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## Square Abstractions and the Double Neutral in Guillermo Jullian's Venice Hospital Church, 1966

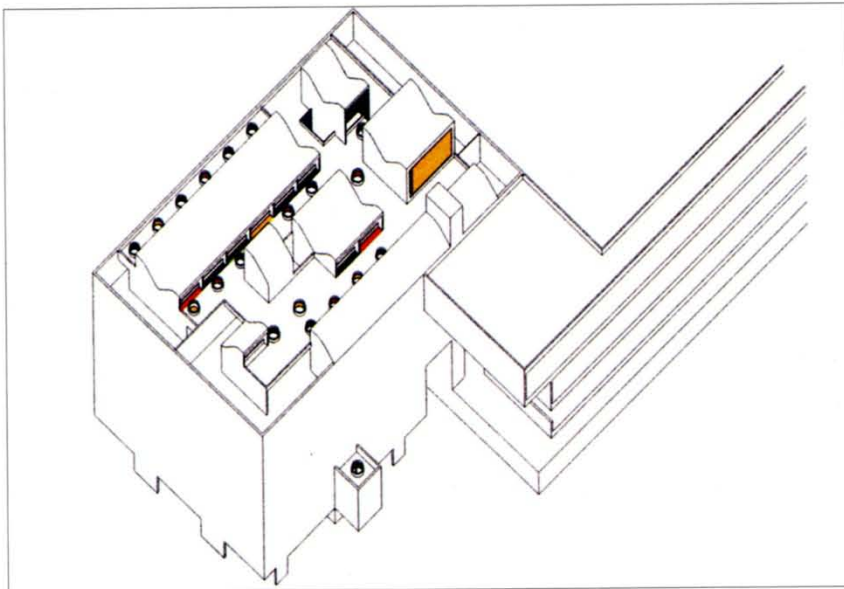
**PEDRO IGNACIO ALONSO**

### 1. THE VENICE HOSPITAL CHURCH

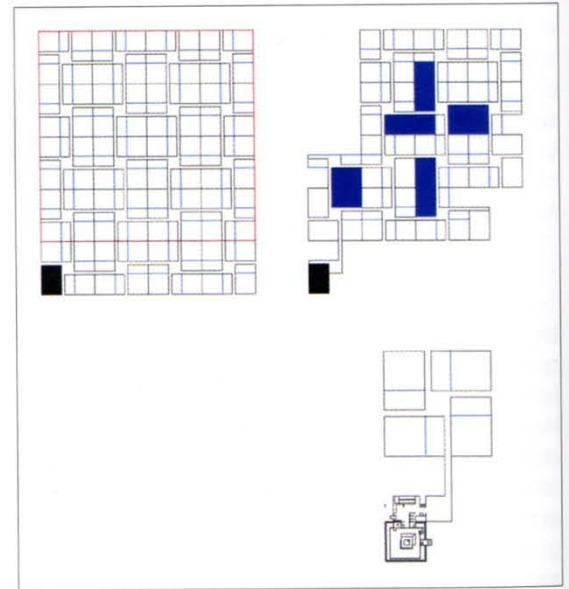
When Le Corbusier died in 1965, the project for the new Venice Hospital was incomplete, and its church no more than an indication of a simple volume. As well as developing the project for the following five years, Guillermo Jullian de la Fuente had to complete the fragment of the Hospital that had been left as a mere sketch. This required the design of the entire building, taking care on the links between the Hospital and the city, its internal articulation, and its symbolic and liturgical relationships (fig. 1). This fact could be considered of no minor significance since the Venice Hospital has been referred to as Le Corbusier's testament<sup>1</sup>, densely containing the main architectural themes he had proposed and developed throughout his entire career. It was Jullian who had to introduce these themes into that blank volume.

The Venice Hospital was to be located in the San Giobbe area, extending horizontally out over the lagoon, and its 13.66 m height offers continuity to the city's general skyline. Le Corbusier planned to introduce the most significant architectural relationships existing within Venice into the project: the way buildings relate to each other both in sequences and superimpositions, the delicate relationship between land and water, the visual trajectories, the materials, the colours and the incidence of light, the reflections, and the relationships between public squares and streets (*calle e campielli*) that define Venice's urban fabric.

The Church was to contain similar kind of relationships. Isolated at one extreme, a volume of 28.8 m long, 20 m width, and 13.66 m height, fixes its position, size and internal subdivisions with the architectural structure of the Hospital. In its version of 1966 (for 800 beds) it was structured out of 14 'construction units' (*unité de bâtisse*). Each one of them was square in plan and subdivided on a proportional ratio taken



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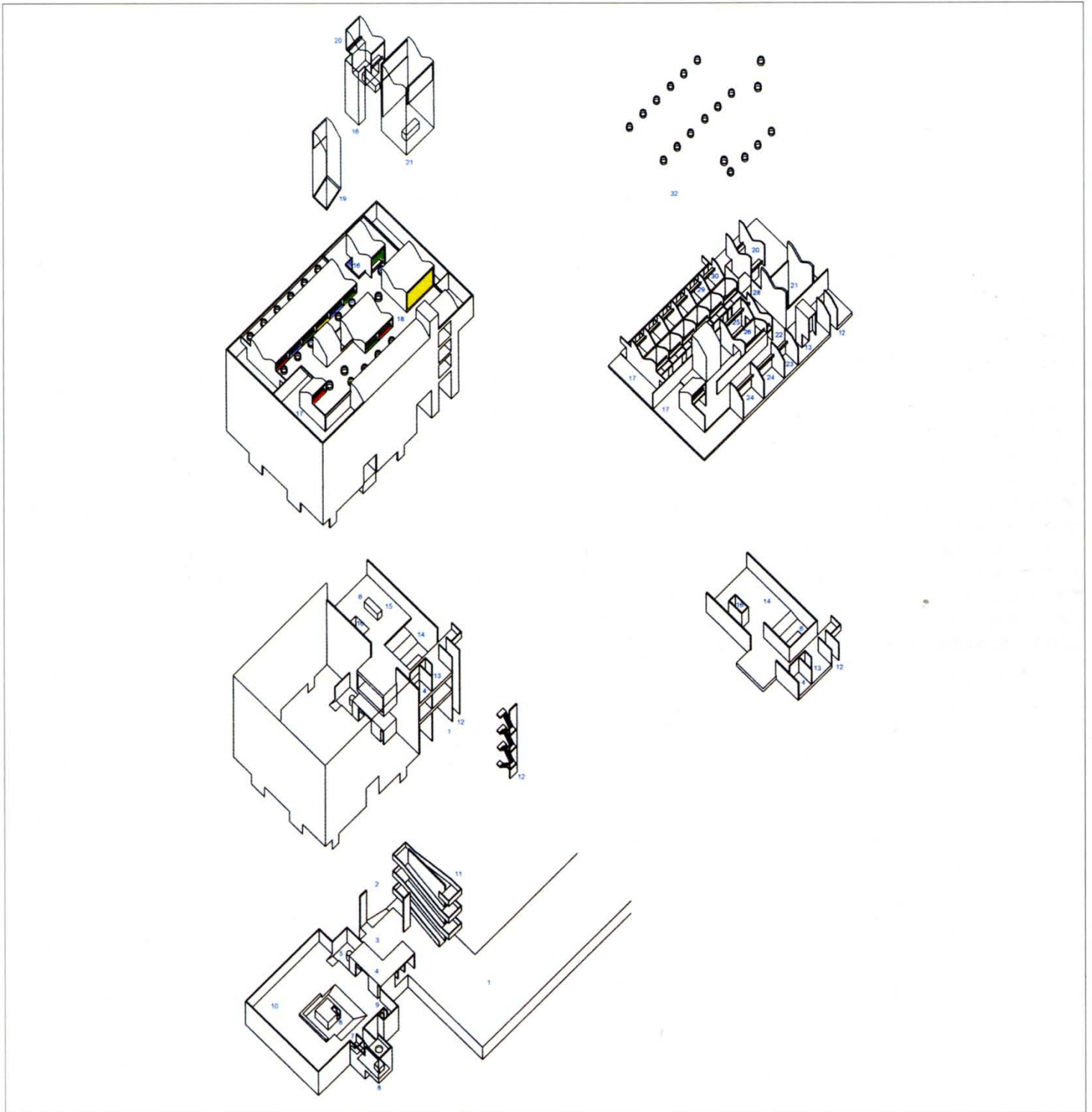
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—1 "The hospital is a kind of witness in which Corbu introduces all his principles and theories [...] It is a whole life, but this is the work that orders everything" Guillaume

1 Isometric drawing of the Venice Hospital Church. Drawing by the author.

2 Venice Hospital scheme; scale relationships between the Hospital and the Church. Drawing by the author.

3 Isometric drawing of the Venice Hospital Church. Drawing by the author. 1. Fondamenta / 2. Access from gondolas / 3. Access to the Church / 4. Sacristy / 5. Baptistry / 6. Altar / 7. Pulpit / 8. Chapel and Altar of the Holy Sacrament / 9. Confession booths / 10. Assembly / 11. Ramp / 12. Stairways / 13. Elevator / 14. Sisters' Chapel / 15. Patients' Chapel / 16. Shaft / 17. Garden / 18. Roofs' Deck / 19. Skylight over the Altar / 20. Skylight over the Patients' Chapel / 21. Skylight over the Sisters' Chapel / 22. Access to the priests' rooms / 23. Parlour / 24. Priests' rooms / 25. Services / 26. Kitchen / 27. Salon / 28. Access to the friars' rooms / 29. Friars' rooms / 30. Water rooms / 31. Common room / 32. Skylights spread across the roof's deck.



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Jullian de la Fuente in conversation with Amedeo Petrilli. In: Amedeo Petrilli, *Il testamento di Le Corbusier. Il progetto per l'Ospedale di Venezia*. Venezia: Marsilio, 1999.

from the Fibonacci series, as developed in The Modulor. The plan of these units formed a *swastika*, containing four *streets*, a public *square*, and four smaller *cure units* (28.8 x 20 m). The plan of each of these units, in turn, was subdivided into a square (20 x 20 m) and a minor rectangle (20 x 8.8 m) also considering a proportion coming from Fibonacci (fig. 2). All these measurements and proportions were then translated into the Church.

The Church defines its volume by walls of reinforced concrete and extending *pilotis* into the water. The external regularity of it contrasts with the complex interior that can be understood as an ensemble of parts within a complex program articulation (fig. 3).

The third level is comprised of the priest's house, the nuns' rooms and shared spaces. These elements turn the roof of the project into a landscape of surfaces and colours, like in the rest of the Hospital (fig. 4). The levels that in the Hospital's general structure contain the floors of medical technology and services, are in the Church dedicated to the nuns' Chapel and the patients' Chapel respectively. These allow the simultaneous, yet autonomous, celebration of different religious rites, forming a body that hangs over five meters in height, generating the atrium. This is where the sacristy, the entrances (on foot and from the lagoon) the stairways and the elevator are to be found. The façade facing the hospital contains minor chapels, and directly relate with the ramp that opens up the volume and connects every level to the Church. Both chapels seem to hang from the third level, facing the main nave of the Church by an elongation that acts as the key to the ensemble composed of the three enclosures (fig. 5). Within this relationship between interlocking pieces and overall design, three deep shafts of light open onto the altar and a fourth introduces light and colour into the atrium (red, yellow and green). Outside, the pieces are integrated into a landscape of roofs and inside they serve as the setting for the deck within the empty interior of the church and its minor chapels.

One the most remarkable features of the Venice Hospital Church is the mismatch between ground and volume, allowing the Venetian lagoon to enter the building, with the constant jolting of tides, sound, and the infinite, mobile reflections that are projected onto the inner walls (fig. 6). The Church's ground floor corresponds to the city's extension of artificial territory that once again projects into the Adriatic. The *fondamenta*, which extends along the water, reaches completion in the square nave of the Church. As with Venice, the ground conquered determines its own topography. The wall that limits the nave is the edge where the city ends, and, in the mismatch between it and the building's volume, a horizon of light fundamental to the space projected by Jullian is generated. Being 1.83 m in height according to the *Modulor*, and painted on the outside, this wall defines a dark base that contains the body, and the horizontal line it establishes is marked by the juxtaposition of darkness and the light of the blue-tinged reflections that penetrate the building (fig. 7).

Light topographic inflections articulated by tiers, slopes and pitches create diverse relationships with the horizon of light that holds the assembly. From the entry, one goes down a small ramp into the baptistery before rising again. After descending through a gentle slope towards the choir, the altar emerges like a cubic mound that can be climbed in few steps. Within Venice, the topographic trajectories, paths, and shifts generate a kind of occupation. As in Jullian's reference to the city of Valparaiso, where the constant process of climbing and descending multiplies the understanding of the horizon, in the Venice Hospital Church the design projects a horizon based on a cosmic, elemental relationship with the light reflections of the lagoon that at certain times of the day, at certain points in the sun's course and seasons, enters the building itself.

The main altar, slightly displaced from the center of the space, seems to emerge from the ground. It rises just where a deep reddish skylight penetrates the volume from above. The rising ground and the descending vertical reddish

skylight contrast against blue-tinged light of that horizon. The crossed point of intersection is occupied by the priest. Toward one side, the chapel of the Holy Sacrament emerges from the volume. The space expands, transversally oriented by the light and colour of the small chapel. Similarly, the altar (in line with the entrance) extends along the nave towards the atrium. Shafts of light, green and yellow strike the altars of the patients' and nuns' chapels (fig. 8). The position of these chapels, which appear above the nave, generate distances. The depths of the seemingly centralized church expand in every direction, blending into shadows, light and colours in a range of planes and distances, crisscrossed, and always in reference to the position of the altar, which serves as an anchor, fixing space to one point.

In the Hospital, a system of colourful mobile metallic elements was intended to reflect light onto each room. The interior rings of the zenithal openings that cover the project's pathways were painted, creating a colourful sort of atmosphere along the way. As for the whole Venice Hospital, light is matched with colour: in the clerestories that crown the hospital as well as in the hallways or skylights that penetrate into the Church's volume. It is likely that at this point Jullian would have added colour to the inner surfaces, as Le Corbusier did in some of the walls of La Tourette's church. This would produce a double palette, "that of primary colours and the shades resulting from the light that reaches them [...] Thus there are moving colours and colours as fixed points."<sup>2</sup> If a red inner wall were to receive the blue-tinged moving reflections, at certain times of the day the colour of the wall would range through many shades of violet. One palette of fixed and the other depending on the changing light within the building constant chromatic change; this, not only in terms of intensities, but also in the appearance of mobile, eventual, circumstantial chromatic sequences.

Colours within Le Corbusier's approach possess characteristics that explain the function of light within Jullian's project:

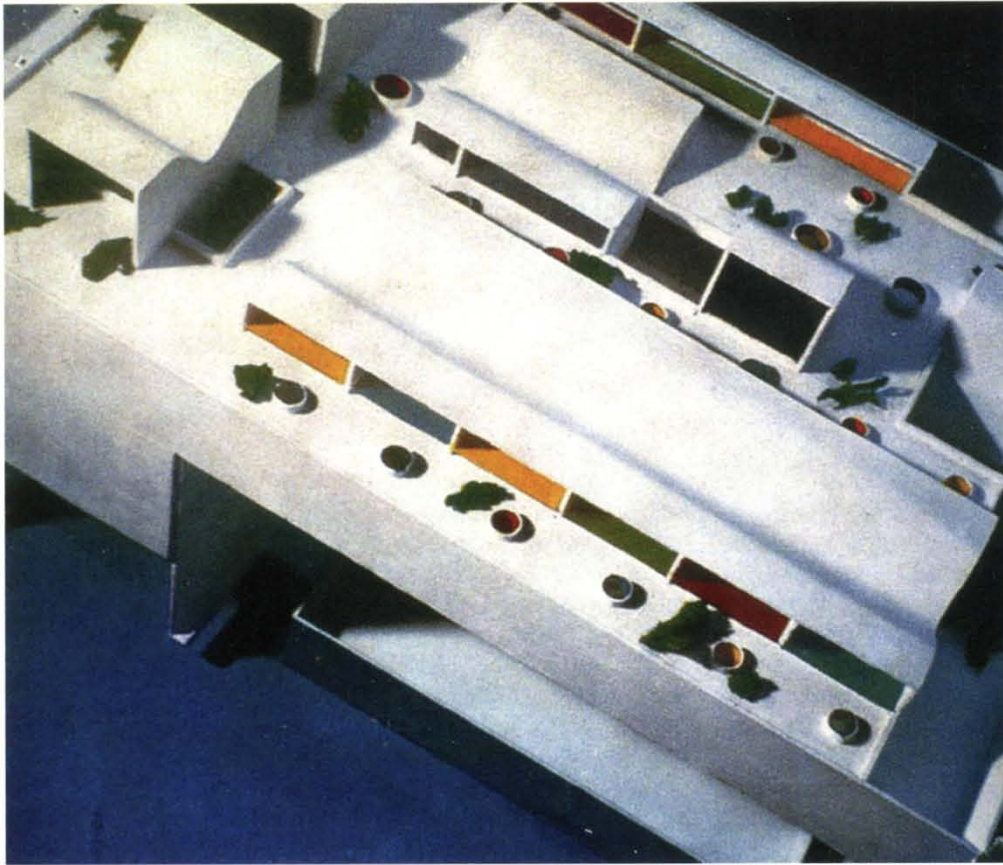
Blue and its combinations with green create space [...] produce atmosphere, distance the walls [...] remove the sense of solidity [...] Red (and its combinations of brown and oranges) fixes the walls, affirms their exact position, their size [...] blue is space, while red fixes the project.<sup>3</sup>

From this we would understand the function of the shading blue projected onto the inner walls of the main volume, as well as the function of the reddish light coming down as skylight over the altar.

Together with this, and following the experience of the Philips Pavilion<sup>4</sup>; or as Le Corbusier had thought for the Firminy-Vert church or the Carpenter Center; hidden speakers would flood Jullian's church with electronic music. Located along the service passageway outside the lower wall that contains the assembly area, sound paths would spread through the building, reverberating on different planes, at different depths, through different materials, according to Le Corbusier's ideas on acoustic matters.

In this sense, the Venice Hospital Church, with its colour-flooded shadows, windowless, tries to move the senses with a particular intensity. This is not an abstract work just in geometric terms, but in the way its different elements appear in a pure state; light and colour, earth and water; sound. Light penetrates from above or below in relationship to the water; fixed or in movement, diffuse, composed of primary colours. Water is perceived without being seen, by smell and hearing. Music is not a melodic element, rather it forms part of the atmosphere, coming in waves that move through the integrity of this emptiness, expanding into its depths. Red provides a vertical focus, a reference for the movements of light, sound, and body that move through the place, shifting positions and levels in relationship to a horizon. The space is conceived through movement. Symbols attempt to reveal themselves as a sequence of physical sensations, turning into a series of elements linked to the liturgy in a total spatial experience, of noteworthy density, that affects the senses in this abstract, small universe projected by Jullian.

*Architecturale: Le Corbusier Farbenklaviaturen von 1931 und 1959.* Basel: Birkhauser, 1997. p. 99. —<sup>4</sup> In the Philips Pavilion was performed the Electronic Poem by Edgard Varèse.



4 Original Model of the Venice Hospital Church, 1966.

5 Assembly sequence of the Venice Hospital Church. Model by the author.

6 Isometric drawing of the Venice Hospital Church, ground floor and external volume. Drawing by the author.

7 Ground floor, blue wall and staircase in the Venice Hospital Church. Model by the author.

8 Roof and Patients' chapel in the Venice Hospital Church. Model by the author.

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## 2. DOUBLE NEUTRAL

In this project, square and cube were not seen just as ideal forms, but also as the *form becoming neutral*. This reminds El Lissitzky – in reference to Kazimir Malevich – for whom the square was considered the zero of all form and all painting. He says:

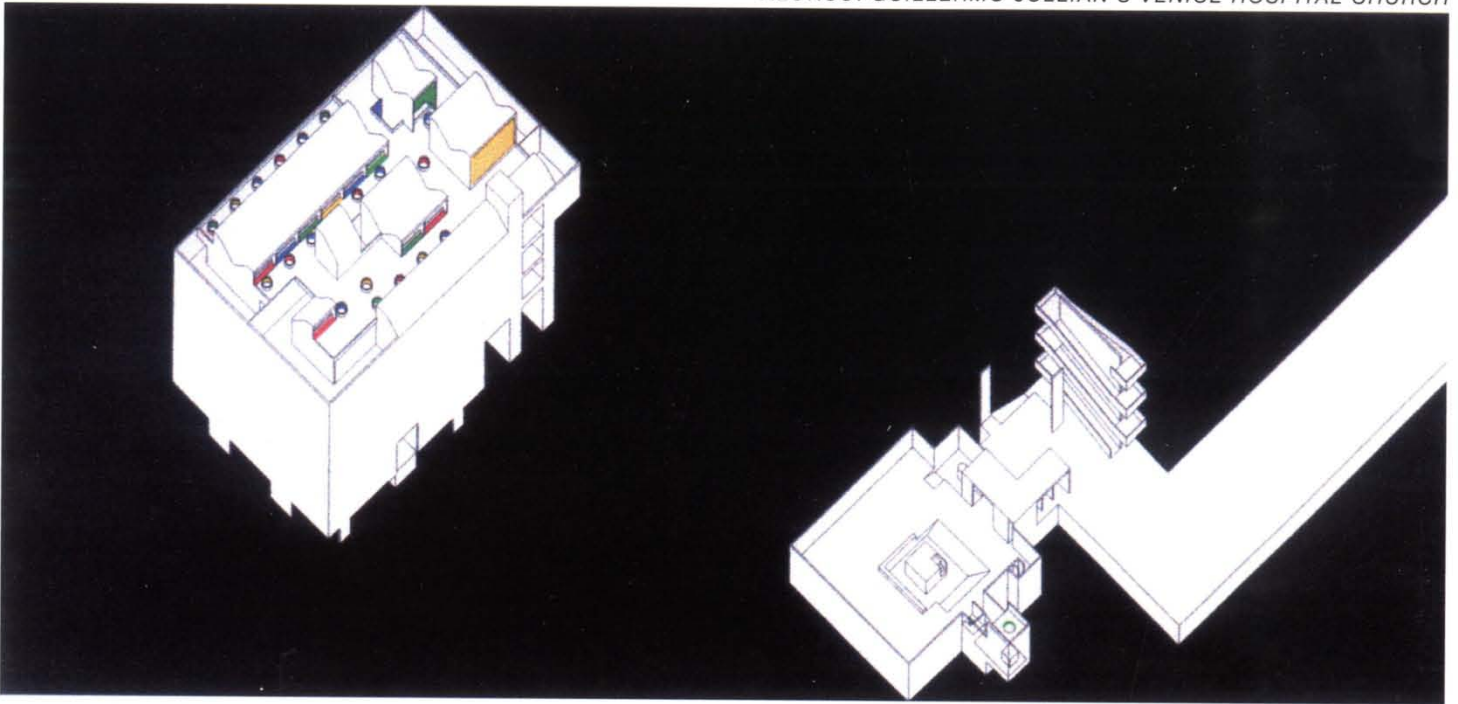
In 1913 Malevich exhibited a black square painted on a white canvas. Here a form was displayed which was opposed to everything that was understood by 'pictures' or 'painting' or 'art'. Its creator wanted to reduce all forms, all painting to zero.<sup>5</sup>

Consequently, "suprematism extolling the square as the very source of all creative expression."<sup>6</sup>

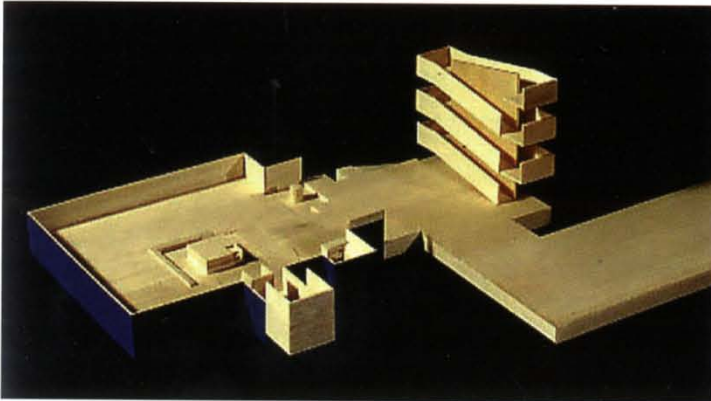
The square becomes the foundation-stone for *the new spatial construction of reality*<sup>7</sup>.

In a different way, this attitude could be seen in the work of Jullian's former professor at Valparaiso, Alberto Cruz. Cruz's design for the Capilla de Pajaritos (1953) was conceived from the intersection of seven cubes of different sizes (fig. 9). The main one was thought to be a cube of light, non geometrical or of perspective, but creating *the church of the absent form*, "la iglesia de la forma de la ausencia."<sup>8</sup> In this project, light was called to dematerialize the building, dissolving its mass, reinforcing lightness. Within the line of thought pursued by Cruz and the Valparaiso's School at that time, the cube came to be external circumstance to the act of praying. Although it was never built, this project was of great influence within

—5 El Lissitzky, "New Russian Art: a lecture, 1922". Typescript from the Lissitzky archive, Moscow. Translated in Küppers 1967 p. 337. —6 El Lissitzky, "Suprematism in world reconstruction, 1920". Typescript from the Lissitzky archive, translated in Küppers 1967 p. 331. —7 Ibid. p. 338. —8 Alberto Cruz, "Memoria Capilla de Pajaritos". In: *Fundamentos de la Escuela de Arquitectura de la Universidad Católica de Valparaiso*, 1971. —9 Guillermo Jullian de la Fuente. Interview with Pedro



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Chilean architecture, and should have been referential for Jullian, who by 1953 was student at Valparaiso.

Through the square, and its related cube, form is thought to be suppressed, neutralized, absent; reduced to be the zero, the basic unit of art and architecture. This is fundamental for Jullian, since "What matters are the relationships, not the elements. That is why the neutrality of the square."<sup>9</sup> Going back to Lissitzky, "a relationship is formed between the individual parts. This relationship had to be organized."<sup>10</sup> The connections between Jullian's paintings and the plan of the Venice Hospital Church are proposed precisely in these terms. It is all about relationships of parts that, beyond form, are represented by the neutrality of the square, and form becoming absent (fig. 10).

In 1919, Theo van Doesburg had proposed the following statement:

A unity is created, a rational harmony through the geometrical relationships of areas of colour. Because of that, each one of the surfaces and each one of the colours is attributed a function to fulfil, which is that of contribute no longer to natural harmony, but to that of aesthetics, this is, a harmony achieved from the relationships of reciprocity between planes and colours, within a constant variation of position and dimension."<sup>11</sup>

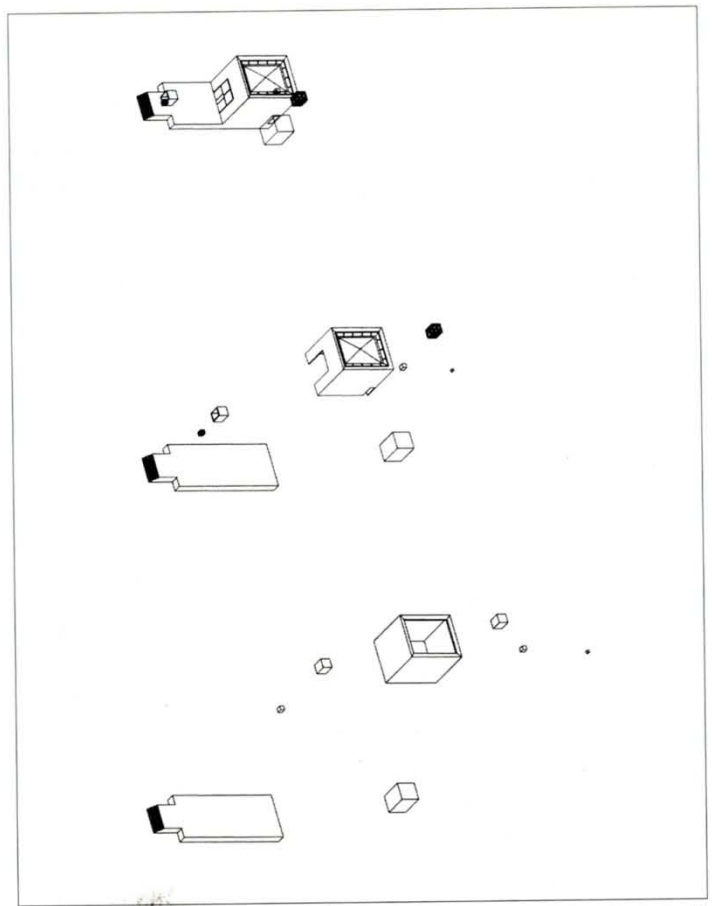
In Jullian paintings (resembling Mondrian and Van der Leck's work<sup>12</sup>) squares of all sizes and in different colours spread across the canvas. Within the architectural plan, they

Ignacio Alonso, 1st September 1999. Charlestown, Massachusetts. —<sup>10</sup> El Lissitzky, "New Russian Art...", cit., p. 338. —<sup>11</sup> Theo Van Doesburg, "About the way of seen the new painting", *De Stijl*, February 1919, II, n. 4 - In: *De Stijl 1, 1917-1920*. Complete Reprint 1968. Athenaeum, Amsterdam, Bert Bakker, Den Haag and Polak & Van Gennep, Amsterdam. p. 42. —<sup>12</sup> Such as e.g.: Piet Mondrian's *Composition in Colour B* of 1917; or Bart van der Leck's *Composition* of 1918.

organize a series of relationships, densities, juxtapositions, repetitions, focal points, and spatial fields. The colours coded the program and its specific functions<sup>13</sup>. Whether or not this was coming from Malevic, Lissitzky, De Stijl or Alberto Cruz, the square as the neutral form seems to escape Le Corbusier's insights in the way the plan of the Venice Hospital church was conceived by Jullian. Yet, the notion of 'form' as the external circumstance of an intelligible, ideal world, seems well established in Le Corbusier's thought when he proposed he had brought Venice into the Hospital and that "The external successes is nothing but a consequence."<sup>14</sup>

It opens another stream of discussion, one that considers architecture as a permanent dialogue with other cities, buildings, experiences or situations, qualities captured by Le Corbusier's in his *Carnets de Voyage* since 1911. The direct observation of reality and the discovery of phenomena, registered and developed through rough sketches, become a fundamental architectural concern in the possibility of re-introducing these observations into new projects and configurations. In Jullian's scope, this process is accomplished through square abstractions.

In this context, together with Corb's idea of taking Venice as a model ("the city of Venice is there, I've followed it. I've invented nothing"<sup>15</sup>); Jullian had established a dialogue with the churches of Santa Maria in Cosmedin in Rome<sup>16</sup>, and Santa Maria dei Miracoli in Venice, among others. From there, a number of issues were brought into the Church, such as the notion of a crossed section, the expansion of space; the relative autonomy of elements, and the focusing of space by the emergence of punctual elements within specific horizons of perception. Also we found a reference to the manner in which body, movement and horizon work in the Chilean city of Valparaiso: architectural concerns that were later rearticulated into new relationships represented by the square as the zero of creative phenomena: *architecture becoming its representation*, the outcome of a system of

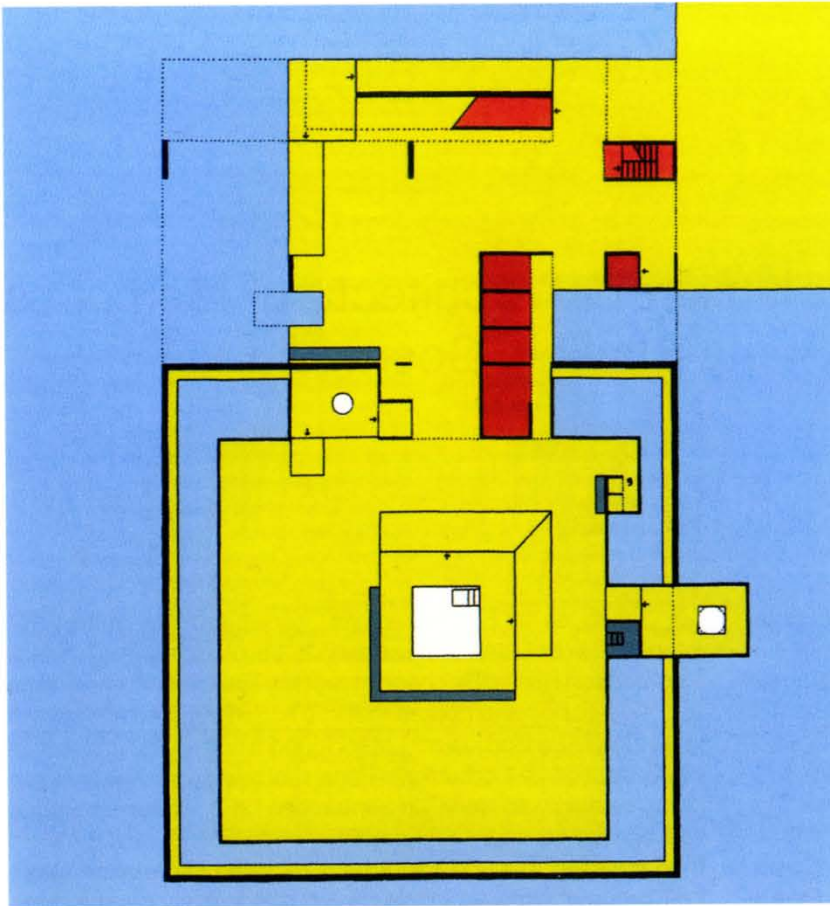


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square abstractions which, as Malevic and Lissitzky thought, will bring a complete new world of objects, not a natural harmony, but the harmony of aesthetics (Van Doesburg).

But the neutrality of form is followed by the neutrality of matter; which, against *Brutalism*, proposes different kinds of intellectual connections. Any technical concern in the use of materials should be regarded as an attempt to hide the concreteness of matter. This, behind a wider range of effects within a building that was meant to be constructed out of light, sound, colour and trajectories of movement. Building techniques were not reckoned in celebrating themselves, as a pure manifestation of technological means but on the contrary, *le béton brut* is explored as it would become neutral, to support the abstract universe designed by Jullian. In this case at least, the central ambition is not, as Reyner Banham proposes, *to construct moving relationships out of brute materials*<sup>17</sup>, but to construct an absence, dissolving mass throughout light and colour, to become the abstract support for a number of spatial effects and moving relationships conceived, they thought, beyond (and before) form and matter.

—13 Yellow (pedestrian pathways); orange (specialized or medical pathways); red (patient's rooms or priest's cells); blue (medical sectors, surgery rooms); beige (ramps); grey (mechanical circulations); violet (public squares); grey (fixed elements, furniture). —14 Le Corbusier quoted by Giuseppe Mazzariol in "Esperienze di etica dell'architettura", *Venezia Arti* n. 4, 1990. —15 Le Corbusier. In: *Il Gazzettino*, Venetian newspaper, April 1965. —16 This particular case was first brought



9 Isometric drawing of the 'Capilla de Pajaritos'. Alberto Cruz, 1953. Drawing by the author.

10 Venice Hospital Church plan, Ground Floor (Niveau 1).

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However, in the Venice Hospital Church the relationship between formal and material neutrality is asymmetric. The square – as a visual sign – should not be regarded as a figurative label which comes to be attached to things and qualities already given in advance by a pre-existing truth, such as that of the *neutral*. It recalls in Ferdinand de Saussure's understanding that the sign is arbitrary, so there is not an internal connection between the idea of the 'neutral' and the 'geometrical construct' of the square which acts as its signal<sup>18</sup>. In fact, the reference to Saussure has currency. Like his whole generation, Jullian was influenced by a Structuralist approach that, by 1960s, had developed out of Saussure's insight into the work of Levi- Strauss. In this domain, Saussure explains, *what operates as a secondary phase in the creation of signs is its adoption by the community*<sup>19</sup> (in this case, the modernist adoption of the square as signifying neutrality). The absence of form is not attached to the square by an internal connection given in advance to that geometrical figure, but on the contrary, this attachment is matter of *modernist* convention. However, while the connection between square and neutrality was driven by

such a modernist well established agreement, *le béton brut* came to be thought *Brutal* in late modernism. The double neutral, here, is challenged by the modernist commitment to the material as a sign of rawness. In a different direction, *le béton brut* is asked by Jullian to overcome that previous convention, being replaced by a more subtle and complex 'construction of an absence.' For him, in fact, "The object is not guiding you, but other things; yet, there is not escape from the object."<sup>20</sup>

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into consideration by Le Corbusier as the referent model for the church of La Tourette. —17 Reyner Banham, *The New Brutalism: Ethic or Aesthetic?* London: The Architectural Press, 1966. p. 16. —18 F. de Saussure, *Course in General Linguistics*. Translated by Roy Harris. Illinois: Open Court, 1989. p. 67. —19 *Ibid.* p. 97. —20 Guillermo Jullian de la Fuente in conversation with Pedro Ignacio Alonso. 31st August, 1999. Charlestown, Massachusetts.