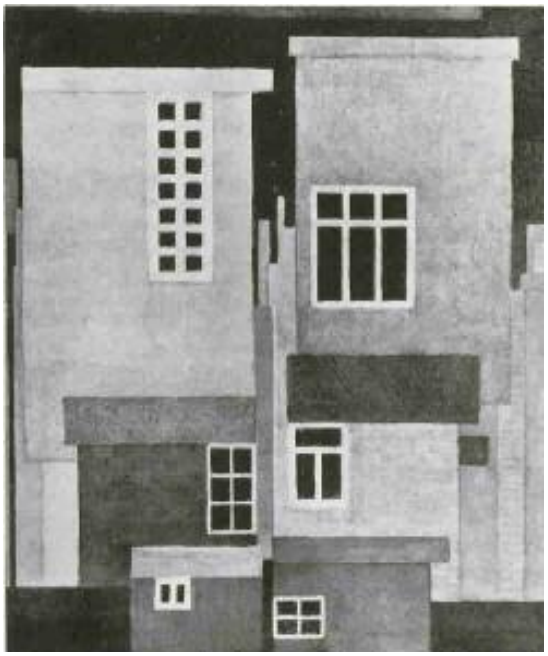

Fig. 16 Josef Albers. *Black and White Drawing,* 1923. Destroyed. Reproduced in George Heard Hamilton, Josef Albers: Paintings, Prints, Projects.

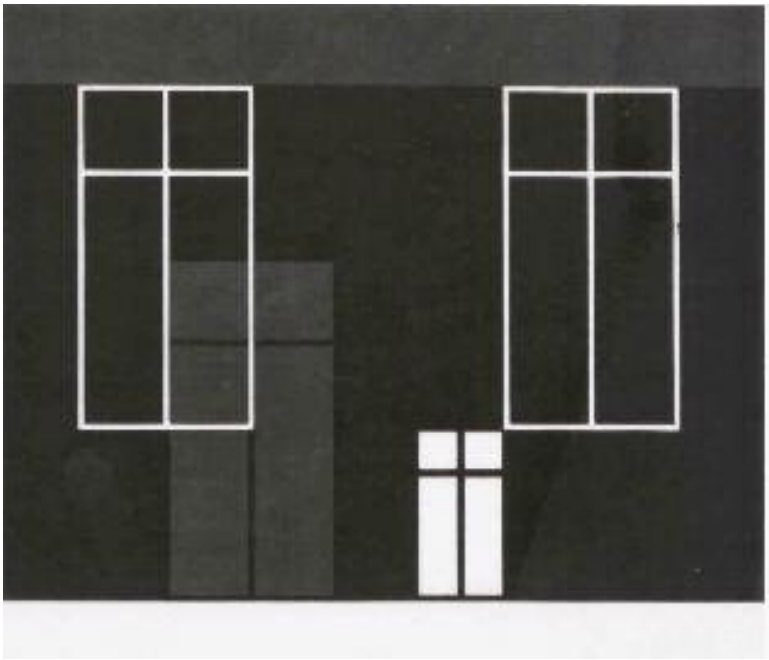

Fig. 17 Jose Albers. *Windows*, 1929.
Sandblasted opaque flashed glass.
13 ¼ x 14 ¾ inches. Private Collection.

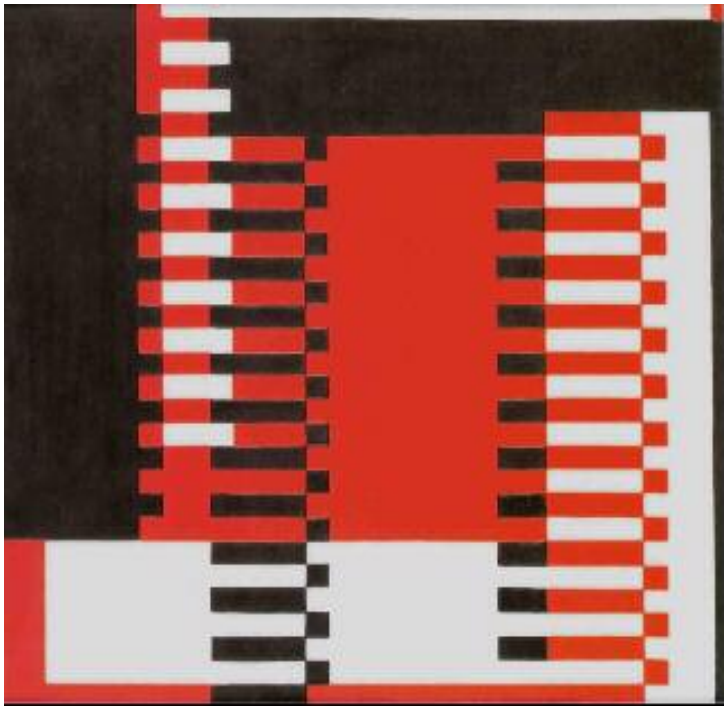

Fig. 18 Josef Albers. *Pillars*, 1928.
Sandblasted opaque flashed glass with black paint.
11 ¾ x 12 ¼ inches. The Metropolitan Museum of Art.

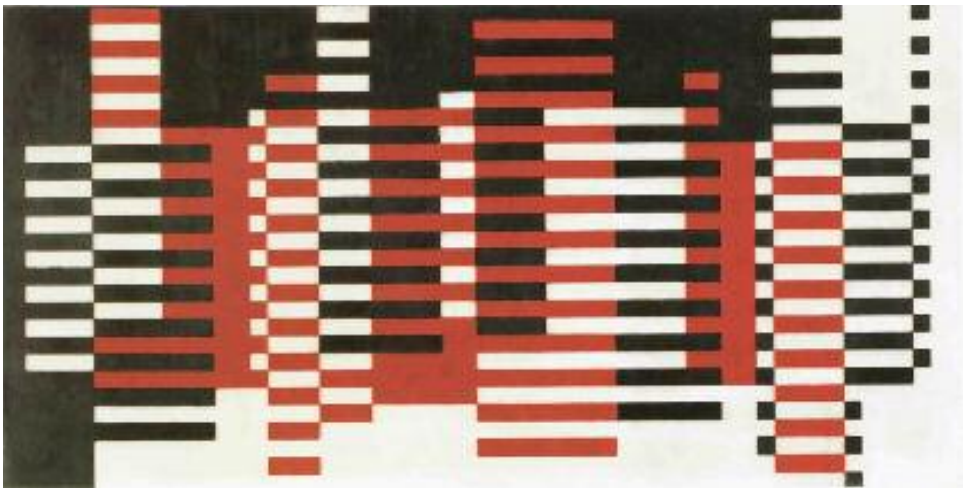

Fig. 19 Josef Albers. *City*, 1928.
Sandblasted opaque flashed glass with black paint.
11 x 21 5/8 inches. Kunsthaus Zurich.

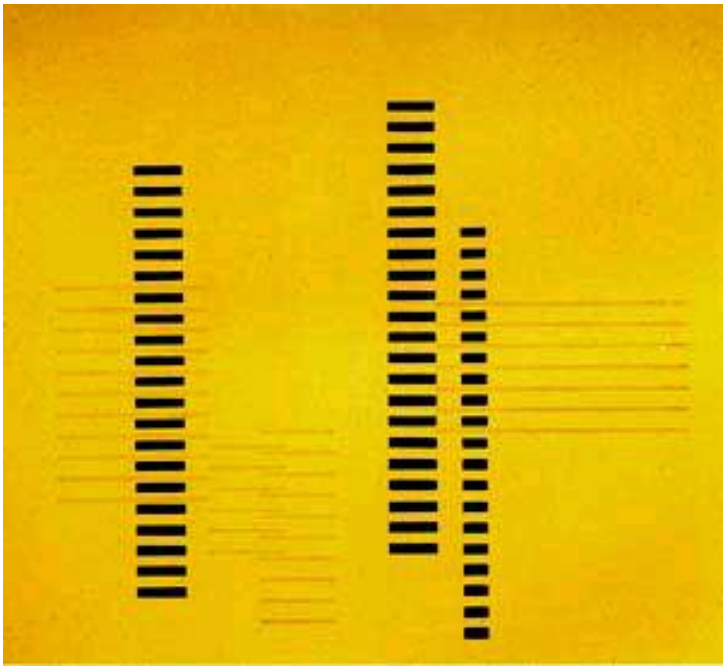

Fig. 20 Josef Albers. *Skyscrapers on Transparent Yellow*, ca. 1929.
Sandblasted flashed glass with black paint.
13 7/8 x 13 ¾ inches. The Josef Albers Foundation.

Fig. 21 Josef Albers in his Bauhaus studio, Dessau, 1928.
Reproduced in Josef Albers: A Retrospective.

Fig. 22 Bruno Taut, The Glass Pavilion.
Werkbund Exhibition, Cologne, 1914.
Reproduced in Paul Scheerbart, Glass Architecture,
trans. James Palmes, 1972.

Fig. 23 Wassili and Hans Luckhardt and Alfons Anker. Office Building, Berlin, 1925.
Reproduced in Arthur Korn, Glass in Modern Architecture of the Bauhaus Period.

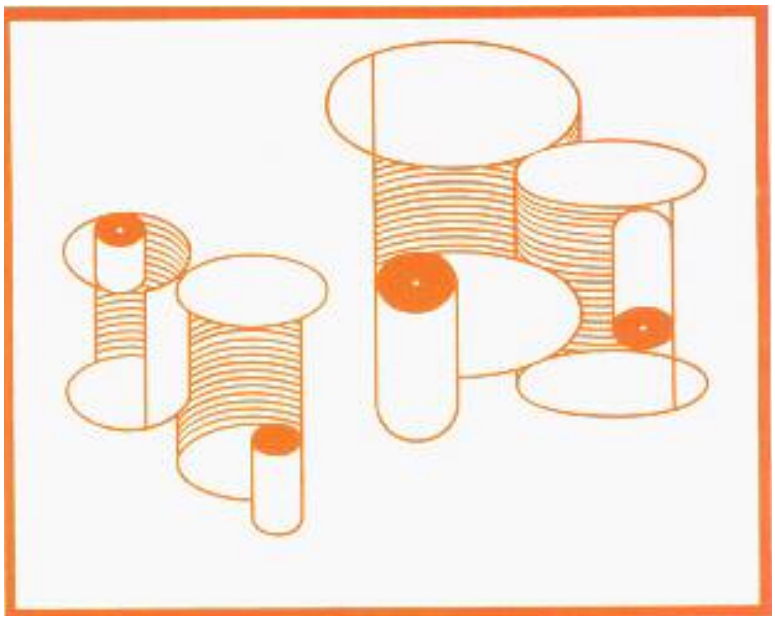

Fig. 24 Josef Albers. *Cables*, 1931.
Sandblasted opaque flashed glass.
15 ¾ x 19 11/16 inches. The Josef Albers Foundation.

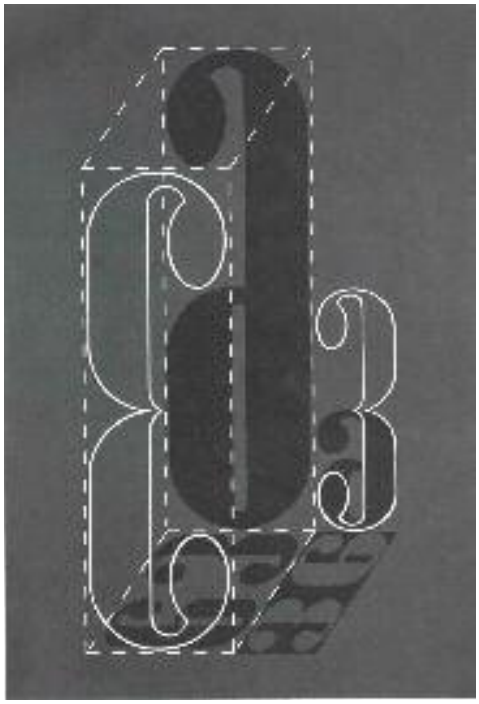

Fig. 25 Josef Albers. *Six and Three*, 1931.
Sandblasted opaque flashed glass.
22 1/16 x 14 inches. The Josef Albers Foundation.

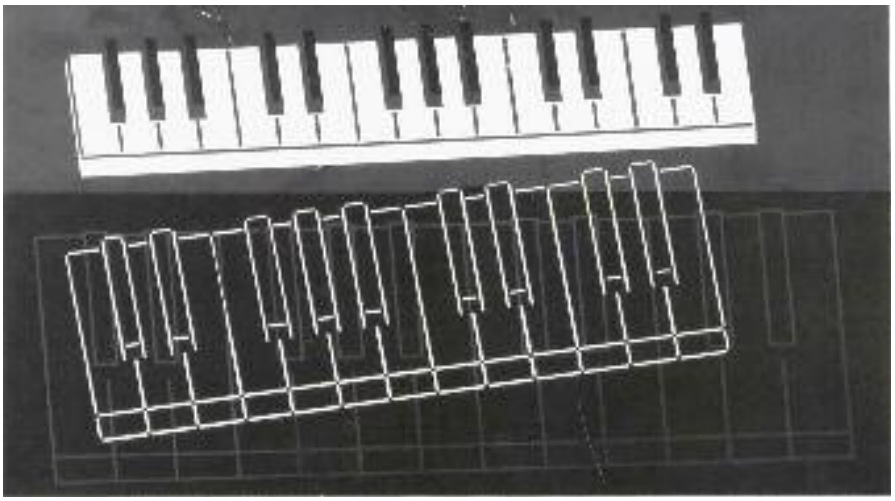

Fig. 26 Josef Albers. *Keyboard*, 1932.
Sandblasted opaque flashed glass.
14 11/16 x 25 9/16 inches. The Josef Albers Foundation.

Fig. 27 Josef Albers's drawing class at Black Mountain College. Reproduced in Mary Emma Harris, The Arts at Black Mountain

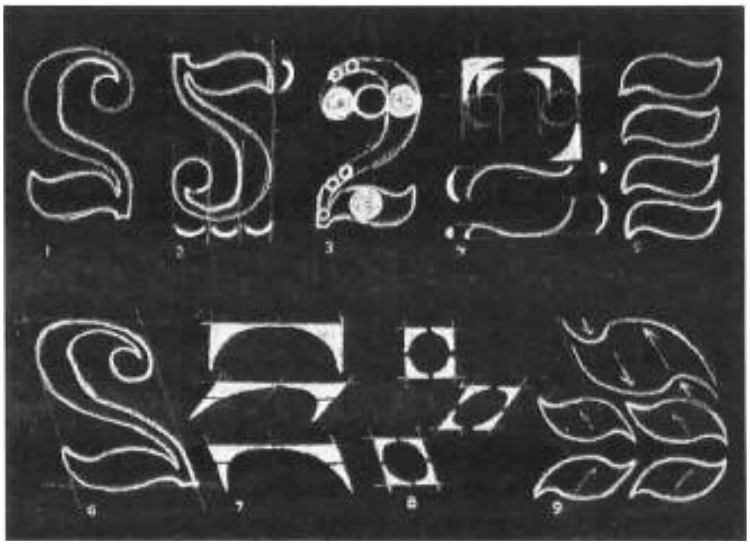

Fig. 28 Black Mountain exercise in foreshortening using numbers. Reproduced in Mary Emma Harris, The Arts at Black Mountain

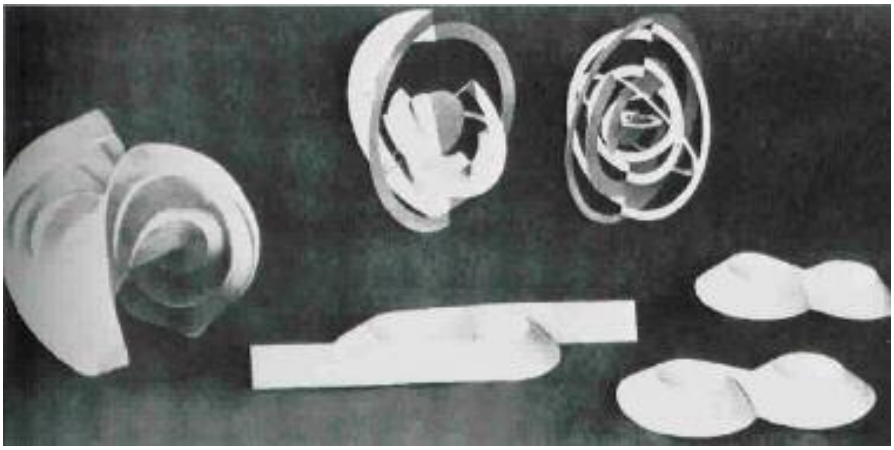

Fig. 29 Black Mountain paper studies, c. 1937-38.
Reproduced in Mary Emma Harris, The Arts at Black Mountain College.

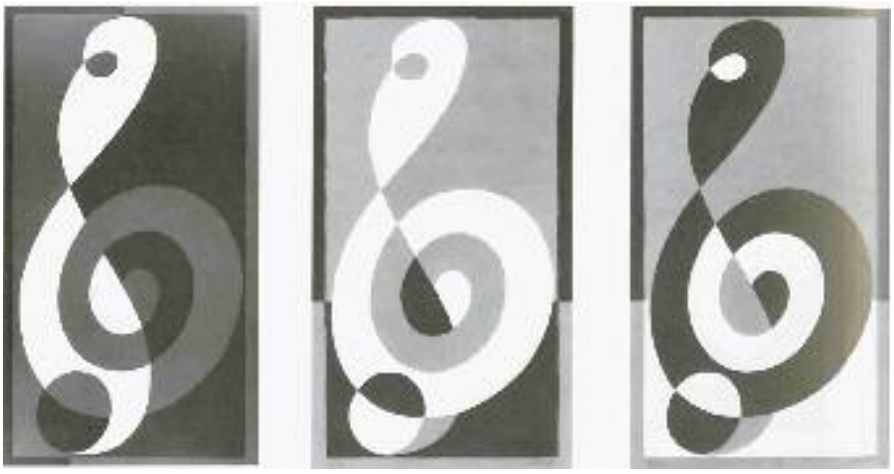

Fig. 30 Josef Albers.*Treble Clef Ga, Gd, Ge*, 1932-35. Gouache on paper. Each 14 ¼ x 8 inches. Collection Martina and Michael Yamin.

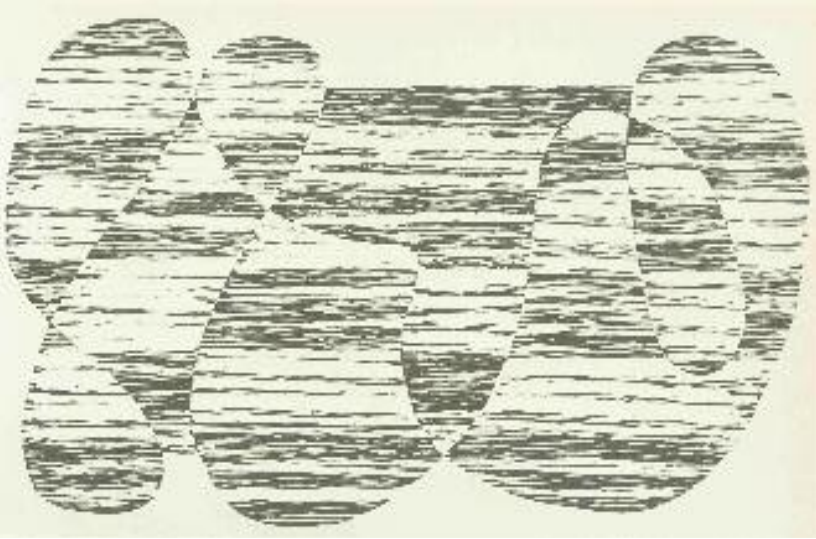

Fig. 31 Josef Albers. Sea, 1933. Linoleum/woodcut on paper.
14 x 17 5/8 inches. The Josef Albers Foundation.

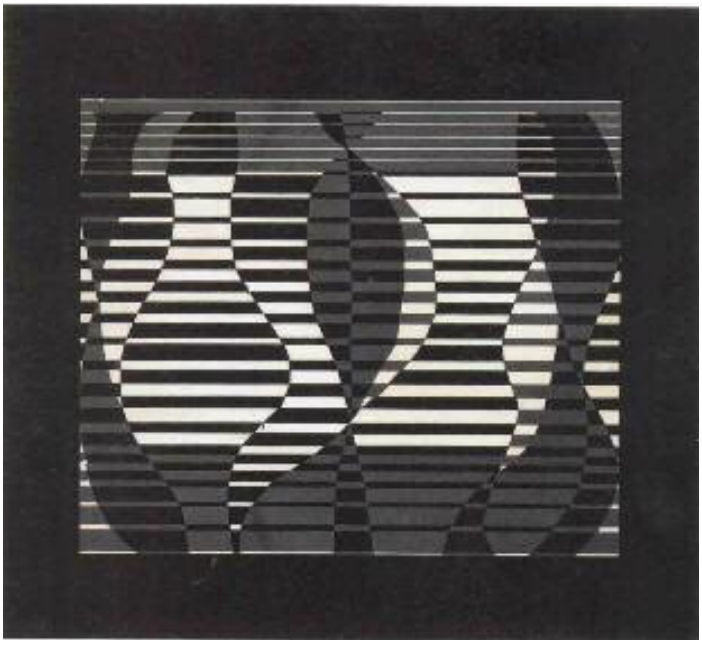

Fig. 32 Josef Albers. *Im Wasser*, 1931.
Sandblasted opaque flashed glass.
17 ¾ x 19 7/16 inches. Josef Albers Museum, Bottrop.

Fig. 33 Josef Albers. *Etude: Hot-Dry*, 1935. Oil on Masonite. 12 ¾ x 15 ¾ inches. The Josef Albers Foundation.

Fig. 34 Josef Albers. *Etude: Red-Violet (Christmas Shopping)*, 1935. Oil on panel. 15 3/8 x 14 inches. The Josef Albers Foundation.

Fig. 35 Josef Albers. *Almost Four (color étude)*, 1936.
Oil on Masonite.
13 ¾ x 15 ¼ inches. The Josef Albers Foundation.

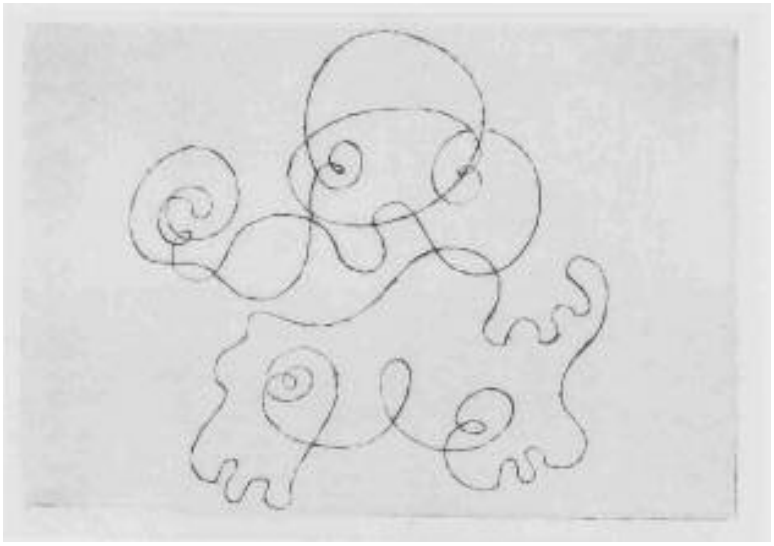

Fig. 36 Josef Albers. *Eh-De*, 1940. Drypoint on paper.
8 7/8 x 10 7/8 inches. The Josef Albers Foundation.

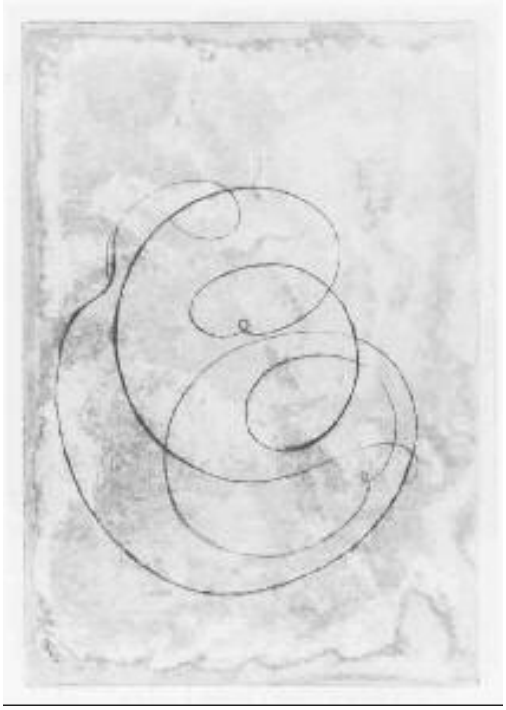

Fig. 37 Josef Albers. *Maternity*, 1942. Drypoint on paper.
12 15/16 x 9 15/16 inches. The Josef Albers Foundation.

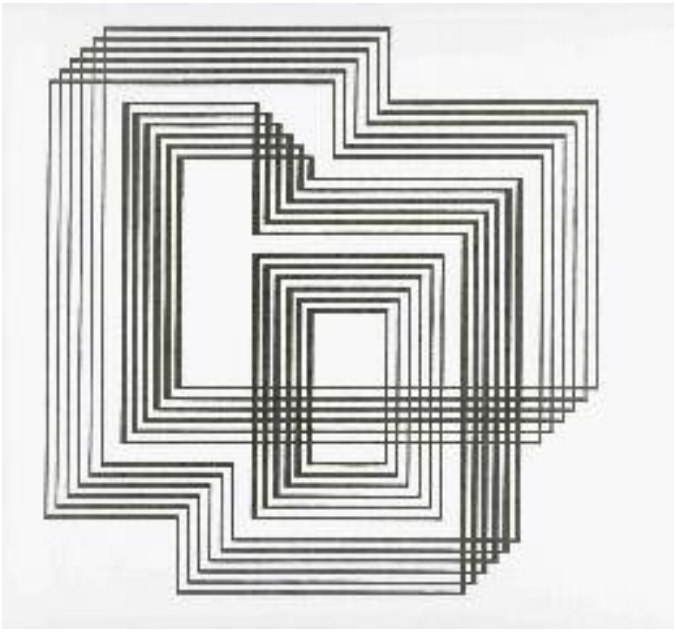

Fig. 38 Josef Albers. *Shrine (Graphic Tectonic Series)*, 1941-42.
Zinc lithograph on paper.
19 x 23 5/8 inches. The Josef Albers Foundation.

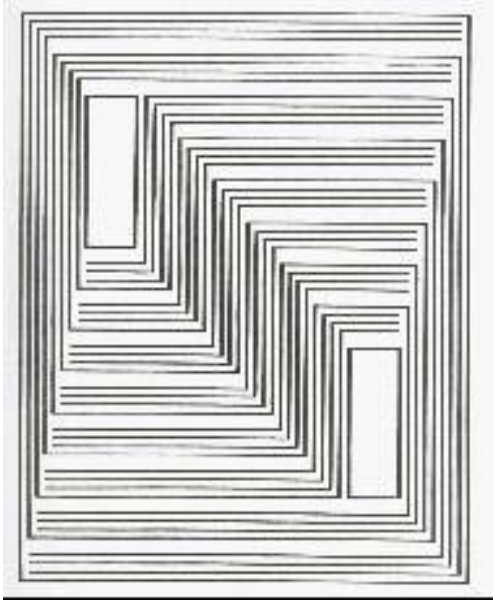

Fig. 39 Josef Albers. *To Monte Alban (Graphic Tectonic Series)*, 1941-42.
Zinc lithograph on paper.
23 5/8 x 19 inches. The Josef Albers Foundation.

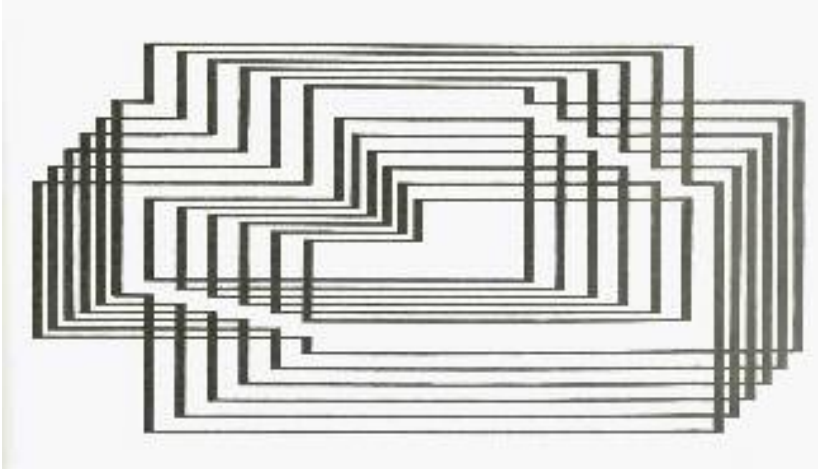

Fig. 40 Josef Albers. *Interim (Graphic Tectonic Series)*, 1941-42.
Zinc lithograph on paper.
19 x 23 5/8 inches. The Josef Albers Foundation.

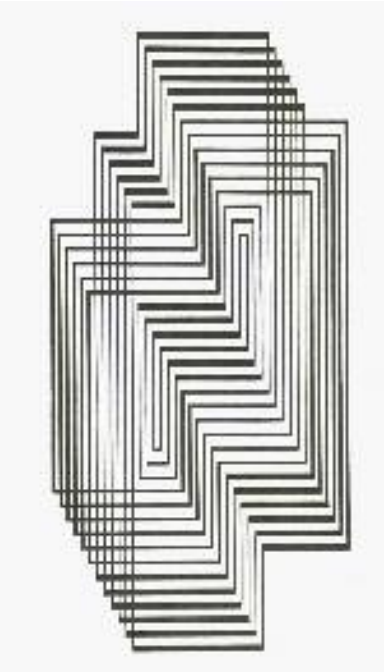

Fig. 41 Josef Albers. *Ascension (Graphic Tectonic Series)*, 1941-42.
Zinc lithograph on paper.
23 5/8 x 19 inches. The Josef Albers Foundation.

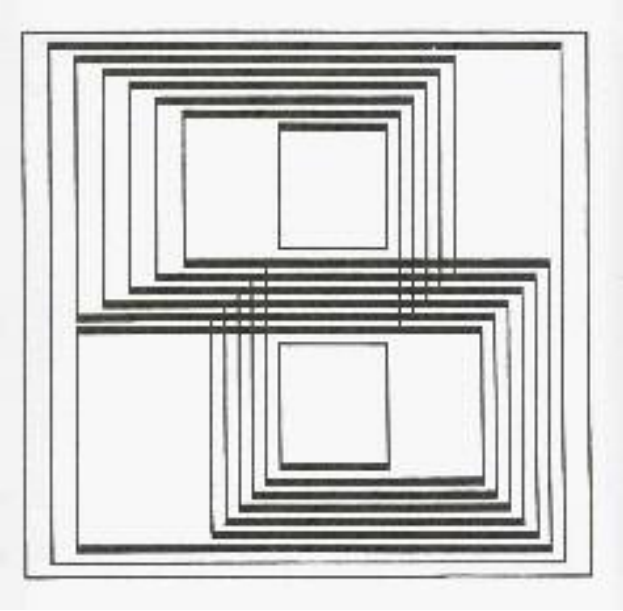

Fig. 42 Josef Albers. *Seclusion (Graphic Tectonic Series)*, 1941-42.
Zinc lithograph on paper.
19 x 23 5/8 inches. The Josef Albers Foundation.

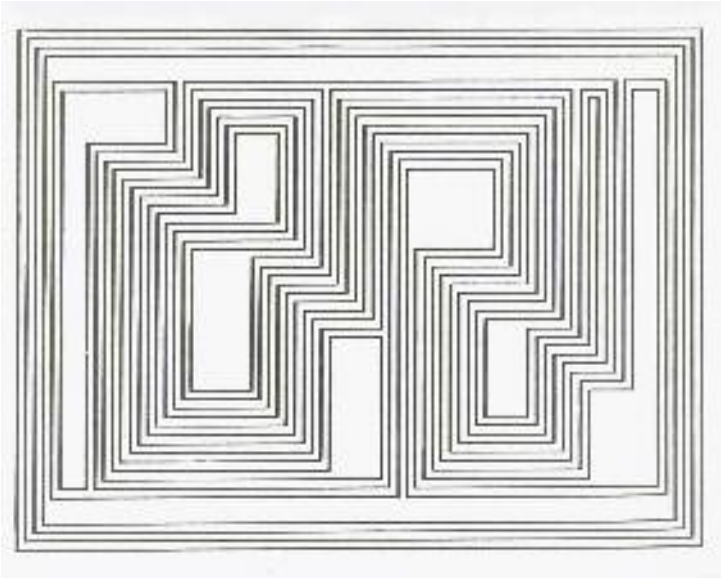

Fig. 43 Josef Albers. *Prefatio (Graphic Tectonic Series)*, 1941-42.
Zinc lithograph on paper.
19 x 23 5/8 inches. The Josef Albers Foundation.

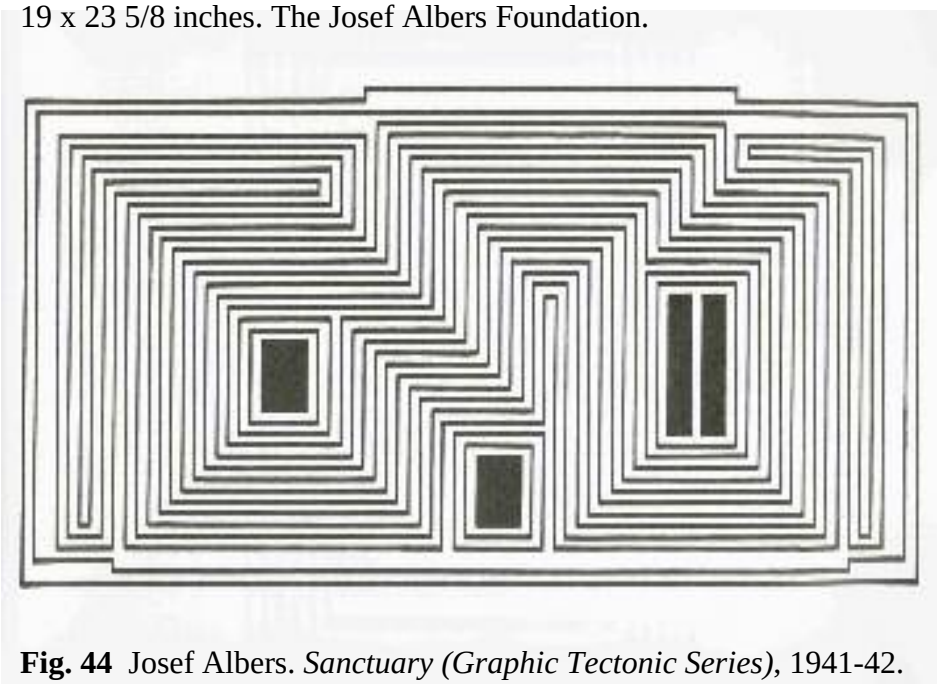

Fig. 44 Josef Albers. *Sanctuary (Graphic Tectonic Series)*, 1941-42.
Zinc lithograph on paper.
19 x 23 5/8 inches. The Josef Albers Foundation.

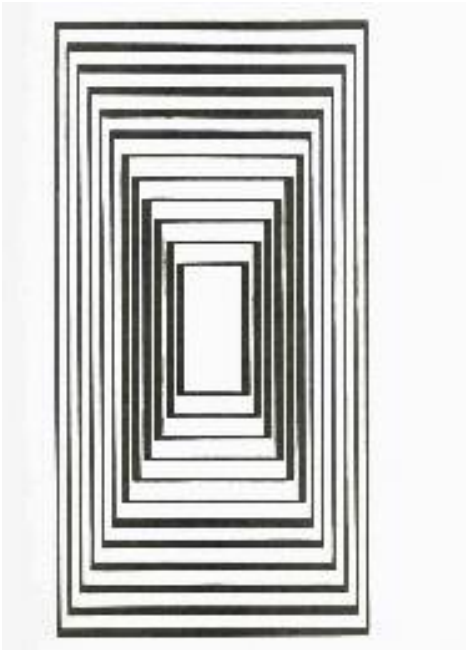

Fig. 45 Josef Albers. *Introitus (Graphic Tectonic Series)*, 1941-42.
Zinc lithograph on paper.
23 5/8 x 19 inches. The Josef Albers Foundation.

Fig. 46 Josef Albers. *Gate*, 1936. Oil on Masonite.
19 3/16 x 20 1/16 inches. Yale University Art Gallery.

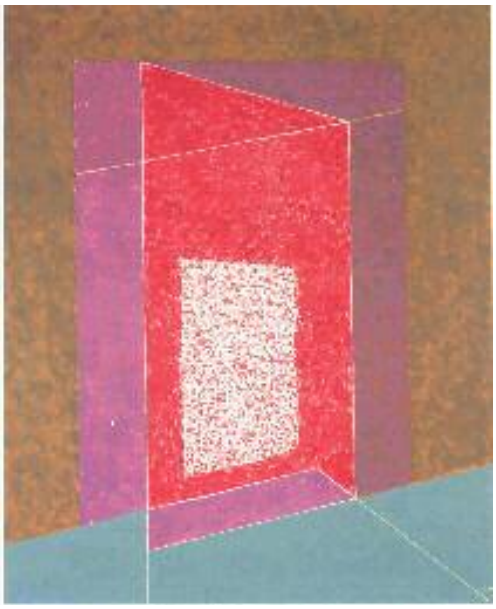

Fig. 47 Josef Albers. *Concealing*, 1940. Oil on pressed wood. 27 7/8 x 23 ¼ inches. Solomon R. Guggenheim Museum.

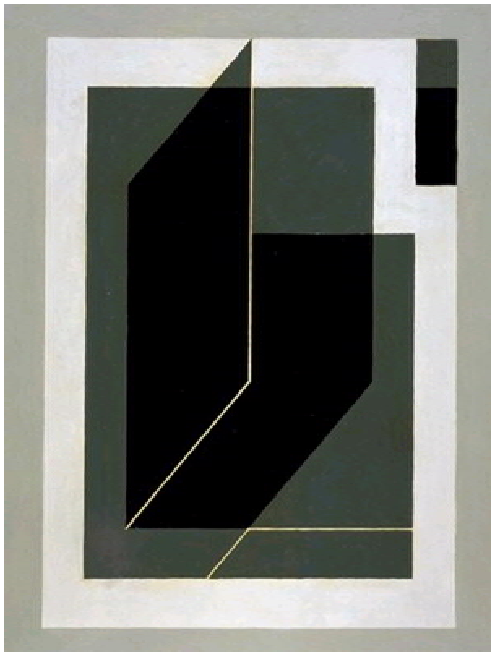

Fig. 48 Josef Albers. *Bent Black (B)*, 1940. Oil on fiberboard. 26 x 19 ¼ inches. Hirshhorn Museum and Sculpture Garden.

Fig. 49 Walter Gropius and Marcel Breuer.
Lake Eden Campus model, Black Mountain College, 1939.
Reproduced in Mary Emma Harris, The Arts at Black Mountain College.

Fig. 50 Completed wing, Studies building, Black Mountain College.
Reproduced in Mary Emma Harris, The Arts at Black Mountain

Fig. 51 Minimum House, Black Mountain College, 1947-48. Reproduced in Mary Emma Harris, The Arts at Black Mountain

Fig. 52 Josef Albers. *Homage to the Square: Blue, White, Grey*, 1951. Oil on Masonite. 11 1/8 x 11 1/8 inches. The Josef Albers Foundation.

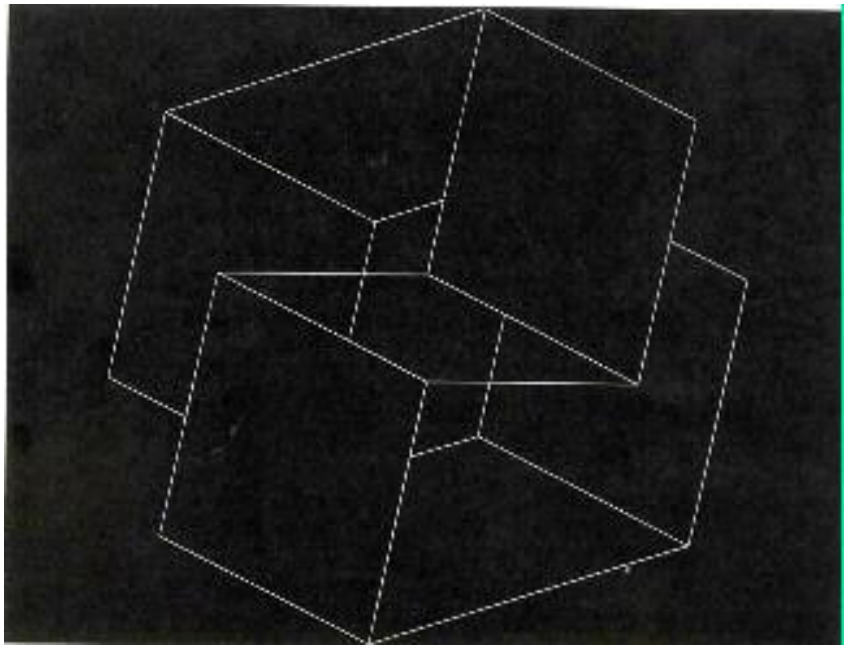

Fig. 53 Josef Albers. *Structural Constellation II*, ca. 1950. Machine-engraved Vinylite mounted on board. 17 x 22 ½ inches. The Josef Albers Foundation.

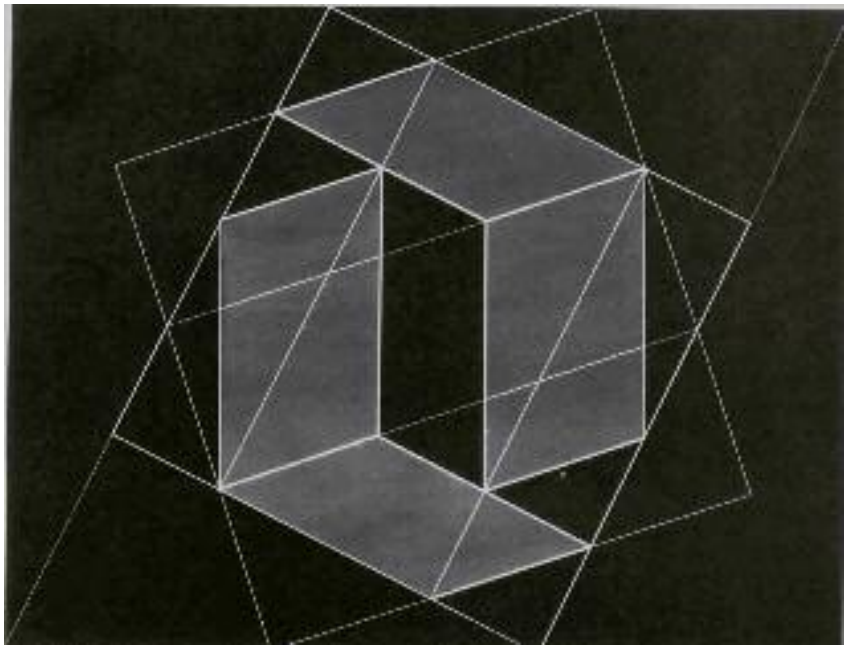

Fig. 54 Josef Albers. *Structural Constellation: Transformation of a Scheme No. 12*, 1950. Machine-engraved Vinylite mounted on board. 17 x 22 ½ inches. The Josef Albers Foundation.

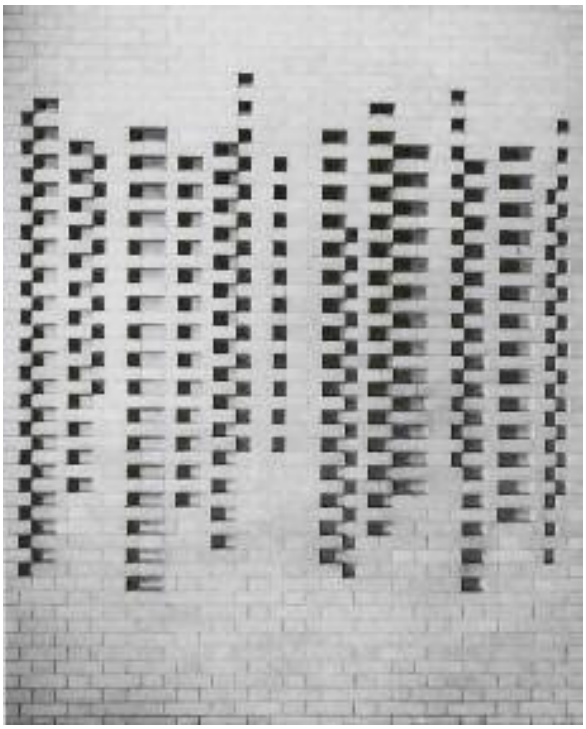

Fig. 55 Josef Albers. *America,* 1950.
Rear wall of brick fireplace, Harkness Commons,
Harvard University. 11 x 8 feet, 8 ¼ inches deep.

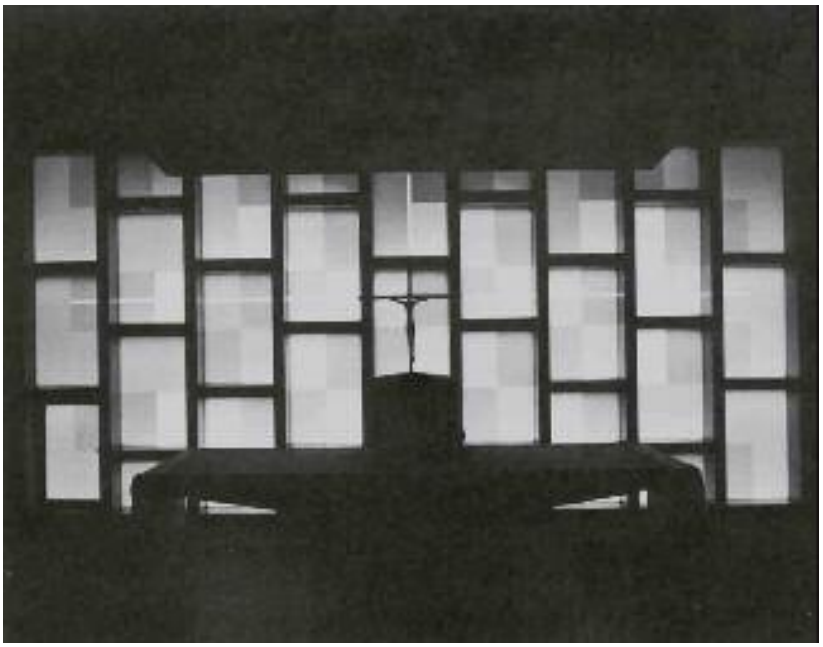

Fig. 56 Josef Albers. *White Cross Window*, 1955. Photo-sensitive glass.
5 x 11 feet. Abbot's Chapel, St. John's Abbey, Minnesota.

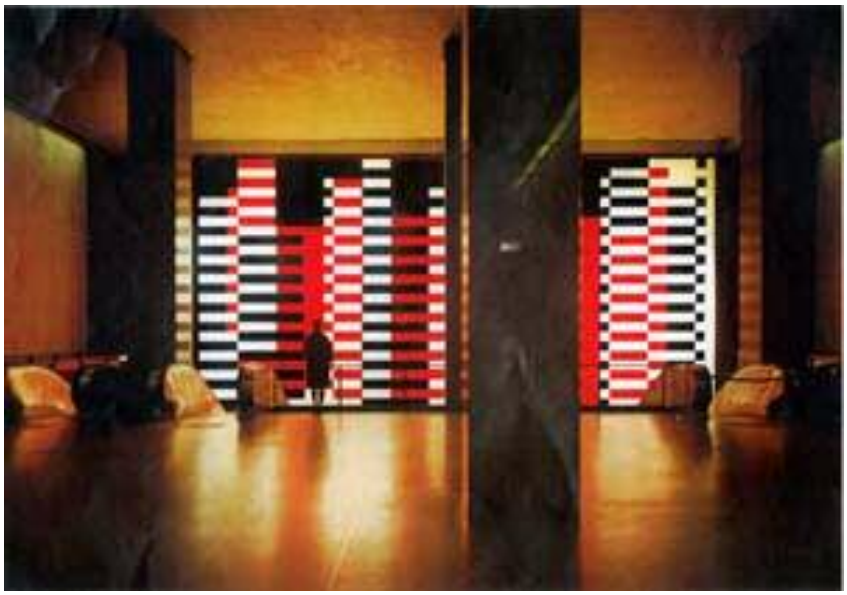

Fig. 57 Josef Albers. *Manhattan*, 1963. Formica.
28 x 55 feet. Metropolitan Life Building. Now

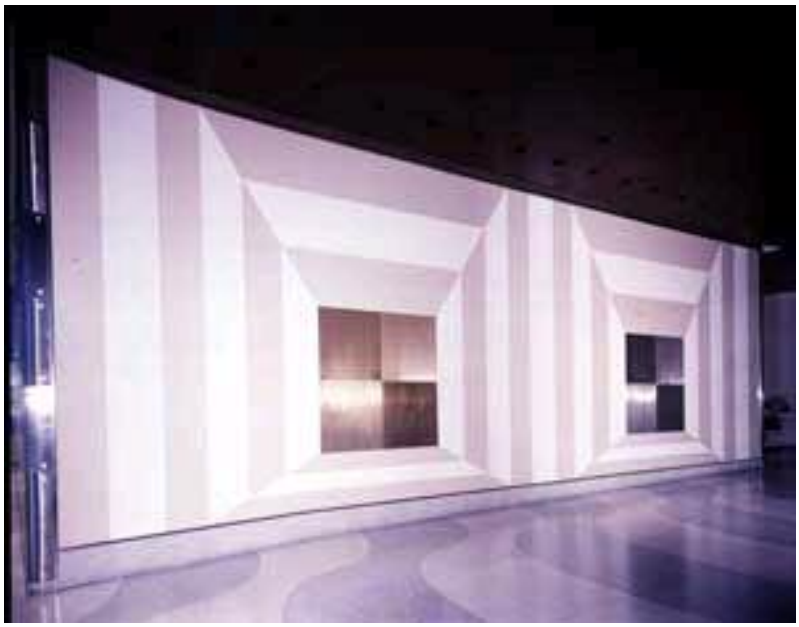

Fig. 58 Josef Albers. *Two Portals*, 1961.
Carrara glass, nickel bronze and bronze.
14 x 42 feet. Time and Life Building, Rockefeller Center.

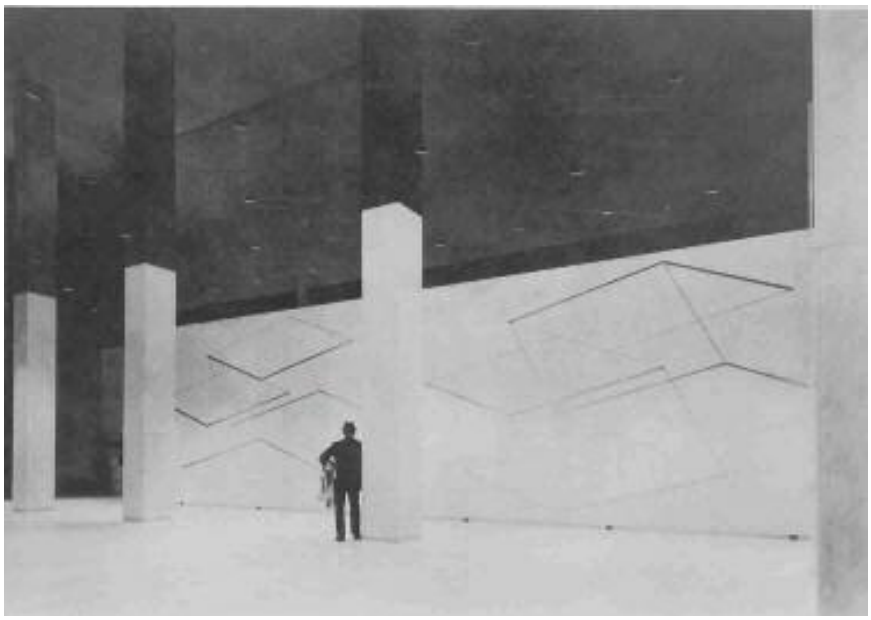

Fig. 59 Josef Albers. *Two Structural Constellations*, 1959-60.
Incised gold leaf on Vermont marble wall.
16 x 61 feet. Corning Glass Building, New York.

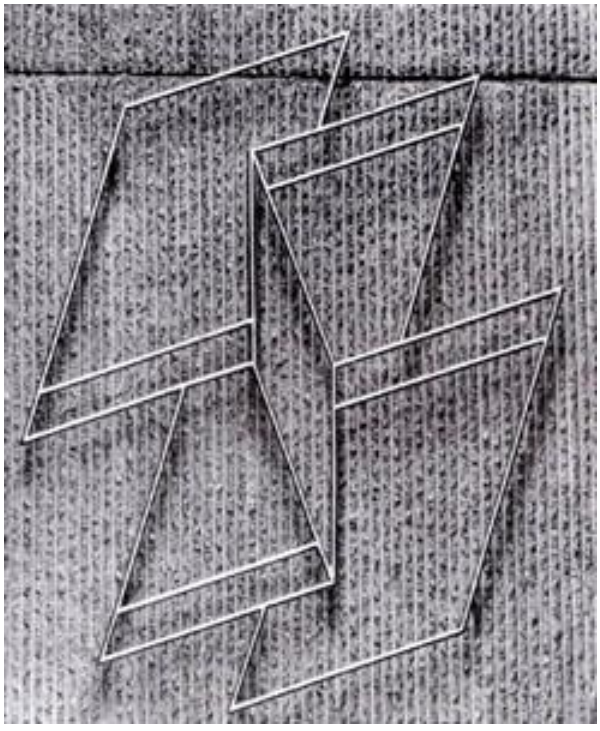

Fig. 60 Josef Albers. *Repeat and Reverse*, 1963.
Stainless steel. 6 ½ x 3 feet.
Yale University Art and Architecture Building.

Fig. 61 Josef Albers. *Two Supraportas*, 1972.
Stainless steel on granite wall. Wall is 5 x 106 ½ feet.
Westfaelisches Landesmuseum fur
Kunst und Kulturgeschichte, Munster, Germany.

Fig. 62 Josef Albers. *Gemini*, 1972. Stainless steel.
Each figure 8 x 14 ½ feet. Grand Avenue National Bank, Kansas City.

Fig. 63 Josef Albers. *Wrestling*, 1976.
Aluminum channel on black anodized aluminum wall.
56 x 40 feet. Mutual Life Centre, Sydney, Australia.

Fig. 64 Josef Albers. *Stanford Wall*, 1980. Arkansas brick.
8 feet 8 inches x 54 x 1 feet. Stanford University.

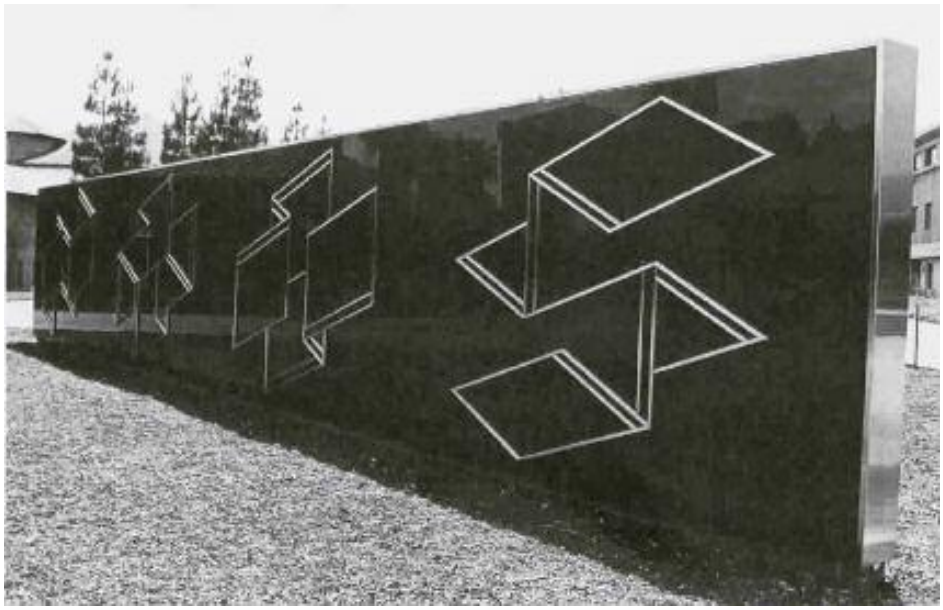

Fig. 65 Josef Albers. *Stanford Wall*, 1980.
African granite and stainless steel.
8 feet 8 inches x 54 x 1 feet. Stanford University.

Bibliography

Adamic, Louis. My America: 1928-38. New York: Harper & Brothers, 1938.

Adamic, Louis. "Education on a Mountain." Harper's Magazine 172 (April 1936): 516-530.

Albers, Josef. "Art as Experience." Progressive Education 12 (October 1935): 391-393.

- - - . "The Educational Value of Manual Work and Handicraft in Relation to Architecture." New Architecture and City Planning: A Symposium. Ed. Paul Zucker. Freeport, New York: Books for Libraries Press, 1944.

- - - . Untitled statement on *America*. Reprinted in Benezra, Neal David. The Murals and Sculpture of Josef Albers. Diss. Stanford University, 1983. New York: Garland Publishing, Inc., 1985. 216 - 217.

- - - . "March 1965 Interview." Black Mountain College: Sprouted Seeds. Ed. Mervin Lane. Knoxville: University of Tennessee Press, 1990: 33- 41.

- - - . Search Versus Re-Search. Hartford: Trinity College Press, 1969.

- - - . Interaction of Color. 3rd ed. New Haven: Yale University Press, 1971.

- - - . "Zu Meinen Glas-Wandbildern." A bis Z: Organ der gruppe progressiver Künstler 3 (February 1933) 117. Translated for the author by Carl Stoll, Washington DC.

American Abstract Artists: Three Yearbooks (1938, 1939, 1946). New York: Arno Press, 1969.

"Art: Today and Tomorrow." Design 44.8 (April 1943): 23.

Bauhaus: 1919-1928. Eds. Herbert Bayer, Walter Gropius, and Ise Gropius. New York: Museum of Modern Art, 1938.

Bauhaus and Bauhaus People. Ed. Eckhard Neumann. New York: Van Nostrand Reinhold, 1993.

Benezra, Neal David. The Murals and Sculpture of Josef Albers. Diss. Stanford University, 1983. New York: Garland Publishing, Inc., 1985.

Bucher, François. Despite Straight Lines. New Haven and London: Yale University Press, 1961.

Cho, Jennifer Myungsook. "Hans Hofmann and Josef Albers: The Significance of their Examples as Artist-Teachers." Diss. Columbia University Teachers College, 1993.

"College in Black Mountain, N.C., designed by A. Lawrence Kocher." The Architectural Forum 82.6 (June 1945): 128 – 129.

Darwent, Charles. "From Bauhaus to Black Mountain." Modern Painters 15.4 (Winter 2002): 48 – 49.

van Doesburg, Theo. Principles of Neo-Plastic Art. 1925. Trans. Janet Seligman. Greenwich, Connecticut: New York Graphic Society Ltd., 1968.

Duberman, Martin. Black Mountain: An Exploration in Community. New York: Anchor Press, 1973.

"Education of the Architect." The Architectural Record 80.3 (September 1936):201 – 213.

Ellert, JoAnn C. "The Bauhaus and Black Mountain College." The Journal of General Education 24.3 (October 1972): 145 – 152.

Elsen, Albert. "A 'Stunning Presence' at Stanford." ArtNews 80.1 (January 1981): 64 – 65.

Fenichell, Stephen. Plastic: The Making of a Synthetic Century. New York: HarperCollins, 1996.

Finkelstein, Irving Leonard. The Life and Art of Josef Albers. Diss. New York University, 1968. Ann Arbor, Michigan: University Microfilms, Inc., 1979.

"German Professor to Go to Black Mt. College." New York Herald Tribune 10 December 1933: 10.

Gibson, Eric. "Josef Albers: in the engine room of modern art." The New Criterion 4.8 (April 1986): 34 – 41.

Goldstein, Carl. "Teaching Modernism: What Albers Learned in The Bauhaus and Taught to Rauschenberg, Noland, and Hesse." Arts Magazine 54.4 (December 1979): 108 – 116.

Gomringer, Eugen. Josef Albers: His work as contribution to visual articulation in the twentieth century. New York: George Wittenborn Inc., 1967.

---. "Abstrakte Kompositionen auf opakem Glas: Die Glasbilder von Josef Albers." Glaswelt 17 (November 1958): 14-15.

"Gropius Finds a College Run by Teamwork." New York Herald Tribune 10 January 1940: 11.

Halsey, Margaret Brown. "The Aesthetic and Educational Theories of Josef Albers." Diss. New York University, 1968.

Hamilton, George Heard. Josef Albers: Paintings, Prints, Projects. New York: Yale University Art Gallery, Clarke and Way, 1956.

Harris, Mary Emma. The Arts at Black Mountain College. Cambridge: The MIT Press, 1987.

Hirsch, Faye. “Albers Prints of the ‘30s & ‘40s: Artist’s Cheat.” The Print Collector’s Newsletter 26.4 (September-October 1995): 122 - 125.

Hirshhorn Museum and Sculpture Garden, Washington D.C. Collection archives, files on *Fugue II* (72.4), *Latticework* (74.5), *Skyscraper B* (74.6), *Window-Picture* (72.6).

Hitchcock, Henry Russell and Philip Johnson. The International Style. 1932. New York: W. W. Norton & Company, 1966.

“House in Black Mountain, N.C.” The Architectural Forum 81.1 (July 1944): 108 - 109.

Hunter, Sam. “Josef Albers: Prophet and Presiding Genius of American Op Art.” Vogue. 15 October 1970: 70-71, 126-127.

Josef Albers: A Retrospective. New York: The Solomon R. Guggenheim Museum, 1988.

Josef Albers: Glass, Color, and Light. New York: The Solomon R. Guggenheim Museum, 1994.

Josef Albers: His Art and His Influence. Montclair, New Jersey: Montclair Art Museum, 1981.

Josef Albers: Paintings and Graphics, 1917-1970. Princeton, New Jersey: The Art Museum, Princeton University, 1971.

Kehlmann, Robert. “The Legacy of Johan Thorn Prikker.” American Craft 45.2 (1985): 26-31.

- - - . 20th Century Stained Glass: A New Definition. Kyoto: Kyoto Shoin, 1992.

de Kooning, Elaine. “Albers Paints a Picture.” ArtNews 49.7 (1950): 40 – 43, 57 – 58.

Korn, Arthur. Glass in Modern Architecture of the Bauhaus Period. 1929. New York: George Braziller Inc., 1968.

Kuhn, Charles L. “America and the Bauhaus.” American-German Review 15 (December 1948): 16-22.

Lohse, Richard P. “Josef Albers: City 1928.” Zürcher Kunstgesellschaft, Jahresbericht (Zurich) 1960: 52 – 56.

Mansbach, S.A. Modern Art in Eastern Europe: From the Baltic to the Balkans, ca. 1890-1939. Cambridge: Cambridge University Press, 1999.

Meikle, Jeffrey L. American Plastic: A Cultural History. New Brunswick: Rutgers University Press, 1995.

“Minimum House, Black Mountain College, North Carolina: A Student Project.” Arts & Architecture 66 (April 1949): 30-31.

Moynihan, Jeanne Patricia. “The Influence of the Bauhaus on Art and Art Education in the United States.” Diss. Northwestern University, 1980.

Nordland, Gerald. Josef Albers: The American Years. Washington, D.C.: Washington Gallery of Modern Art, 1965.

L.H.O. “A Teacher From Bauhaus.” New York Times 29 November 1933: 17.

Overy, Paul. “Calm Down, What Happens Happens Mainly Without You.” Art and Artists 2.7 (October 1967): 32-35.

Paintings by Josef Albers. New Haven: Yale University Art Gallery, 1978.

The Plastics Age. Ed. Penny Sparke. Woodstock, New York: The Overlook Press, 1993.

Rowell, Margit. “On Albers’ Color.” Artforum 10.5 (January 1972): 26-37.

Scheerbart, Paul. Glass Architecture. 1914. Trans. James Palmes. New York: Praeger Publishers, 1972.

Schulz, Maria-Katharina. Glasmalerei der Klassischen Moderne in Deutschland. Frankfurt am Main: Peter Lang, 1987.

Sjöberg, Leif. "Josef Albers: Some Reminiscences and an Unpublished Interview." The Structurist 31/32 (1991/92): 52 – 55.

"Special Issue: Black Mountain College." Design 47.8 (1946).

Spies, Werner. Albers. New York: Harry N. Abrams, Inc., 1970.

Staber, Margit. Colour and Line – Art and Education: on the Works of Josef Albers. Olten, Switzerland: O. Walter, 1960.

van Straaten, Evert. Theo Van Doesburg: Painter and Architect. The Hague: SDU Publishers, 1988.

Stuart, John A. Introduction. The Gray Cloth. By Paul Scheerbart. Cambridge, Massachusetts: MIT Press, 2001. xiv – xlv.

"Student-Built Campus Ready for Black Mountain College." New York Times 14 September 1941: 6D

"Students and Teachers to Build Halls at Black Mountain College." New York Herald Tribune 8 September 1940: 6II.

Taube, Karl. The Albers Collection of Pre-Columbian Art. New York: Hudson Hills Press, 1988.

Thompson, Derek. "Transportation Icon Must Move On." ArtNews 100.8 (September 2001): 52.

Vander Weg, Kara. "Josef Albers: Circumventing the Eye." Glass 88 (Fall 2002): 22 – 29.

Vasily Kandinsky: Painting on Glass (Hinterglasmalerei). New York: The Solomon R. Guggenheim Museum, 1966.

Vogel, Carol. "An Albers Mural May Reappear." New York Times 21 February 1003: E40.

Wangler, Wolfgang. Bauhaus: Representational Drawing Under Josef Albers. Cologne: Verlag der Zeitschrift "symbol", 1987.

Watson, Tom. "Making Open the Eyes." Art & Antiques 19.5 (May 1996): 94 – 97.

Weber, Nicholas Fox. The Drawings of Josef Albers. New Haven: Yale University Press, 1984.

- - - . "Josef Albers's Drawings: The Linear Obsessions of a Color Theorist." Drawing 16.5 (January-February 1995): 97 – 101.

Welliver, Neil. "Albers on Albers." ArtNews 64.9 (January 1966): 48 – 51, 68 – 69.

Wember, Paul. Johan Thorn Prikker: Glasfenster, Wandbilder, Ornamente 1891-1932. Krefeld: Scherpe Verlag, 1966.

Wick, Rainer. K. Teaching at the Bauhaus. Ostfildern-Ruit, Germany: Hatje Cantz Verlag, 2000.

Wingler, Hans M. The Bauhaus: Weimar, Dessau, Berlin, Chicago. Trans. Wolfgang Jabs and Basil Gilbert. Ed. Joseph Stein. Cambridge, Massachusetts: MIT Press, 1979.

Wodehouse, Lawrence. "Kocher at Black Mountain." Journal of the Society of Architectural Historians 41.4 (December 1982): 328 - 332.

Yale Collects Yale. Eds. Sasha M. Newman and Lesley K. Baier. New Haven: Yale University Art Gallery, 1993.

Young, Grace Alexandra. “Art as a Fourth ‘R’.” Arts and Decoration 42.3 (January 1935): 46-47.