

# Barragan's *Homage to Albers*

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Luis Barragan's placement of ruggedly textured modern planes creates understated interior spaces and exterior gardens. These quiet spaces demonstrate his skill and ingenuity in both the manipulation of light on the defining surfaces and in the design of the exterior, horizontal water features. In one restrained exterior space' marked by two sizable unadorned walls, a shallow water pond with its underlying coarse rock surface fills the frame. A view of the jungle beyond seen through juxtaposed openings in one of the walls and amplified by reflections on the water contrasts with the stark space within the courtyard. This surreal scene is pictured with an unassuming horse and its trainer quietly moving past one of the walls. The serenity of this space is puzzling and seemingly contradicted by Barragan's hallmark, the application of bright color to the vertical surfaces.

Barragan's use of architectural color highly saturated with pigments is attributed to the climatic conditions and cultural milieu of Mexico, specifically the colors painted on the facades of vernacular buildings and particularly the paintings of Jesus Reyes.<sup>2</sup> A study of Barragan's works reveals color refinements that transcend these influences and which could be explained by his two-decade friendship,<sup>3</sup> in the 1950s and 1960s, with artist, educator and color authority Josef Albers. Examining the role of the acknowledged influences and emphasizing certain refinements will illustrate the color influence of Josef Albers on Luis Barragan.

To distinguish Albers' unique contribution to Barragan's work with color, Barragan's other sources should be clearly stated. In the clear atmosphere of Mexico, the white sun<sup>4</sup> fades the landscape to somber earth tones, and there is a two thousand year tradition of using brilliant color. This color usage preference is seen in the art and decoration of the ancients, the Mexican costumes and clothing, their popular arts and the color painted on their buildings<sup>5</sup>. Art historian MacKinley Helm reports that "the earth tints traditionally used on the walls of adobe houses in Mexican villages, [are] pinks and blues, grays, faded greens and violets."<sup>6</sup> And further, Tim Street-Porter states that the little colonial town of Tlacotalpan, reportedly a favorite of Luis Barragan, has houses painted red, green, blue, yellow, pink, or purple.<sup>7</sup>

While the use of highly charged color is contextual, when one examines the color ensembles produced by people working independently of each other, the crafts and vernacular buildings show an absence of the cohesive schemes of Barragan.

Equally important as the environmental influences are the interests he acquired from his friends. Barragan's designs were not intuitively derived but based on scholarship and intelligent conversations. There is ample evidence that Barragan's choice of hues and color theories was influenced by his associates and his knowledge of the ideas and paintings of other artists. Raul Ferrera, who worked with Barragan for the last sixteen years of Barragan's life, described Barragan's thoughtful and informed work as "...scientific: mental; conscious and sentimental"<sup>8</sup>. Ferrera's comments that Barragan "...discusses the work accomplished..."<sup>9</sup> and "...Luis Barragan also sought the advice of his friends..."<sup>10</sup> verify his involvement with other designers. Barragan himself freely admits his source of ideas about color comes from people other than himself and mentions names such as "de Chirico, Balthus, Magritte, Delvaux and Chucho Reyes."<sup>11</sup> Barragan reveals repeatedly that Chucho Reyes is a source of great inspiration and influence.<sup>12</sup>

After the 1910 Mexican revolution, certain Mexican artists", Chucho Reyes included, promoted a national art that elevated and built upon the traditional crafts of Mexico as opposed to adopting the latest artistic import from Europe.<sup>14</sup> Painter and decorator Reyes was a friend and collaborator of Barragan and a superb colorist who drew inspiration from Mexican crafts and traditions. Reyes and Barragan, both from Guadalajara, shared an interest in producing a genuine Mexican art and architecture that are both spiritual and diverse in their expression of the feelings and emotions that are the mark of the Mexican culture. Reyes was instrumental in helping Barragan identify and develop the ingredients of the national architecture for which Barragan is recognized as the first to form. Barragan credited Reyes<sup>15</sup> with many of his key ideas such as the use of gridded wood screens on windows, the design of the famous stairway in Barragan's own house, and the color advice or approval, and

in some cases hue selection, for Barragan's projects.

However, in comparing the interiors of Reyes' house and Barragan's houses, it is clear that Barragan transformed his friend's ideas into his own quiet, restrained style. Compared with the cohesive and understated Barragan work, Reyes' design work is eclectic and cluttered. Although Barragan was an admirer of Reyes and freely used many of Reyes' suggestions, in the refinement of those ideas, he is much more attuned to the taste and interest of another friend, and thus far unacknowledged influence, Josef Albers.

To understand Albers' association with Barragan, one should examine Albers' background and experience in Mexico. After German Bauhaus artist Josef Albers moved to the United States to teach at Black Mountain College and later at Yale University, he visited Mexico thirteen times over his lifetime for extended periods. His first Mexican visit in 1936 reportedly awakened his preoccupation, as an artist and an educator, with color theory.<sup>16</sup> It was during this visit that Albers departed from creating highly controlled, monotone woodcuts and produced his first paintings using an extensive palette of hues.<sup>17</sup> From this period on he engaged in a lifelong study of color that culminated in his publication of the classic text, *Interaction of Color*,<sup>18</sup> consisting of descriptions of exercises that he and his students used to better understand and see color.

Albers' fascination with pre-Columbian art and with the rich and primitive Mexican art involved him in the cultural life of the country and brought him into contact with many of its artists and architects, one of whom was Luis Barragan. In the 1941 book, *Modern Mexican Painters*, author MacKinley Helm cited Albers' opinion about Mexican artists several times.<sup>19</sup> In 1968, Ricardo Legorreta, an architect who was greatly influenced by Barragan, was sufficiently aware of Albers' work to base the design of a vertical landscape screen at the Camino Real Mexico City on one of Albers' squares.<sup>20</sup>

Prior to his friendship with Albers, Barragan's very early architectural work featured the use of natural indigenous materials and white colored painted surfaces. His use of color was confined to very small accents. Barragan's fascination with color grew in the early years of friendship with Albers in the mid-1950s, and shortly after Albers, who had just concluded the *Variant* color series, started work on the *Homage to the Square* series. As a result of their close friendship, Barragan received two of Albers paintings as gifts. Both of the paintings were from the *Homage to the Square* series, one of which is displayed in Barragan's living room.

Barragan, it is interesting to note, did not conceive his designs in color. After his projects were built, and when his interest for color was awakened in the 1950's he would browse through his favorite art books looking for a color scheme<sup>21</sup>. Once he decided on the hues he would have a painter apply the color to large sheets of cardboard that were then attached to the uncolored walls. He left the color in place for several days. He might move the color to other

locations or even change the contrast until he felt decisive enough to paint the actual walls.<sup>22</sup> Looking carefully at the color and studying its effects is a method promoted by Albers.

### COLOR BOUNDARIES: SHARP OR MERGING

Both Barragan's earlier architectural color applications featuring hues that produce sharp light and dark contrast and his later incorporation of hue adjacencies with identical light intensity parallel the development of the color theory of painter Josef Albers. Albers' early *Homage to a Square* combined warm centers with cool backgrounds, and later he selected hues for the *Squares* that were contiguous to each other on the color wheel. In Barragan's architecture, the contrasting hues separate the building elements, and with the use of hue adjacencies, Barragan creates merging, indistinct boundaries. The photographs of Barragan's work<sup>21</sup>, document this change well because differing color schemes for the same project were included in a project presentation.<sup>24</sup> So it has to be viewed as intentional that Barragan allowed the documentation to be gathered that illustrates his changing interest from the early use of high contrast to the use of hue adjacencies.<sup>25</sup> The high contrast projects that were later changed to hue adjacencies are best illustrated in Barragan's own house and in the Satellite City Towers.

Barragan's house was photographed extensively when it was a newly built and a totally white composition. Later, colors were added to the space. The changes can be viewed in photographstaken over the years. The walls of the exterior roof garden have changed from only white walls to white

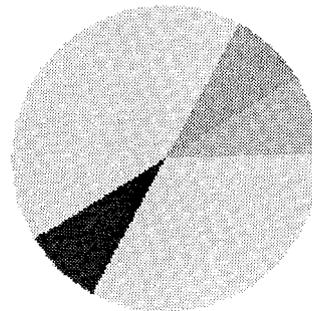


Figure 1. Diagram of color wheel illustrating hue contrast.

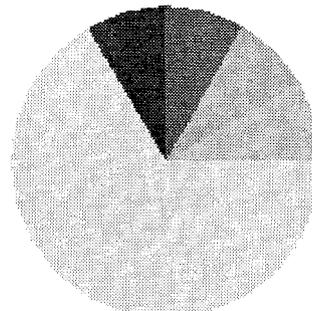


Figure 2. Diagram of color wheel illustrating hue adjacencies.

walls with one orange wall which contrasted against the blue-gray paving. Later another wall was painted pink, an adjacent hue. The interior space better shows his later interest in hue adjacencies: the walls surrounding his famous red-brown stairs started as white but were then changed to hot pink; a red-orange carpet was added to the space.

The best illustration of color schemes changing from hue contrast to hue adjacencies is the Satellite City Towers. The five towers designed in collaboration with artist Mathias Goeritz in 1956 were originally painted in hues that featured hue contrast. The original colors chosen by Chucho Reyes<sup>26</sup> with Barragan's approval were cream, yellow, terra cotta, and blue and were based on the polychromatic colors of the Aztec culture. The towers were often repainted since the harsh sunlight of Mexico easily fades the color and Barragan recommended painting every two years.<sup>27</sup> The hues were changed during one of the repaintings. This time the hues were adjacent to each other -- red, red-red-orange, red-orange, and orange -- all at the same intensity. It may be that Barragan felt yellow, cream and blue could be eliminated because there was hue contrast against the blue sky. These two examples illustrate Barragan's growing preference for hue adjacencies, which follows the same sequence and preference of Albers.

The fact that Barragan's later work incorporated many examples of hue adjacencies suggests this had become his favorite color scheme. Illustrations of this can be seen in the use of red-orange, orange, and yellow-orange in the Chapel in Tlalpan done in 1952-55, the orange-red, orange, orange-yellow, and orange-brown in the gardens and fountains and the surrounding wall at Las Arboledas done in 1958-61, rose, orange-rose, and brown rose at Los Clubes done in 1963-64, as well as the purple-red, purple, and rose at San Cristobal Stable, Pools and House done in 1967-68.

### HUE ADJACENCIES AND COLOR BOUNDARIES

Color schemes that utilize adjacent hues have an interesting effect when their boundaries seem to touch each other. This contact appears to blend the edges making the boundaries indistinct. Several of Barragan's projects, particularly the

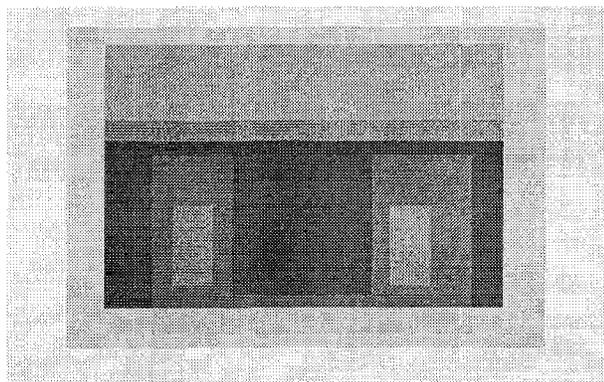


Figure 3. Diagram of Josef Albers' *Variant*: *Brown, Ochre, Yellow.*

exterior spaces, are three-dimensional manifestations of Albers' *Variant* series.

Albers' compositions appear to be a series of overlapping rectangles: one rectangle has two openings within it that frame the color that is behind, and one rectangle appears to be transparent and changes its hue as it overlaps the different colors of the other rectangles.

These effects are best illustrated at the San Cristobal Stable, Pools and House in Los Clubes, Mexico City, which Barragan designed in 1967.

In this project the shapes of his architectural frames surround or overlap the forms, imbedding, as in one of Albers' paintings, one color within another creating indistinct boundaries. Beyond just the color influence of Albers, Barragan's work reflects Albers' *Variant* composition in other ways.

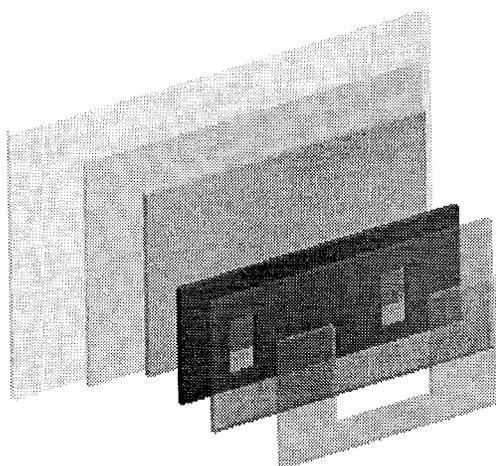


Figure 4. Diagram showing exploded view of rectangular planes in the *Variant*.

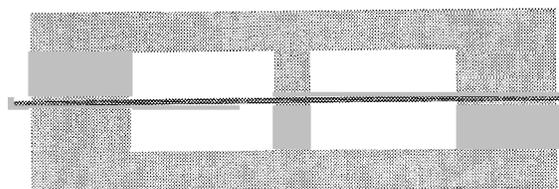


Figure 5. Diagram of wall at San Cristobal Stables

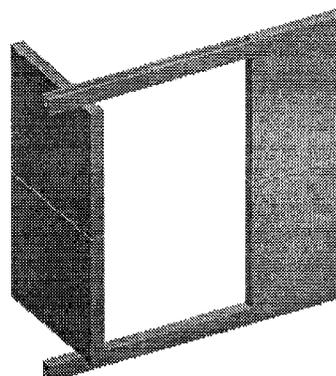


Figure 6. Diagram of fountain at Los Clubes.

Cubistic spaces are formed by Barragan's dramatically colored vertical planes, which create the foreground, and middle ground, and acknowledge the view beyond. These planes promote a frontal stance that compresses and foreshortens space in a similar manner to Albers' painting compositions.

### HUE ADJACENCIES AND COLOR INTERSECTIONS

The Chapel of Tlalpan represents a more complex and unique achievement in the use of hue adjacencies. The color scheme in this project is a warm and placid combination of hue adjacencies. Incidentally the combination of hues -- red-orange, orange, yellow-orange -- is very close to the combination of hues in one of the paintings that was a gift from Albers and that is hanging in Barragan's living room. One wonders if the painting affected Barragan's architectural work or if perhaps Albers was aware of Barragan's preference for this combination and Albers felt that this particular painting would be especially relished.

To understand the work done at the Chapel, one needs to know why Albers was so fascinated with the hue adjacencies. A combination of hues that are next to one another on the color wheel makes an attractive and harmonious ensemble. But Albers looked for more of a challenge than mere aesthetic appreciation. The highly intellectual Albers was interested in achieving color "intersections."

Nicholas Fox Weber defined the "intersection" and its role in the *Homages* in the following way:

It is the process by which a correctly selected color lying between two other colors takes on the appearance of both of those colors. When colors properly intersect in a three-square *Homage*, the color of the innermost square will appear toward the outer boundary of the second square out. The color of the outermost square will also appear within the second square, toward its inner boundary.<sup>28</sup>

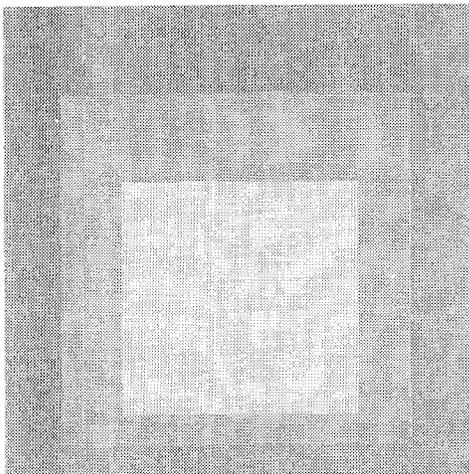


Figure 7. Diagram of Josef Albers' *Homage to the Square* series.

Albers explains that in this illusion, "The middle color plays the role of both mixture parents, presenting them in reversed placement."<sup>29</sup> Barragan achieves reversed placement at the Chapel. In the Chapel in an alcove to the left side of the altar, a freestanding red-orange wooden crucifix stands in front of a wall painted the same hue. To the right of the crucifix and wall is another wall painted a yellow-orange. Left of the crucifix and wall, and hidden by another wall in the chapel which sets forward of the crucifix, is an outdoor light source that is filtered through the panes of a yellow stained-glass window, designed by Mathias Goeritz. Left of this window is a yellow diagonal wall, hidden from view from the chapel. This wall has the effect of amplifying the yellow hue cast from the window.

The stated intention with this grouping is to take advantage of the changing light from the sun's diurnal path which will cast an interesting, dramatic, traveling shadow from the crucifix across the altar. But so much more is achieved. When there is no direct sunlight entering through the yellow stained-glass window the back wall is the same color as the crucifix, and the crucifix dissolves against the wall. The light hitting the wall lightens the color, and the crucifix jumps into view, drawing the viewer's attention to its presence. The hue on the left boundary of the red-orange wall behind the crucifix takes on the hue of the orange wall to the right, and a color "intersection" is formed. In this case a literal mixture from the light that passes through the yellow stained-glass onto the red-orange wall creates a yellow-orange tint.

Another rich color example occurs in the altar's gold-leafed triptych designed by both Barragan and Mathias Goeritz. This effect does not fit in with any of Albers' exercises. In this instance, Barragan could have taught Albers a new color design device. The roughly-textured gold surface has a deep, dynamic mixture of reflected color from the surrounding elements and space. The changing light cast on the gold along with the changing perspective from the viewer's movement through space creates the surface dynamics. Colors from the walls and the dark brown floor mix together and spill across each other's changing boundaries. This slowly moving perspective with its suggestion of a spatially deep and moody darkness promotes the solemn introspection of the viewer.

### OPAQUE COLOR MIXTURE: THE APPEARANCE OF TRANSPARENCY

The project that makes the strongest argument for a direct influence of Albers' theories on Barragan's designs is Barragan's last project, the Casa Giliardi which was designed in 1976. The commission to design this house follows the lengthy friendship between Barragan and Albers. The house features a dining room that is the most opulent part of the house and the location for entertaining business acquaintances of the owner. This space is located on the ground floor, and it is the terminus and focus at the end of an interesting sequence of circulation spaces. The first view of

this space is a sky-blue wall illuminated by an opening to the sky above and on axis to the circulation gallery which precedes this space. The sky opening casts a changing strip of light on the wall. A wider view of the space reveals a pool of water that is surrounded on two sides by the blue wall, made even more brilliant in its contrast with the white walls of the dining room. Barragan has made the point that the blue wall refers to the bright blue sky above.<sup>30</sup> Off center, freestanding and forward from the blue wall, is a shorter width, bright red wall<sup>31</sup> which stands in the pool of water and supports the other side of the skylight opening.

At this point, Barragan departs from his usual application of color. Barragan made several previous examples of walls that sit in water. The colors of the walls in those examples remain the same above water and below. As those walls emerge into the blue-green water there is really no discernible change in their color. But in the instance of the Giliardi dining room walls, Barragan explores an Albers' example of "interaction of color." Albers makes an opaque colored paper seem transparent when he makes it appear that the opaque paper passes over another piece of opaque color of a different hue. And in the area of the intersection the hues appear to mix creating a third hue that is a combination of the other two. Barragan employs this idea and emphasizes the overlay of the transparent blue-green water with the opaque colored walls by literally changing the hue at the bottom of the wall that is in the water to a third hue, a yellowish-pink, and thereby making it appear that the colors mixed and produced a hue that is a combination of the red and the blue-green water.

The bottom of the blue wall appears to be painted a slightly greener-blue as does the bottom of the white wall which appears to be painted blue-green. This color treatment is a more complex and elaborate composition utilizing the appearance of seven hues, one of the largest palette of colors used by Barragan in such a small space.

Emilio Ambasz explains the change of hue on the column below the water line "As water corrode[ing] the proudest of

columns..."<sup>32</sup> However, it is difficult to imagine that Barragan, who usually produces serene, spiritual designs, would desire in this instance to suggest the destructive wearing away of color by chemical action, and it does not explain why the same eroding illusion is not duplicated on the other walls that touch this biting water. It is more logical and in character with the designer to believe this effect is an architectural model of the color overlaps of Albers.

## CONCLUSION

The predominance of Albers' influence on Barragan is an enticing speculation. There is clear evidence that there was a close relationship, and that Albers' influence on Barragan was profound. Their color work must have been the center of lively discussions between two old friends, who both valued the contributions of color so dearly. Even when Barragan worked independently from Albers, Albers' instructive comments about Barragan's choice and use of color provided valuable insights which assuredly informed Barragan's future projects. Albers taught a generation of artists and architects about color. He must have wondered how and if the conservative color work of the architects was influenced by his instruction. It had to be gratifying for Albers finally to see vividly his two-dimensional color exercises translated so brilliantly in Barragan's architecture.

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## NOTES

- <sup>1</sup> A photograph, by Armando Salas Portugal, of San Cristobal Stable, Emilio Ambasz, *The Architecture of Luis Barragan* (New York: MOMA, 1976) 92-93.
- <sup>2</sup> Anibal Figueroa, "The Context of Luis Barragan's Mexican Architecture," *Center* (1987): 42-48.
- <sup>3</sup> For verification of the length and time of the friendship, I am indebted to Mexican architect architectural historian and educator Javier Gomez Alvarez Tostodo, who has done extensive research on Barragan.
- <sup>4</sup> Ambasz *The Architecture of Luis Barragan* 5.
- <sup>5</sup> Figueroa 43.
- <sup>6</sup> MacKinley Helm, *Modern Mexican Painters* (New York: Harper, 1941) 28.
- <sup>7</sup> Tim Street-Porter, *Casa Mexicana: The Architecture, Design, and Style of Mexico* (New York: Stewart, Tabori & Chang, 1989) 30.
- <sup>8</sup> Raul Ferrera, *Luis Barragan: Capilla en Tlalpan/Mexico* (Mexico City: Sirio, 1980) 11.
- <sup>9</sup> Ferrera 11.
- <sup>10</sup> Ferrera 11.
- <sup>11</sup> Luis Barragan, "Color Confessions by Contemporary Architects" *Daidalos* Mar. 1994: 29.
- <sup>12</sup> See for example, Barragan 29.
- <sup>13</sup> A list of other Mexican artists that promoted and drew from Mexican traditions include painters Diego Rivera, Jose Clemente Orozco, David Alfaro Siqueiros and Rufino Tamayo; musicians such as Carlos Chavez and Silvestre Revueltas; poets such as Carlos Pellicer, Jorge Cuesta, Jose Gorostiza; and writers Juan Rufo Alfonso Reyes, Octavio Paz, Juan Jose Arreola; photographers such as Manuel Alvarez Bravo, and sculptors like Francisco Zuniga; and architect Luis Barragan. Mario

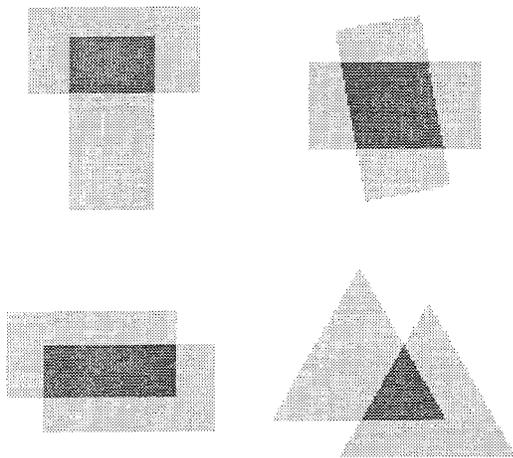


Figure 8. Diagram illustrating color mixture in paper-illusion of transparency.

- Schjetnan G., "Luis Barragan: The Influential Lyricist of Mexican Culture," *Landscape Architecture* Jan. 1982: 69.
- <sup>14</sup> See Helm 1-20.
- <sup>15</sup> Barragan acknowledged his debt and gave a posthumous tribute to Reyes in his address following Barragan's award of the Pritzker Prize in 1980. The wording of this tribute is included in Street-Porter 144.
- <sup>16</sup> Nicholas Fox Weber, editor, Mary Emma Harris, "Art Education at Black Mountain College", *Joseff Albers: A Retrospective* (New York: Guggenheim, 1988) 51.
- <sup>17</sup> Weber 51.
- <sup>18</sup> Josef Albers, *Interaction of Color* (New Haven: Yale UP, 1963) 1-77.
- <sup>19</sup> Helm 115, 178, 180.
- <sup>20</sup> Albers' used squares and cubes as the subject of many of his paintings. Wayne Attoe, *The Architecture of Ricardo Legorreta* (Austin: Univ. of Texas UP, 1990) 52.
- <sup>21</sup> Barragan 29.
- <sup>22</sup> Barragan 29.
- <sup>23</sup> Almost all photographs of Barragan's work have been taken by Armando Salas Portugal, *Armando Salas Portugal Photographs, Barragan* (New York: Rizzoli, 1992) 50-65, 98-105.
- <sup>24</sup> Portugal 98-105.
- <sup>25</sup> It has to be assumed that Barragan approved of the appearance of a project that he allowed to be photographed for publication, particularly the colors that appear in the photographs of Portugal. It requires cooperation between the architect and the client to notify the photographer at the appropriate moment to get the desired image. Colors fade and are changed. The colors must be fresh and vibrant and the building and grounds tidy. If Barragan had not liked the color scheme, presumably he would not have had the project rephotographed at that time.
- <sup>26</sup> I am indebted to Javier Gomez Alvarez Tostado for this information.
- <sup>27</sup> Barragan 29.
- <sup>28</sup> Nicholas Fox Weber, "Artist as Alchemist," *Josef Albers: A Retrospective*, (New York: Guggenheim, 1988) 44.
- <sup>29</sup> Albers 38.
- <sup>30</sup> Emilio Ambasz, "Casa Francisco Gilardi, Mexico City; architects: Luis Barragan and Raul Ferrera," *Progressive Architecture* Sept. 1980: 141.
- <sup>31</sup> The choice of the blue and red was inspired by a painting by Chucho Reyes. Ambasz "Casa Gilardi" 141.
- <sup>32</sup> Ambasz "Casa Gilardi" 141.