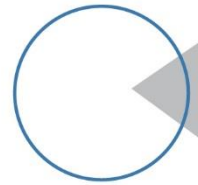


RESEARCH AND DESIGN IN ARCHITECTURE TODAY



OCT 15, 2017



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FROM SKETCH TO SKETCH

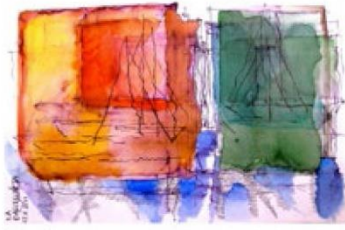


Image 1 - Barcelona in my mind" -
Watercolor -Barcelona 2011

Introduction

I have always had an obsession with sketching. By searching for patterns of lines and patches of colors, I have discovered a refuge for the essence of life. Naturally, those drafts were changing hues, peeling back deep layers of mysteries, a path to discover the magical world of architecture. Drawing as a way of reading the world is ancient. When facing carbon sketch studies of the human body produced by the hands of Michelangelo, we perceive the light that emanates from his paintings, the morphological struggle of his architecture and, certainly, the immortality of the beauty transmitted through his sculptures.

Inquiring in the realm of sketching is not a tool of graphic representation, but a way of running between two parallel events. The city scaled to the human step and the vastness of the mind thus become generic tools for researching architecture. Through the endless space of the mind and driven by the total freedom that produces fantasy, boundaries are never reached (Image 1). When those fantasies turn into spots of color on the thirsty pages of a sketchbook, and time freezes it, they turn into new places.

Precedents

Zaha Hadid

Zaha Hadid designed controversial buildings. While studying at the Architectural Association in the 1970s, she drew a series of abstract drawings that reinterpret the Suprematist compositions of Kazimir Malevich and El Lissitzky. As she pointed out, "the Russian avant-garde offered me a reservoir of yet-untested compositional innovations that were full of complexity and dynamism. The Suprematist composition [...] experimented with the interpretations of forms rather than maintaining their neat separation [...] I added to this the ideas of distortion and gradient transformation."¹ Zaha Hadid's sketchbook became a laboratory for exploring new spaces. It was a platform beyond the two dimensions of the page. Through perforations, cuts and collages between pages, she created layers of colors and reflection. Hadid explains, "building and programs need to break open and embrace each other, even interpenetrate. This requires spatial complexity and openness. This is the meaning of my first compositional strategies: explosion and fragmentation."² Thanks to her infinite talent and the high technology of the twenty-first century, we can walk through those spaces today.

Louis I. Kahn

In Hirato Koyoma's words: "great individualists always appeared as a consequence of the struggles they had with their own periods. Their appearance, in turn, resulted in the birth of new periods in history. Those outstanding individuals. . . always surpassed their own period's achievements."³ Louis I. Kahn was looking for a new language in architecture. Through texts based on Martin Heidegger's thought, Kahn introduced a new way of relating to the discourse on the decline of modernism: "You say to brick, 'What do you want, brick?' Brick says to you, 'I like an arch.'" Thus, Kahn introduced a poetic layer and a deep understanding of how architecture should be.

Kahn, accompanied by his sketchbook, embarked on a journey that led him far away from North America. Those mute pages were filled with sketches in pastel and ink, nets of lines and colors seeking out light, images of what he found inside the ruins of such stately empires as those of the Egyptians, the Greeks and especially the Romans. Michael Graves recalled Kahn telling him, "Michael, I've tried and tried ... to make the wall thinner and thinner ... and it wasn't until I went to Rome... that I finally felt that I was at home with architecture."⁴ Years later, at the dawn of his mature period, Kahn stated, "the pyramid, echoing silence, gives the sun its shadow."⁵ Forms and colors from those early travel sketchbooks emerged in Kahn's work.

David Wisdom, who was a principal architect at Kahn's office for many years, repeated an illuminating anecdote that Kahn once mentioned regarding his concept of live architecture: "I talked all the time while I sketched." Explaining Kahn's theories or principles, Wisdom recalled, "His words and his pencil went over and over the design, in an almost endless exuberance."⁶

Research Process

The design process I propose to research takes place in three parallel worlds, which are linked through the sketch.

First: The City

Exploring urban spaces with a sketchbook in tow develops two basic skills, namely sight and perception. As John Ruskin remarks on the importance of these two skills, "I believe that the sight is a more important thing than the drawing ... the excellence of an artist, as such, depends wholly on refinement of perception."⁷ Thus, drawing the city as it appears to the eye, as a free interpretation of that reality, results in lines and colors on the white pages.

¹ Zaha Hadid, "The Way Forward," *Architectural Review*, April 2016.

² Ibid.

³ Hirato Koyama, "Louis I. Kahn and His Times," *A+U*, November 1983.

⁴ Michael Graves, "Thoughts About Louis I. Kahn," *A+U*, November 1983.

⁵ Christian Norberg-Schulz, *Louis I. Kahn, idea e imagen*, y J.G. Digerud, 1981.

⁶ David Wisdom, "Worked at Louis I. Kahn Office," *A+U*, November 1983.

⁷ John Ruskin, *The Elements of Drawing* (New York: Wiley & Halsted, 1857), xi.

Second: The Drawing Desk

Sitting in an interior space, at a desk filled with white paper, watercolors and pencils, going through reinvented sketches and imagining abstract worlds, stimulates open minded research. As Michael Graves made clear, "I'm personally fascinated not just by what architects choose to draw but also by what they choose not to draw."⁸

These sketches turn into personal interpretations, provoking new questions. In Graves's words, "It is not likely to represent reality but to capture an idea."⁹ And again, "Drawing by hand stimulates the imagination and allows us to speculate about ideas, a good sign that we're truly alive."¹⁰

Third: The Mind

Sketching allows us to explore the endless space of the mind. It grants us access to a world of imagination and fantasy. As Neil Leach points out, "fantasy creates its own fictions not as a way of escaping reality, but as a way of accessing reality."¹¹



Image 2 – "Rubinsky House, Hagilboa 1 - TLV" Watercolor



Image 3 – "DNA - TLV" – Watercolor

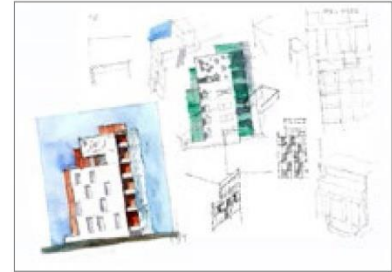


Image 4 – "Sketch studies, Anew wall' HAM 79" Watercolor

Case Studies: Four Personal Design Projects.

HAM 79 Housing

Analyzing the HAM 79 project, we can identify two topics that generate the design process. There is, on the one hand, personal sketches, which function as a platform for investigating questions and languages. On the other hand, there is the need to rethink what David Leatherbarrow calls "the surface of the architecture." The existing building dates back to the 1930s, and is located in the historical center of the original Geddes Plan for Tel Aviv.¹² The program called for an addition of two new floors with a penthouse at the top and a complete renovation of the building. The HAM 79 project mainly deals with the common issue of how to renovate the facade of those numerous white boxes of the 1930s. Or, symbolically, how to re-clad those buildings "dressed in white" with a new dress?

Adolph Loos pointed out that "to be dressed correctly ... is to be dressed in such a way that one stands out the least."¹³ The real goal is to "sew a new dress," appropriately white and new, but inconspicuous.

Personal research begins with the study of the surrounding streets, with a particular emphasis on the better pieces of architecture next to the existing building. Like a pendulum, sketches swing from drawing pieces of the city (Image 2) to painting abstract watercolors that suggest a new form for the White City (Image 3). Eighty years after the heroes of the Bauhaus age sealed its eternal image, the city is an endless fountain of inspiration and fantasy. Walking, drawing and breathing, the city gives the light that turns on the desire to confront those early attempts to design.

In David Leatherbarrow's words, "Once the skin of the building became independent of its structure, it could just as well hang like a curtain or clothing."¹⁴ The new independent skin, made white again as a tribute to the modernist box, embraces the old building, generating new forms of wall fenestration and (Image 4) emphasizing what Leatherbarrow describes as "Cladding history [...] intersected with the history of the window."¹⁵ Where it touches the street's surface, the skin opens itself, subtly allowing those glass boxes that contain two small commercial spaces to engage the pedestrian realm, the symbol of a good host. When this skin extends beyond the last existing floor level, it encloses space for new dwelling units. There the new skin allows interior spaces to define a new architectural language, introducing a new material: metal. The existing balconies that were untidily closed since the early days by tenants will be renovated with white panels that allow control over personal levels of privacy and the streams of light that wash the interior space. (Image 5)

⁸ Michael Graves, "Architecture and the Lost Art of Drawings," New York Times, September 1, 2012, accessed May 1, 2017,

⁹ Ibid.

¹⁰ Ibid.

¹¹ Neil Leach, Forget Heidegger (Bucharest: Paideia, 2006).

¹² Patrick Geddes (1886-1932) was a biologist, sociologist and town planner. He submitted a master plan for developing Tel Aviv, which has become known as the "Geddes Plan for Tel Aviv."

¹³ David Leatherbarrow and Mohsen Mostafavi, Surface Architecture (Cambridge, Mass: MIT, 2002).

¹⁴ Ibid.

¹⁵ Ibid.



Image 5 – "HAM 79 render"

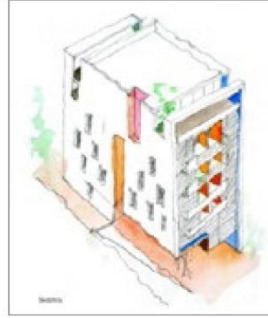


Image 6 – "Preliminary sketch" Watercolor

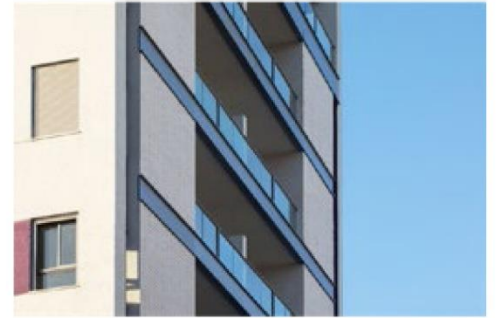


Image 7- "HSL 18" – Picture: Tal Nisim

HSL 18 Housing

The question that arises from the HSL 18 project is how to find an architectural language for housing, using a simple, low-cost new box. How should we deal with the banality of repetition? How should we deal with the repetition of the same window that illuminates the dormitory and the same glass doors that open to the same balcony on each floor?

Everything takes place between the edges of the sketchbook. Drafts abound in the pursuit of these questions as they become two separate but related topics: the return of ornamentation in the language of housing projects as a generous tribute to the public realm and the almost intuitive decision to use color as a source of identification. Luis Barragán clearly defined color as a complement to architecture, since it appeals to the human eye and other senses. A series of watercolor sketches led the way to discovering how to use "color as the most subtle and bodiless of converting material," as Gottfried Semper¹⁶ defined it. A dialectic develops between the white side walls of the building and the ornamented street facade. The color takes the role of mediator, breaking the repetition and rationality of the building (Image 6). As David Leatherbarrow explains, "The use of cladding [...] should be understood as a result of three sorts of criteria: the requirements of the interior settings, those of the street or urban situation, and the practices of the craftsmen who built the building by shaping its materials."¹⁷ First sketches range from an image of the whole composition to separate studies of each component. Texture, colors and details are juxtaposed at each stage, creating a series from which the final image emerges. Sketching naturally leads to a defined image of the entrance porch, a space that belongs to the city and the inhabitants of the building. Finally, color subtly climbs and seizes the rooftop apartment as a natural gesture to the blue sky. Inside the apartments, the master bedrooms are rewarded with a stain of color. Bricks, used as a surface appliqué, cover the balcony wall (Image 7), bestowing a "sense of home."

Aharoni House

At the Aharoni House, the habitable volume enters into dialogue with the swimming pool. Drawing a series of sketches (Image 8) facilitates an understanding of the place by reproducing each object in its immediate context. These preliminary drafts lead to new questions concerning the precise spot of the intersection of the house and pool, the appropriate balance between full and empty and the relationship between framed views from the perspective of those who inhabit the space and those who visit. Issues of depth, transparency, reflection, color, light and shadow are brought into play. Those sketches finally convert the meeting point between the habitable volume and the water cube at the house gate into a deep perception of the garden's home. (Image 9)

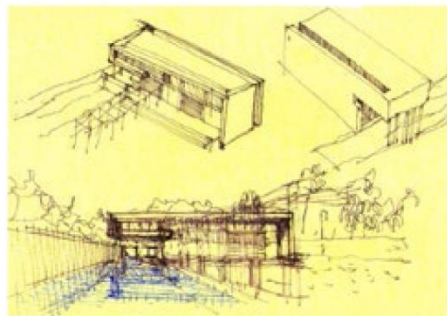


Image 8 – "Preliminary sketch" Ink and marker.



Image 9 – "Aharoni House" – Picture" Amit Geron

¹⁶ Ibid.

¹⁷ Ibid.

NEZ Housing

The NEZ Project introduces a dialectic between the desert landscape and the human habitat (Image 10). Naturally, drawing the environment as a primary creative act is to find the sense of place, the "genius loci," to dwell in the desert. The project calls for the design of single-family houses with generous common areas as well as the use of innovative materials suitable for the environment. Environmental sketches lead to a series of watercolors (Image 11) ranging from abstract drawings to architectural ones. Three-dimensional sketches bring forth, as a starting point for the design process, a primary act of digging in the fresh sand as a refuge instinct. Slowly, the drawings become two-dimensional compositions in which habitable voids and cloisters become sections, almost architectural ones. While time will clarify this sense of inhabiting, in the interim it is conveyed through a series of drawings, plans, sections, detailed drafts of patios, water mirrors, porches and roofs as the fifth façade.

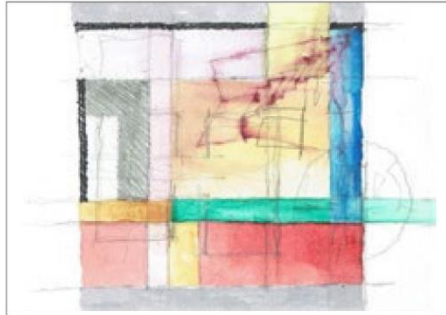


Image 11 – "Preliminary sketch" Watercolor



Image 10 – "Deseret's living room" – Render: Studio 84

Conclusion

As architecture is, according to Alberto Campo Baeza, "the Built Idea,"¹⁸ it should not be based on purely formal responses to rigid regulations and functional programs. Daily professional practice must be developed in parallel layers in a search for innovative topics that challenge the mediocrity of current practices.

Free experimentation with color, ink line studies or even carbon sketches of light and shadow, liberated from the rules of art school, increases the sense of freedom, of an endless world of fantasies, and defeats the fear of being wrong when the first stain appears on the white sheet.

Sketching as a way to discover a new architectural language offers a path that can encourage the next generation of architects to transcend bureaucratic limitations. It is a good way to create a built environment in which human beings begin to feel at home, recalling Walter Benjamin's concept of mimesis as "a way of finding meaning in the world, through the discovery of similarities."¹⁹

Indeed, a sketch is an illusion. It has a life of its own. In a sketch there is a primary ingredient that does not exist in reality. The realistic space emerges as a struggle between light, technology and material, as they define the human sense of shelter. Indeed, these are separate yet overlapping worlds. By inquiring into those overlapping points, I believe we can generate architecture.

¹⁸ Alberto Campo Baeza, *The Built Idea* (Shinzen: Oscar Riera Ojeda Publishers, 2015).

¹⁹ Leach, *Forget Heidegger*.