

Recollections of Josef Albers

Rob Roy Kelly

To Design

*To design is
to plan and organize,
to order, to relate
and to control.*

*In short, it embraces
all means opposing
disorder and accident.*

*Therefore, it signifies
a human need
and qualifies man's
thinking and doing.¹*

I consulted with Joseph Lucca, Bob Engman, and Dorothy Yanik; and I am most grateful for their input in preparation of this paper.

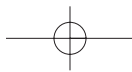
For anyone with an interest in teaching, Josef Albers was, and still is, an exemplary role model. He had enormous experience and insight into teaching and students. He was the most effective and inspirational teacher I encountered in my career. I came to Yale during 1953 from Minnesota so naive and visually ignorant as to cause others to wonder how I ever got there. The truth is that I came to Yale through the good graces of Dean Charles Sawyer, rather than through admissions. The East Coast and Yale University were total cultural shock for me. Perhaps even more so than for students coming there from much more exotic parts of the world than Minnesota. I did not understand anything that was happening, but I did recognize that it was all very important.

I am certain it was Albers, and not coincidence, that led so many of his graduates into teaching. Graduates gained enormous confidence and inspiration from Albers, and were eager to share their newfound understanding with others. Yale graduates often were resented by colleagues at other institutions as their self-confidence was interpreted as arrogance.

When graduates from Yale are asked how they most benefited from studies with Josef Albers, they invariably reply, "Albers taught me to see." The word "see" has several meanings. One is in the optic sense using the eyes, but another definition of "see" is to discern, to understand. I believe that students of Albers are referring to both definitions.

Among those things that I learned from being a student in classes taught by Albers were: to see nuance in color and drawing; to use color with confidence and differently than before; to understand spatial relationships; to better understand the illusion of form;

¹ Josef Albers *Poems and Drawings* (New York: George Whittenborn, Inc., 1961, Second Edition).





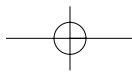
to see nature abstractly; to understand activation of color or space; and to realize that suggestion is more powerful than delineation in visual art. In viewing Albers the teacher, there was much to be learned in terms of beginning with simple exercises with criteria being understood by students, and the sequencing of related problems where one builds on another. Also, the teacher's awareness in knowing what can and cannot be taught is important.

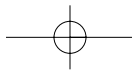
My experiences at Yale were the foundation for what I was to do as a teacher, and they prepared me at a later date to better appreciate the teaching of Armin Hofmann. My views and appreciation of Albers, and his contribution to education, were not shared by all of my colleagues in graphic design. Most felt influenced more by men such as Alvin Lustig, Herbert Matter, Leo Lionni, and Lester Beall. I found these men to be interesting since they presented challenging problems and were excellent role models, but they did not teach. Albers did. When you completed an Albers course, you learned, you could apply what you learned, and you viewed your work and that of others in an entirely new way.

Being a graphic design graduate student, I did not have as much contact with Albers as did the fine art students, but there was a great deal of interaction between painting and design students in printmaking, where I was an assistant to Gabor Peterdi, and I heard stories from painters and sculptors about Albers. I was teaching at The Minneapolis School of Art before entering Yale, and knew that I would return to teaching following graduation. It is likely, that because of vested interests, I focused more attention on teachers, the problems, critiques, and methods of instruction than did my classmates. While I did not actually understand everything, I made notes regarding problems and comments by instructors. The notes became my bible during the early years of teaching.

Upon returning to Minneapolis, I was the only faculty member with a graduate degree. Consequently, whenever there was a faculty opening, I was always asked if there was someone I could recommend. My strategy was to recommend anyone from Yale who I felt understood what was happening there. Within a relatively short time, we had about six Yale graduates on the faculty. At every opportunity, I pumped each one for every bit of understanding I could get.

Visual education can be broken down into at least three broad areas such as history and precedent; technical knowledge based on equipment, processes, and materials; and perceptual understanding. Some might include professional practices as a separate segment. An effective education requires an appropriate balance between the various areas emphasized. The different concerns are taught sequentially and sometimes concurrently. In the most general sense, perceptual studies are at the beginning, and form the foundation for the other areas. Technical instruction is strongly emphasized during the second and third years. Professional practice is





concentrated in the last year, with history and craft taught throughout the program.

Perceptual understanding is the most confusing, misunderstood, and the weakest link in visual education. Too often, the educational emphasis is focused in technology or professional practice. Style and example are substituted for perceptual understanding, and students are expected to learn through imitation. Too many instructors admonish students to “just keep drawing and painting—it will come.” Other instructors impress students with the notion that only feeling, emotion, or mood can lead to real art.

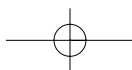
Albers’s peculiar genius was in formulating a pedagogy that resulted in his students’ abilities to grasp and incorporate perceptual factors into their work and to recognize them in the work of others. His color course is a pedagogical model that can be applied to introductory studies in drawing, design, fine arts, and crafts.

The unique qualities of perceptual understanding in visual education are that they are applicable to all areas of art—architecture, fine arts, design, photography, and all of the crafts. Perceptual understanding always is relevant, since it transcends all styles and time frames—it is never in or out of date. Albers is as valid today as he was during the 1930s at the Bauhaus, Black Mountain in the 1940s and Yale in the 1950s.

Albers compared learning to the crystallization process in which one crystal forms on another. He believed that, in the first year, students should learn simple, uncomplicated concepts; and as they moved through the program, the work should become progressively more complex. Each bit of new learning is added to the first until a body of knowledge accumulates, and from thereon, students are expected to grow as a result of their experiences. Albers was fond of saying that, if he did his job properly from the first day of class, he was beginning a process that would put him out of work. The import of his remark was that, if he was effective in his teaching, by the time of graduation, students no longer required his input.

Albers approached instruction through a pedagogical scheme employing principles, sequence, criteria, and learning through doing. Albers either said or wrote that basic studies incorporated only those elements and principles that were in common to all visual arts including painting, drawing, sculpture, design, and architecture. Within my experience, he never made any distinction between students in one discipline or another, they were all treated equally. Albers remarked several times that, as a teacher, he had to treat all students equally because, regardless of individual performance, he had no way of knowing which ones might become artists in the future.

The terms “problem” and “exercise” often are used interchangeably, but they are really quite different. “Problem” implies a solution, while “exercise” is defined as experiential learning with-





out solution, and it has infinite variations. In graphic design, we were given problems, but, under Albers, we did exercises.

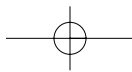
My observation was that Albers used two different types of presentation. One employed demonstrations to illustrate a point, while the other consisted of exercises. Albers had strong feelings about the need for concentration when drawing. His introduction to basic drawing was to make a few remarks about mental concentration and control. Then he would take a piece of chalk in each hand and, simultaneously, draw two circles on the blackboard—one from right to left, and the other from left to right (try it sometime!).

To further make his point, he asked students to write their name and hold up their hand when completed. The response was nearly immediate. Next, students were asked to write their name backwards and raise their hand when completed. This took longer. He then asked students to write their name upside down and backwards. This took a considerable amount of time. He used this demonstration to talk about “automatic” drawing, which is done without thinking. Writing their name backwards called for mental visualization and concentration, and it was this state of mind that he felt essential to drawing. I believe this demonstration was effective because students experienced what he wanted to communicate. The ploy might be compared to teachers who simply tell students that, to draw, they must concentrate.

Another one of his demonstration exercises was to take a sheet of paper, fold it, and then flatten it out. The crease made a line. After this demonstration, we were to lay the sheet of paper next to our drawing board. We were to mentally fold the paper on angles and draw in the crease lines. After making two mental folds, the concentration necessary was so intense it became painful. When we reached that point, we were instructed by Albers to have that same degree of concentration each time we drew.

One day in drawing class, we were doing quick sketches of the model. Albers was upset with the class because he did not believe students were concentrating on what they were doing. After some scolding which apparently did not resolve the problem to his satisfaction, he halted the class for a fifteen-minute break.

Students were instructed to go across the street to Michael’s Art Store and purchase a large sheet of D’Arches paper. As I recall, it was a little more than three dollars a sheet, and three dollars was quite a bit of money for most students in those days. Upon returning to the studio, he had us pin the paper on our easel, and we were instructed to resume our quick sketches. You never saw such mental concentration as this group of students making quick sketches on three-dollar-plus sheets of paper. When we finally went back to newsprint pads, he frequently would remind us that we were sketching on D’Arches paper. Knowing that he might make a reality of it, we gave our drawing the attention and focus he demanded.





Albers effectively conveyed to students the requisite mental and physical attributes for working in the visual arts.

Exercises had to do with refinements. Perhaps the best examples are found in the color course. Each exercise was preceded with a quick demonstration by him or using students. For instance, at the first class, he would ask students to go through the color pack, pick out red, and lay it face down on the desk. When everyone had done so, he asked students to hold up red. Of course there would be a variety of reds, and he used this demonstration as a preface to talking about the relativity of color, and how each person sees color differently. He then made a statement of the principle for the first exercise, and stated criteria and objectives. The exercise demanded that students go through a process of putting something down, pinning it up and evaluating it, making adjustments and, usually, repeating the last step several times. As I recall, Albers did not collect student work until the end of the semester, which allowed students to do exercises over and over. Most students would go through their work before handing it in, and redo those pieces they felt were weak.

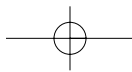
At each stage of the exercise; because of working with cut and torn paper which could be moved, reduced, enlarged, added, or subtracted; students made numerous decisions based on trial and error. Learning resulted from knowing objectives, and the process of evaluating the work and each decision along the way.

Students not only learned about the interaction of color, but to see nuances as well; how the smallest change affected the whole. Big decisions often were made in moments, but small decisions might take hours if not days to finalize. When studying with Albers, the little decisions were the big decisions.

Just as athletes train to build their bodies, and develop muscles and athletic skills, the eyes can be trained as well. Albers's drawing and color exercises might be construed as visual calisthenics to train the eyes to recognize the most minute detail and variation, along with the learning criteria which provided direction and an ability to assess work.

I recall one instance in drawing class when Albers held up his arm and explained to students that drawing the arm could be approached from several different points of view. On one hand, if the shirt-sleeve was carefully drawn, it would describe the arm. A drawing of the skeletal structure composing an arm would be another option. He rolled up his sleeve and pointed out that, if he focused on drawing the hairs on his arm, it would reveal the form and shape of the arm. Albers was fond of saying that the purpose of art was to re-present nature, not to represent it. Albers taught students to see objects and nature in new ways.

An aspect of courses under Albers that impressed me was the absolute silence when students were working. The only sound was an occasional crumpling of paper as students made the deci-





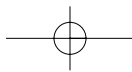
sion to start over. The ability to judge their own work was the direct result of Albers providing simple, uncluttered objectives which made criteria obvious. This can be compared to the more prevalent practice of students not starting over until the teacher is critical of the work. Albers taught students how to evaluate work for themselves, and thus began the process of students becoming less and less dependent on the teacher with each new exercise as they progressed in the program.

In drawing class, Albers required students to keep a sketch book which was turned in at the end of the semester. He threatened students with hell and damnation, and a low grade at the least, if they had doodles, phone numbers, cartoons, messages, or anything other than serious sketching in the book. He likewise cautioned students about not tearing out any pages—he wanted to see everything. I don't know if it is true, but students swore that Albers had counted the pages in the sketch book that we used, and if he suspected pages had been removed, he counted the pages. He did not like work that was crumpled, dirty, or otherwise damaged. He could be scathing when messy work was submitted. Albers taught students to respect their own work, no matter if it was a sketch or a finished piece.

In Basic Drawing, Albers did not permit charcoal drawing—he referred to it as “smear” drawing (That is with a German accent that makes it sound more like “schmeer.”) He had equal distaste for rubbed graphite or blunt pencils. Every student was required to have a pencil sharpener, and to keep a sharp point on the pencil when drawing. Particularly so in drawing classes, Albers constantly admonished students, “You must learn to crawl before you can walk, and until you can walk, you cannot run.”

Once students progressed beyond the abstract exercises and began to draw objects, Albers demanded a single line describing form. He became agitated when students used multiple lines to define a contour—what he called “hen scratching.” He would point to one stroke and say, “Do you mean this line, or perhaps this one, or which one do you mean?” He justified this by saying that he could not judge what the student had done when there were so many options. Whether students were drawing with line or mass, he required control, and students were held accountable for every mark they put on paper. Albers did speak a great deal about the need for discipline and not much about skills or craft, but he constantly demanded them from each student.

A large part of Albers's success with teaching had to do with his ability to verbally communicate with students regarding visual theory and content. He most often expressed his views through metaphors that students understood. He was uncanny in this respect. Albers clearly stated problem objectives which were uncomplicated and easily grasped by students. He always provided criteria for evaluating progress and goals. Consequently, students





became increasingly self-sufficient in working toward problem objectives. He presented exercises in sequential and incremental steps, with each new one building on the one before—much like the crystallization process he described as learning.

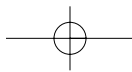
Albers's pedagogy was not suited to every individual's concept of an art education. Because of the restrictive nature of simple exercises with specific criteria and objectives, some felt that he was too dogmatic, rigid, and arbitrary. His classes were never conducive to free spirits who wanted to do their own thing. My observation was that students who had another education in art before Albers did much better than students who had only Albers. I think the reason for this was that students with prior experience had something to compare with what they were receiving from Albers, and immediately, realized the value of Albers's approach to visual education. Because of the positive response, they were better motivated, and more appreciative and productive.

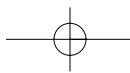
Albers often was misunderstood and unfairly judged by many. The fact that Albers worked with color paper packs and controlled line did not mean that he believed that these were ends—he used them only as instructional strategies at the initial stages of visual education. There was a distinct difference between how Albers related to students at the beginning level and with those in advanced classes. In basic courses, Albers dictated objectives, format, and materials. In upper level courses, students chose content, style, format, and materials; and Albers taught within parameters set by students. Never before or since Albers have I seen so much variety of approaches to painting in one class as those taught by Albers.

Students worked with abstract expressionism, representational art, impressionism, or color studies in paint and some even imitated Albers's work. He never questioned content, only what the student was doing or trying to do visually. The same was true with prints and drawings. Albers was open and receptive to all kinds of expression. It always was a matter of the student's level of study and understanding of what they were doing.

When critiquing painting students, it was customary for Albers to ask the student what they were trying to do. If the student responded in terms of color, space, or form, Albers engaged in meaningful discussion with the student. If the student responded in terms of feelings, or some esoteric rationale, Albers would throw up his arms and, in a loud voice, exclaim, "Gotten Himmel! Don't show me your intestines." He would avoid that student for the next few weeks. It did not take students long to learn how they should reply to Albers's inquiries if they wanted his input.

Albers was extremely rational in his approach to instruction. When it came time to put pencil or pen to paper, brush to canvas, or chisel to wood or stone, Albers believed that artists became intensely rational as they concentrated on how best to give form to





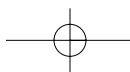
intent. In the classroom or studio, he had short shrift for mood, emotion, mystique, or self-expression. He rarely relied on the past for examples. He was more likely to rely on analogies to explain a point. He concentrated on pedagogical principles, and reacting to what the student was doing. Albers said to me that those aspects of painting dealing with emotion, expression, or message were personal and subjective, therefore, as a teacher, he was in no position to judge them. Albers confined his comments to what students were attempting to do in terms of color, line, shape, space, or form. Albers made clear distinctions between what could and could not be taught. He provided students with tools for expression, but felt that expression itself was a private matter.

There were many occasions where Albers talked about teachers and teaching. One view that he expressed was that only the best teachers should be permitted to work with students during the first year of studies. It was this period in which students learned work habits, acquired values, became motivated, and began the learning process that would shape what they did in the future. The first year of study was the most important year of education.

To better appreciate this viewpoint, it can be compared to the common practice in the majority of American art schools and universities of staffing the first year of study with young, inexperienced teachers beginning their careers, older teachers who have passed their prime, and, in some instances, teachers who are assigned to basic courses as administrative punishment. At numerous universities, the first year is taught with graduate assistants which, in most instances, is the blind leading the blind.

Albers explained to our class one time that, in order to be a good teacher, you had to be a good actor. There would be times in dealing with students when you might be extremely angry with a student, but it was a time to speak softly and be encouraging. Likewise, there might be an instance where it was in the best interest of the student to affect great anger even though you felt none. This reflects an insightful and disciplined teacher. Albers often commented that, when students can anticipate a teacher, much of that teacher's effectiveness as an instructor is lost. It is a credit to Albers that although he was in his seventies and might be expected to be more routine in his teaching, we never knew what he was going to say or do next.

In his color class, which met twice a week, the students often were intimidated. Albers was so highly respected by students that, if he was critical of the work, an immediate response was to want to crawl under the desk and hide. Secondly, Albers's color classes were so famous that frequently there were visitors. Sometimes, they were people from other departments of the university, or from other parts of the country or Europe. As a result of these conditions, a number of students did not put work up for critique.



One day when we came to class, and there was Albers standing at the head of the stairs in front of the door to the classroom. No one knew what was happening, and so a line formed that ran all the way down the stairs to the front door. At two o'clock, Albers looked at his watch and, with a great flourish, announced, "It is time for the show to begin." He turned to the first student and said, "Your ticket, please." When the student mumbled something about not knowing he had to have a ticket, Albers explained, "Your work is your ticket." The student pulled work from his knapsack and showed it to Albers. Albers then said to the student, "You have your ticket. Go in and find a seat up front. We have a good show today." The procedure continued with several other students. Finally, he came to a student who confessed that she had not finished her work. Albers put his arm around her shoulders, and walked her to the head of the stairway saying, "It is too bad you do not have a ticket young lady, but you come back on Thursday with your ticket and we will have another fine show." All students who did not have "tickets" were turned away. That was the last time it was necessary for him to address this problem that year. The problem of students not putting work up for critique is a common one. I have often thought about how the rest of us handle it. Ordinarily, we bluster and threaten students with low grades if they do not mend their ways. Albers's method of handling the situation was not only more intriguing, but it was also more effective.

I remember one rather humorous situation with Albers when four or five of my classmates and I pulled an "all-nighter" in preparation for a Graphic Design presentation. Around six in the morning, Albers walked into the Graphic Design studios. We froze in our tracks because we were not supposed to be in the department all night and we had been caught, and by the Department Head. He had his car loaded with drawings and, evidently, was looking for a janitor or someone to help him carry the work to his office. Of course, we jumped at the opportunity to help. As we went by him on the way to his car, he smiled and said how nice it was to find young men willing to come to school so early in the morning to do their work. He did not fool us. We knew he was aware that we had been there all night.

Albers was very Germanic in that he used himself to punish or reward students. On several occasions, I would pass Albers on the sidewalk and address him with a "good morning" or "good afternoon." He never acknowledged that he even knew me. Several of the graphic design students asked Albers if he would critique our work if we set up a noncredit painting class. He agreed to do so. When the class began, there were about nine of us. In six weeks, it was down to four who regularly participated. I was one of the four. The next time I met Albers on campus and spoke, he gave me a hearty greeting, put his arm around my shoulder, and asked me what all I was doing. I felt good all over.



Dorothy Yanik told me about one occasion with Albers when he asked her how her studio work was going? She said that it was terrible. Nothing was coming out the way she wanted. He smiled and said, "Good! Good!" Albers understood the role of frustration and struggle as an essential part of the educational process.

Albers was capable of incredibly intensity, and I think that, for some, it was intimidating. Each year when I would go back to Yale, Clancy, who was Albers' secretary, would always make certain that I was able to see him. I would go into his office and he would pull up a chair for me. We would be sitting almost knee to knee, and we would begin talking. After twenty or thirty minutes, I would leave with my head spinning. All the way back to Minneapolis, I would be trying to remember everything he had said. Sometimes, it was weeks before it was sorted out. Josef Albers was an incredibly intense individual.

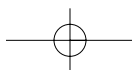
I have no idea whether it is true or not, but I did hear that there were times when Albers was upset and went to see Dean Smith. The Dean would hide behind his desk, and instruct the secretary to tell Josef that he was out. Knowing Albers when he was upset, I can easily believe this story, although it is extremely doubtful that it ever happened.

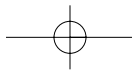
When Albers retired, Rico LeBrun, a West Coast painter, was appointed as Visiting Lecturer in Painting. A year after Albers left Yale, he was invited back to critique a painting class. A young teacher at Minneapolis recorded the critique, and I only heard the tape. It was apparent that he was quite disturbed by what students were doing in the new program. Also, some of the students had worked with him earlier, and he was not pleased with how they were currently being directed. At one point in his critique, he shouted, "Big brushes do not make big painters." You heard a young lady say, "What if your teachers tell you to use big brushes? His reply was, "Did you hear what I just said? PERIOD!"

On one occasion, when our critic in graphic design could not attend the class, we requested Albers to critique the work. The student work was pinned on the board, and Albers came into the room and began to examine the work. While looking over the work, he explained how teachers were like circus clowns that entertained the audience between main acts. The teacher was expected to walk into the room, look at the student work, and give a performance by telling them what was good and what was bad.

He said that he found this extremely difficult to do. Often, there was work that he would like to hang in his house for a week, a month, or even longer so he could look at it every day. Only then might he be able to give a constructive critique.

Albers then began to take each student's work and point out those places in the composition where the student had to make a visual decision. He talked about the decision they made, the result





of that decision, and what other options could have been explored. It was one of the most enlightening critiques that I ever experienced.

Albers talked about type only once. He recounted how, as a child in Germany, childrens' books were printed in different sizes of type. Each size dictated the tone of voice, with the largest type being shouted and the smallest being whispered. He suggested that we read advertisements using this method to see how ridiculous some of them were in establishing priorities.

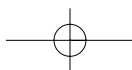
While I was a student at Yale, Josef Albers was invited to the Minneapolis School of Art for several days of meetings with the faculty and to lecture. I was asked to assist him while he was in Minneapolis. He never traveled by air, so he took the train to Minneapolis. I flew out ahead of his arrival, and picked him up at the train station. I was his companion, guide, and driver while in Minneapolis.

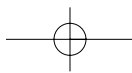
The one event that is still most vivid for me was Albers's meeting with the drawing teachers. They asked him to explain his drawing program. Albers clearly outlined his approach to, and sequencing of, a basic drawing program. The reaction to his views were that the program inhibited creativity. And what about expression, mood, and the role of emotion? Albers's reply was that emotion can bring the artist to the easel, get out the paints and set up, or to work all night, but it had little to do with the actual drawing or printing. He believed the artist must be lucid, critical, focused, and objective out of concern for imagery, and meeting the ends being sought. This required objectivity and not subjectivity.

The teacher became increasingly defensive, and began challenging Albers's views. Gustav Krollman, an elderly Austrian drawing master, was especially vocal. After a few moments of verbal attacks, Albers would listen to the comments and then say, "Gentlemen prefer blondes." This infuriated Gustav Krollman. After these exchanges had gone on for a few minutes, Gustav finally blurted out, "You damn Prussians are all alike!"

After the meeting was over, Albers wanted a break so we went outside and sat in the park. I asked him what he meant by "Gentlemen prefer blondes." He told me that he had fought these battles thirty years ago, and now that he was growing old, he must conserve his energy for more productive purposes. They asked for his views and he gave them. They disagreed, indicating that they preferred something else, so they should do what they preferred and he would do the same. There was nothing to be gained through argument, because it was apparent no one was open to changing their mind.

The longer I taught design, the more appreciative I became for Albers' color class. There have been numerous critics of Albers and his color course., largely by individuals who never took the course or truly understood it. The principal criticism was his use of color papers in place of pigments.





Albers's rationale was that the purpose of the course was for students to learn about color, and he did not believe they should have to cope with problems connected to brushes, mixing pigments, and applying color all at the same time. Imagery was always abstract because Albers wanted color to dictate quantities and, with representational images, content tended to dictate quantities.

Using cut and torn color papers was simple and quick. It allowed students to make considerably more visual decisions in the same amount of time than if they had been using pigment. He also liked the fact that each sheet of color was numbered on the back, and if more of that color was required, it could be identified and purchased at the art store by using the code number.

The process of laying one color against another was much quicker than mixing color, applying it, and waiting for it to dry. The more judgments students made, the more they learned. Albers's exercises were designed to make students explore and refine, which are positive learning processes.

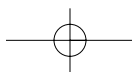
I believe that Albers always enjoyed seeing student work when it was put up for critique, but I am convinced that process was considerably more important to him than the end result.

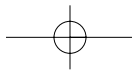
Over the years, I have known a number of individuals who took Albers's color course and later taught it. I never met two teachers that taught color the same, or exactly as Albers had presented the course. Yet, most of them were effective in that students understood criteria and objectives, and applied what they learned. The pattern seemed to be using Albers's problems in the beginning, and gradually substituting or adding problems of their own definition. Each teacher would personalize the course by emphasizing certain principles, or identifying different objectives. This certainly was true for me.

I recall Albers talking about the relationship between shape and color. His point was that, when studying color, all other elements such as shape should be subjugated. Active shapes, oppositional relationships, or other visual dynamics detract from what is happening with color. I am sure this was the reasoning for his "Homage To A Square" series, since the square is the most nonintrusive and static shape possible. Taking this point-of-view to heart, I guided students away from highly active compositions, and kept the emphasis on color.

I tended to see most of the free studies other than the leaf studies as landscapes. With both the free and leaf studies, I stressed composition almost as strongly as color. I found the course excellent for working with refinements, and developing student awareness of visual sensitivity through nuances.

Albers conceived color exercises within the framework of general principles. The principles never changed, but problem definitions varied from year to year, especially in the color course. Albers introduced a number of principles that, within my experi-





ence, were unique to him. These principles were clear and had broad application to visual areas other than his courses. The genius of Albers as a teacher is found in his ability to define learning principles, relate one to another or how one principle built on another, and defining criteria for each.

Teaching Albers Color Problems

At no time within my teaching career was I afforded the opportunity to teach the Albers color course as a separate class. The best I could do was to steal an hour a week from the design course, and teach a class with very restricted content.

Color interaction used three colors to appear as four, using two small squares with each centered on a larger square. A variation of the exercise using the same format was to make four colors appear as three. The most common difficulty for students with this problem was confusing color with value change. Sometimes, Albers would have students use the same format but work with values, i.e., make three values of gray appear as four, etc. I would sometimes have students do a twenty-step value scale for them to better understand that color also has value as well as density and hue, and value change is not the same as color change.

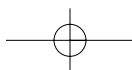
Albers told students that, when one color is laid next to another and nothing happens, color is not being used. The color change problems forced students into extensive exploration of color on color, and helped them to better understand color interaction.

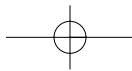
The “how much to how much” problem always began by Albers asking the class what two colors did not go together? After a few minutes listening to student responses, he informed them that there was no such thing as two colors that did not go together. It really was a question of how much of one to how much of the other.

Students chose two colors that they thought to be ugly in combination. First, they put down an equal amount of each butted up to one another. Using the same format, they searched for a quantity relationship that was pleasing or, at the least, less offensive.

The next part of the problem was identified as color climate, where students chose four colors and did four small compositions. By varying the amounts in each composition, the objective was to disguise the fact that the same four colors were used. Sometimes, the compositions were done as vertical stripes.

I found the “how much to how much” problem to be especially good for awakening latent student sensitivities. The exercise required a great deal of experimentation and refinement. The concept applied to other areas of design such as how much type to a page, how much drawing to how much white of the paper, how much line to how much shape, and so on. I found this exercise very effective in terms of students grasping its significance, and using it in a wide variety of applications.



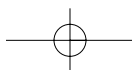


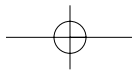
Color mixture most often was done as a stripe problem. Students selected three colors and attempted to create as wide a range of colors as they could using the optical mixture principle. Each of the three colors were included as a wider band to identify the base colors. This problem required a high degree of craft to assemble.

The color boundary problem was of extreme importance, because it allows designers to be precise in controlling the depth of elements in the picture plane. When one color butts another color, it forms a line. The line may be soft or hard according to values. Colors that are far apart in value create a hard line; colors that are close in value create a soft line. A traditional belief was that cool colors recede and warm colors advance. With the boundary theory, students discovered this was not true—it was really the boundary lines that determined spatial relationships, and not hues.

Our first problem involved selecting six squares, with three in one color and three in another, and an illusion of transparency. One set of squares overlapped the other. The area of overlap was done in another color, creating a smaller square with two boundary lines in each of the large squares. If the boundaries of the overlap that were within the top square were softer than the boundaries in the lower square, the reading was that of transparency with the large top square in front of the bottom square. If the boundaries of the overlap within the lower large square were softer than the boundaries in the large upper square, the reading was that of transparency with the lower large square in front of the square above it. The last step was to find a value that would make the boundaries of the overlap equal in hardness or softness in both the large squares. The reading would be of colors merging, and both of the large squares would appear to be on the same spatial plane.

The second part of the problem called for the selection of four colors of different intensities, and butting them against one another forming one large square. A small square was selected arbitrarily and positioned in the lower right corner of the top left block. Another color was selected that had the same boundary value as the first square. The process was repeated twice more. The objective was to create a boundary line around all four of the small squares that had the same degree of hardness or softness. Needless to say, finding the first three were relatively easy, but finding the fourth small square that had a boundary which was equal to both the square behind and the one above was nearly impossible. If you were successful, the integrity of a square formed by the four small squares was established. The square formed by four small ones appeared as a transparency. The check on this problem was to reverse the sizes of the large and small squares, and see if the boundary around the four small squares was consistent. I believe that Albers was much more concerned with students' exploration of this problem than with their success in finding the solution.





The boundary concepts were another example of principles with broad application. Hard and soft edges to place elements in space—including pencil lines in drawing—were a tremendous tool for the designer.

As students did each of the four principles, if I thought they were not understanding, they were required to repeat the problems until it was evident that the majority understood the objectives. As a check of student understanding, I often asked them do a free-study, demonstrating the principle.

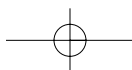
After the theoretical problems, students did free-studies without any teacher imposed conditions. Application of the principles are evident with some regularity in the free compositions. An interesting aspect of the free-studies came near the end of the course, when students had used all the colors of first choice and they did not want to buy another color pack. They began using colors that they probably would never have used, and the results often were stunning. I firmly believe that students working with the color pack were exposed to, and used, many color relationships that they would never have tried if they had been using brushes and pigments. I believe that Albers's color course truly broadened the students knowledge and use of color.

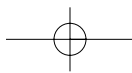
By the end of the course, most students had tremendous self-confidence regarding color. With the knowledge and experience gained from the color course, students were prepared to move into mixing pigment, using the brush, and applying color to any artistic endeavor.

I am convinced that the students' realization of the relativity of color, and understanding the definition of problem objectives and criteria; combined with the ease of exploration using cut-and-torn color paper; plus the flexibility of the color course which could be absorbed into personal terms by a wide range of individuals with different tastes and objectives reflects the genius of Albers as a teacher.

Those individuals who were never students of Albers or actually did the exercise within a classroom context cannot possibly understand the value of Albers's pedagogy through reading a book or simply looking at the illustrations in *Interaction of Color*. Albers's teaching had to be experienced to be appreciated.

This how I remember Josef Albers, the man and the teacher.





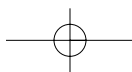
Endnotes

It is my impression that Albers's retirement was not entirely a voluntary decision on his part. I suspect that he was undercut by some colleagues and fine art students while he was in Europe for the State Department, working on establishing a new Bauhaus at Ulm. It was my observation that the School of Art was riddled with political dissension for a number of years following his retirement. The crux for disagreement seemed to be between advocates for instruction based on perceptual emphasis and those with other views. By 1958, the New York School of Painting was a growing force, influencing many fine arts students. Because Albers was associated with the Bauhaus, it was decided by a few that he was "out of date." The new Rudolph building was a huge disappointment to Albers. I heard that his comment regarding the new facility was "That building spits on me!" It certainly sounds like something Albers might say.

I believe that Albers was badly misunderstood by many during his day, and since then. Most people associate Albers with squares, when his real contribution was instructional pedagogy and his role as a teacher. Visual educators, as a whole, have failed to recognize or benefit from what Albers unmistakably demonstrated to be a valid and effective educational model. Some of the more important lessons to be learned from Albers and the Yale program that have been ignored are:

- Only the best and most experienced teachers should be assigned to the first year of studies.
- Identifying and respecting what can and what cannot be taught.
- Perceptual understanding as the basis for introductory studies.
- Capitalizing on Albers' pedagogy of process, values and what constitutes learning experiences.
- Strict limits on enrollment.

It is tragic that changes in visual education that could have come about because of Albers did not. Because of the oversight, countless students in visual arts all over the country for many years have been denied the education they believed they were receiving.



Drawings by Rob Roy Kelly.

Rob Roy Kelly on drawing

During the early 1980's while in Pittsburgh, I felt the urge to resume drawing. I had not drawn or made a print for more than twenty years. I have always identified with subject matter taken from nature. In almost all instances, imagery is conceived in my mind and not done on location. I have always worked best when doing sequential work within a theme. Since I was still involved with burls, a great deal of time was spent tramping through the woods, and this was the source for this series of drawings.

There were several concerns; one being to make visible the invisible. For me, nature has always been vibrant, vigorous with constant movement of agitation. At other times the concept was silent, still, dark and somber—just a hint of mystery. Yet another point-of-view dealt with nature as patterns or textures—almost decorative at times.

I have always been fascinated with drawing nature using symbolic marks in place of more representational imagery. It is a kind of shorthand using a variety of cryptic marks with each representing some specific aspect of natural forms.

