

# AESTHETICS OF ARCHITECTURE IN LE CORBUSIER: FROM SENSORY KNOWLEDGE TO DESIGN <sup>1</sup>

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**Abstract:** In this paper we will see, how the aesthetic contribution of the philosophy of intimate space in Gaston Bachelard is in tune with the creation of a space of “meditation” in Le Corbusier. Our main points will be focused on: 1) Bachelard’s poetic space can relate to our everyday life, and 2) Le Corbusier’s architecture serves as a concrete example of a philosophical and aesthetic contribution. At the same time, we will see how the man makes space, and consequently, Le Corbusier anthropocentrism, in the examples of the Couvent in Sainte-Marie La Tourette and the Cabanon, is represented by an apparently bare architecture that is revealed only when one inhabits it.

**Keywords:** Aesthetics, Atmospheres, Phenomenology, Gaston Bachelard, Dwelling Space.

**Résumé:** Dans cet article, nous voudrions illustrer comment l’esthétique de la contribution d’une philosophie de l’espace chez Gaston Bachelard est en relation avec la création d’un espace méditatif chez Le Corbusier. Les arguments que nous irons impliquer : 1) Comment l’espace poétique chez Gaston Bachelard se relie au quotidien, et 2) Comment l’architecture chez Le Corbusier soit un exemple concret d’une esthétique philosophique. Au même temps, nous illustrerons comment l’espace habité, l’espace construit, se basent sur une sorte d’anthropocentrisme et en conséquent, nous utiliserons l’essence du Modulor chez Le Corbusier pour décrire deux exemples principaux d’un nouvel humanisme architecturale : Le Couvent de Sainte-Marie La Tourette e le Cabanon de Cap d’Antibes.

**Mots-clés:** Esthétique, Atmosphère, Phénoménologie, Gaston Bachelard, Habiter, Espace.

**Resumen:** En este artículo quisiéramos ilustrar como la estética de la contribución de una filosofía del espacio según Gastón BacEn este artículo quisiéramos ilustrar como la estética de la contribución de una filosofía del espacio según Gastón Bachelard está en relación con la creación de un espacio meditativo según Le Corbusier. Los argumentos que vamos a implicar: 1) Como el espacio poético de Bachelard se relaciona con lo cotidiano, y 2) como la arquitectura de Le Corbusier es un ejemplo concreto de una contribución estética y filosófica. Al mismo tiempo, veremos cómo el hombre construye el espacio y, en consecuencia, el antropocentrismo de Le Corbusier, en los ejemplos del Couvent de Sainte-Marie La Tourette y del Cabanon, está representado por una arquitectura aparentemente desnuda que sólo se revela cuando se habita.

**Palabras clave:** Estética, Atmósfera, Fenomenología, Gaston Bachelard, Habitar, Espacio.

**FIG. 1**  
Le Corbusier. Notre Dame  
du Haut. Ronchamp.  
FLC 07191.

## Intro

To find the reading of architectural logos in Le Corbusier's work, it is good to use more points of view. 1) First of all the aesthetic one. By aesthetic reading, we mean everything that belongs to the illustration of reality that projects Le Corbusier's work. 2) In the second place of the theoretical one. By theoretical reading, we mean everything that belongs to the knowledge of the constructs that set this illustration in motion. 3) Finally, in order to emphasize both positions, the choice falls on a third point, namely the phenomenological one. Phenomenology concerns the reading of the phenomenon as what happens in a lived experience. In this case, a phenomenological reading concerns the initial aspects of architectural design and what follows from it from a structural and experiential point of view. In this way, the open question of a vacuous and superficial humanism becomes a thriving ground for various conjectures about the relationship that has always existed between man and space.

Le Corbusier has long sought the textual and architectural confirmation of what the relationship between man and space meant. In 1911, Le Corbusier left his post as a draftsman in the Berlin studio of architect Peter Behrens to undertake a cathartic journey for his human and scientific training. And it is in this way that in the introduction to the Italian translation of the *Voyages d'Orients*, curators Giuliano Gresleri and José Oubrerie define the Journey of the Orient as a true baptism of the fire of architecture. *"From reading this text, broken, confused, fragmentary, deeply emotional and anxious, almost untranslatable, it becomes clearer than ever that we need to have the widest possible casuistry on the formation of the Masters, collecting and systematizing their first experiences, letters and diaries. We would then understand better and better how vital it is to relativize the pragmatic origins of the modern Movement, having exhausted all formal references to its exponents, revising "from the beginning" everything that has been taken for granted with the sole result of helping to block architectural research on dogmatism invented by the critics for its own necessity of survival and systematization; whose only result on short times, as on long ones, has been, always and only, that of the re-foundation of the academies!"*.

Gresleri and Oubrerie, highlight the aspect of the personal experience of space in Le Corbusier, and thus the phenomenological principle of a *recherche patiente*.

In this way the question opens up on the various fronts of the relationship with the surrounding space which is not limited to fleeting theorizations of a superficial post-humanism but is characterized by an intimate and heartfelt path. In this way we can illustrate the importance of the concept of recollection. The importance of experience in architecture is characterized by the primordial need for shelter. Factors such as fear, defence but also knowledge, transcendence and serenity are all part of a technical translation. In this way the phenomenon of recollection includes not only the undisputed relationship between man and space but also some purely philosophical questions that address each of the factors that make up this phenomenology.

From the monolithic exterior to the interior à réaction poétique, Le Corbusier contradictory aspect always proposes a dialectic relationship between forms. This dualism is resolved with respect to the fulcrum of the architecture, illustrating everything that happens in space with respect to a primordial sense of belonging to one's own habitat. Le Corbusier leaves man free to live in space, offering infinite possibilities for living. In doing so, the architect hopes for numerous suggestions of recollection, which are revealed through a path forged, first and foremost by cement, the senses, and the spirit.

## I. The Poetic of Spaces

### 1.1. Concerning Aesthetics Remembrance.

The concept of architectural space implies a focus on the way in which space develops through images of everyday life experience. The word "inhabiting", derived from the Latin *habere* (to have), presupposes a strong anthropological structure made up of the culture of society - and space. The philosophical approach enables us to understand how the Space of experience falls into a category of its own<sup>2</sup>. Indeed, in 1957 Gaston Bachelard highlighted space as a *felt* and principal element in his work, *La Poétique de l'espace* (the Poetics of Space). All that surrounds us is thus a reflection of our inhabiting experience.

The phenomenological figure of *immensity* contains in its entirety two opposite poles: the exteriorisation and the interiorisation of a surrounding space. In Chapter eight of the Poetics of Space, Bachelard underlines the importance of having a real experience of space involvement: *"L'immensité est en nous"*. Hence immensity assumes a characteristic that is one of both contemplation and liveliness. In this respect, poetic space can be conceived as a concrete reality that suggests a model for inhabiting.

According to Plato, memory is the *preservation of sensations*<sup>3</sup>. In his dialogue with Protarchus, the philosopher explains that *memory retention* is born when the soul is in symbiosis with the body in synergy:

**Socrates:** *When mind (psyche) and body jointly undergoing one effect are jointly aroused, would it surely be right to call this arousal perception?*

**Protarchus:** *Surely.*

**Socrates:** *We are clear now, then, what we mean by perception?*

**Protarchus:** *Quite.*

**Socrates:** *Then in my view 'retention of perception' would be a good definition of memory.*

**Protarchus:** *Certainly.*

**Socrates:** *And surely we can distinguish between memory and recollection?*

**Protarchus:** *Possibly.*"<sup>4</sup>

From this dialogue, it emerges that the concept of memory inherently holds *sensation*, working both in the soul and in the body, thus retaining all the principles. Therefore, when discussing memory, we are also considering sensation, and concept of space falls into several categories: scientific, poetic, symbolic, technical, and theoretical. Consequently, our focus is on the *felt space*, and here an analysis is made of the *inhabited space*.

*Sensitive memory* provides the means for developing on the current role of symbolism and phenomenology in the domain of interior architecture, thus generating the concept of *poetic nature*.

## ***1.2 .Poetic Nature of Space: from primordial to archetypical.***

In *The Poetics of Space* (Bachelard, 1957), Bachelard illustrates the dynamics of a re-appropriation of that which is usually called "space". Before questioning architecture, or the modalities of architectural ensembles, we should pose a question of fundamental importance: what does *inhabiting* mean today? An existential awareness of the experienced space is thus fundamental to the awareness of an urban whole. The original considerations about space were defined in an Era characterized by the concept of liquidity, in which all mixes and merges.

It is important to define the habitat, as well as the *oikos*, in a logical and detailed way. In fact, the world of Gaston Bachelard's images and poetics, all too often demonised or dismissed as fantasy devoid of any governing logic, can be seen as an excellent expression of how the space is to be inhabited, shared and remembered. The images provide the key for access to space, which Bachelard conceives as a place of experience. In this regard, the concept of *poetic nature*, which is understood through our sensitive perception of reality, consists of the following:

- 1) *poetic imagery*, a *creative* source enriched by the symbolism of the four natural elements (earth, air, fire and water);
- 2) *active psychism*, the faculty through which poetic images are assumed, that can be defined as a *conscious* rather than a 'dream' state;
- 3) activity of poetic images, the *archetypes* or symbolic *moles* (places) recurring in our sensitive perception.

Accordingly, the poetic nature is a set of symbols and images that evoke a *sensitive* order of things. In this regard, the structure of *poetic nature* underlies, above all, the concept of *happy space* that, understood in its own *intimacy*, leads us to its *primitivism*. Bachelard expresses his aim of examining:

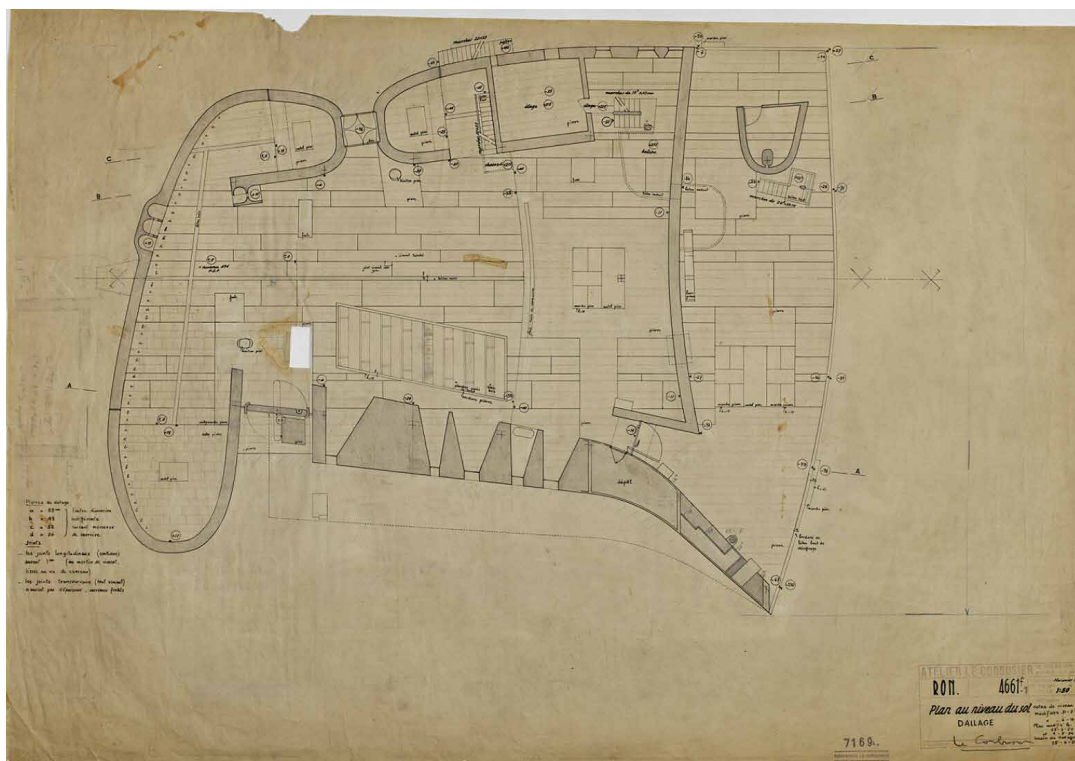
*(I want to examine (are)) ... the quite simple images of felicitous space. In this orientation, these investigations would deserve to be called topophilia. They seek to determine the human value of the sorts of space that may be grasped, that may be defended against adverse forces, the space we love. For diverse reasons, and with the differences entailed by poetic shadings, this is eulogized space.*<sup>5</sup>

On introducing the concept of *topophilia*, the Author illustrates the original characteristics of the *poetics of the house*, cited as examples of images of experienced intimacy.

In developing on the poetics of space, we give examples of space *archetypes*: the house, and the hut, primordial spaces being the *shell*, and the *nest*. We then find the spaces of the corners and the miniatures, of the inside-outside dialectic, and of the *intimate immensity*, all of which underpin a system of spatial images indicating a constitutive poetic cosmology.

## ***1.3 .Sensitive memory of space.***

Our intention is to describe space through the *poetic nature* and explain how *memory is sensitively* stimulated by it.



**FIG. 2**  
Le Corbusier.  
Notre Dame du Haut. Ron-  
champ.  
FLC 07169A.

To consolidate a sensitive memory, humans need to be stimulated by *poetic images* that are developed, according to Bachelard, via a Tetralogy, consisting of the natural elements: Air, Fire, Earth and Water. Our aim is therefore to demonstrate how the *sensitive memory* of space can be created through natural elements and how this *memory* can be restored through architecture.

In Bachelard's philosophy, inhabiting space means, above all, "*habiter les éléments*" (*inhabiting the elements*). An in-depth study of material space is fundamental to an understanding of the basis on which to develop intimate space. The concept of the material principle is contextualized in an environment in which the four elements are conceived as the bases through which a "consciousness of inhabiting" is developed. In this way, we will introduce the four natural elements through the four poetic images:

#### **The fireplace: from domesticity to growth.**

Fire, considered a part of everyday life in Bachelard's tetralogy, can be created in either an inhabited, closed space or a forest. The phenomenology of the *home* manifests itself with respect to a spatial context through the intimate relationship of man with the element of fire, which is present in the house, the room, and is locked into its domestic role. For this reason, through this element, we can speak of a constitution of the poetic figure of *domesticity*.

The poetic image of the home is rendered by the concept of *experience*: life develops through the well-defined phases of childhood, adolescence and adulthood. On addressing the element of fire in *La Psychanalyse du Feu*<sup>6</sup>, Bachelard focuses on the constructive relationship between man and the natural element of flame, developed through different uses: from the *domestic-spatial* to the everyday object, such as a *candle*<sup>7</sup>. Man's relationship with the element of fire is intensified in a condition of solitude, in which the flame becomes a true and proper interactive household item. With the flickering of the candle, dreams and memories overlap and solitude takes on the nature of a rediscovered intimacy.

#### **Dreamed water: the amniotic beginning.**

The water element provides embryonic intimacy through the bond with *motherhood*. In his work, *L'eau et les rêves, Essai sur l'imagination de la matière*,<sup>8</sup> Bachelard highlights this element as a poetic figure of the embryonic bond that extinguishes, on the one hand, our primary, organic need to be *breasted* and, on the other hand, our childlike wish to be *protected*. The

autobiographical love that the philosopher introduces through the poetic figure *rivière* expresses a filial feeling. The landscape thus acquires a *maternal* role, that of *mère paysage*: mother earth.

**From immaterial space to the concept of symbolic empathy of *Einführung*.**

In *L'Air et les songes*<sup>9</sup>, the poetics of flight, of wings, of the sky, of the constellations, of the clouds, of the nebula, and the wind, are all images related to the poetic figure of the celestial return. The images evoking free movement are linked to the element of air. In addition to the aerial element, Bachelard points to the concept of counter-space of the artist Raoul Ubac, who expresses a novel connotation for intimacy, where the relationship with the element is characterized by a constructive *symbolic empathy*. The fusion of this relationship reminds us of the importance of a sensitive memory, where the concept of *Einführung* is taken up again from the theory of Robert Vischer<sup>10</sup> regarding the contemplation of the *aesthetics of nature*.

**Earth and Interiority: The cave as a primordial refuge.**

In *La Terre et les rêveries du repos*<sup>11</sup>, Bachelard illustrates three fundamental forms related to the earth element and the concept of *refuge*: the *cave*, the *womb*, and the *house*.

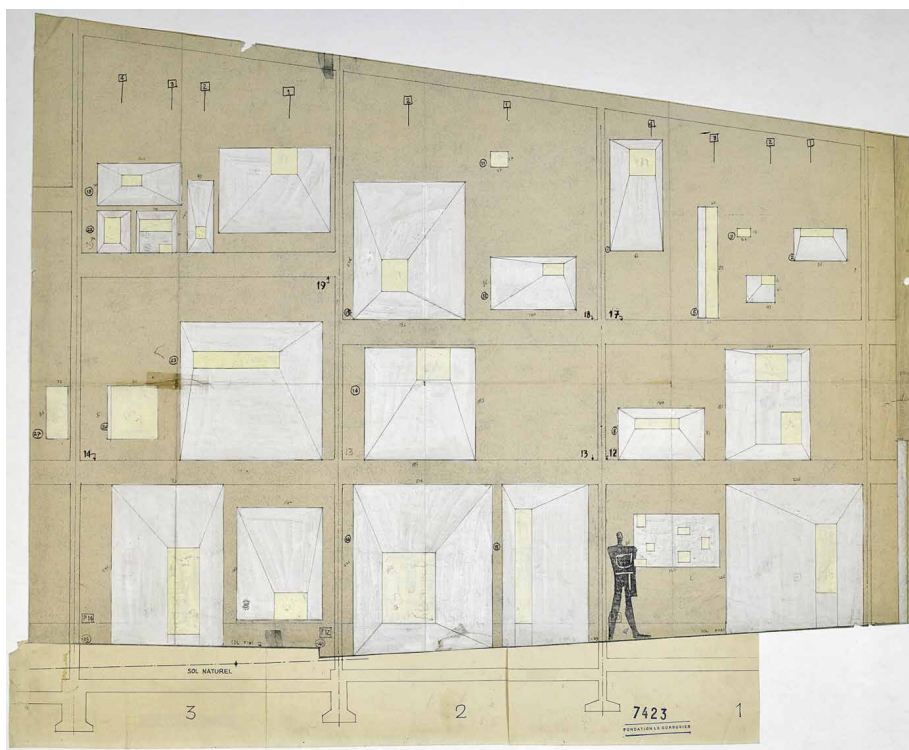
The cave, our natural dwelling, can be described as a primitive place, in which primordial man finds refuge while keeping a solid relationship with the earthly element. Through its original characteristics, the cave provides the possibility of understanding how the image of the depth of the natural cavity suggests reconciliation with the soul. *"The cave is more than a house, it is a being that corresponds to our being, this is also a universe"*.

The universality of the cave pertains to a highly detailed cosmology, where archetypal features become almost unconsciously experienced characteristics. In the image of the womb, Bachelard restores the intimate value of living. Starting with the governing theme of the return to the mother, the intimate principles of sexuality are developed.

Another image that we use to describe the importance of the concept of refuge is that of the house, a protective space par excellence. In this case, Bachelard, considers the main characteristics of the Jungian house, where each storey represents a state of the soul. Id, Ego and Super-Ego thus correspond to the three storeys of the house:



**FIG. 3**  
Interior of Notre Dame du Haut. Ronchamp. FLC.



**FIG. 4**  
Le Corbusier. Notre Dame  
du Haut. Ronchamp.  
FLC 07423.

*We have to describe and to explain a building the upper story of which was erected in the nineteenth century; the ground-floor dates from the sixteenth century, and a careful examination of the masonry discloses the fact that it was reconstructed from a dwelling-tower of the eleventh century. In the cellar we discover Roman foundation walls, and under the cellar a filled-in cave, in the floor of which stone tools are found and remnants of glacial fauna in the layers below. That would be a sort of picture of our mental structure.<sup>12</sup>*

The image of the house leads us back to motherly protection, as it retains universal characteristics. The return to the birthplace is the return to the original refuge. In the space of the house, we find all the values pertaining to ancestral protection and privacy. Through these examples of original conditions, the individual becomes accustomed to being in the surrounding space. The image of the house establishes a true and proper relationship with the world from the spatial viewpoint.

#### ***1.4. Inside/Outside and the Intimate Immensity: the dialectics.***

To define the theoretical part on the sensitive memory of space, we cite two passages from *Poetics of Space*. The first concerns the inside-outside dialectic. In his constitution, the subject relates to space from a subjective and sensitive perspective. All is condensed into a "lacerating" dialectic of the inside and the outside.

*Philosophers, when confronted with outside and inside, think in terms of being and non-being. Thus profound metaphysics is rooted in an implicit geometry which - whether we will or no - confers spatiality upon thought; if a metaphysician could not draw, what would he think? Open and closed, for him, are thoughts.<sup>13</sup>*

Locked in the being, we should always leave it but, as soon as we leave the being, we should return to it. Bachelard examines these states in his chapter entitled *The Dialectic of the Outside and the Inside*. Man's being becomes a spiral that has neither beginning nor end, neither inside nor outside, constituting and containing space. Where does Man, the individual being, stand, if not from within and without? Both intimates are constantly ready for self-reversal. In the second citation, a further explanation is given: the being is dispersed toward the centre constituted by the inside, and the outside.



**FIG. 5**  
Interior of the Church of  
Ronchamp (detail). FLC.

*Through what naive intuition do we locate evil, which is boundless, in a hell? This spirit, this shade, this noise of a shade which, the poet tells us, desires its unity, may be heard on the outside without it being possible to be sure that it is inside. In this "horrible inside-outside" of unuttered words and unfulfilled intentions, within itself, being is slowly digesting its nothingness.<sup>14</sup>*

Toward the end of the chapter, Bachelard offers the possibility of having a more exact denomination of the out-in character, that is, of the hinge. The being wishes to manifest itself and hide itself, the opening and closing movements being so numerous that, states Bachelard: "*Man is an untorn being*", thus affirming his theoretically ambiguous nature.

### **The immensity of intimacy.**

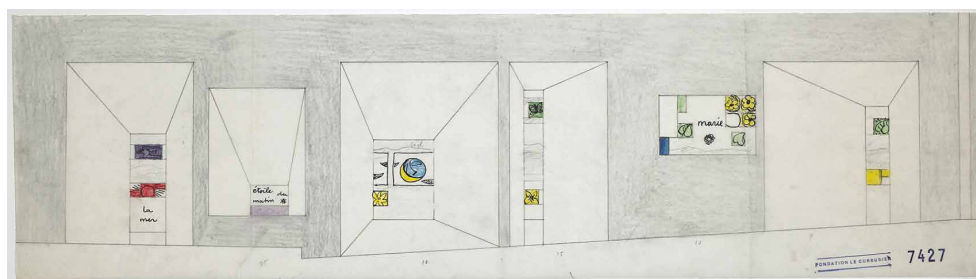
According to Bachelard, intimate immensity is characterised by intensity, an intensity of being, of a being that develops within a broad perspective of intimate immensity that is neither finite or infinite. As it does not yet have time, it remains within a category of the poetic imagination, not only in a general idea created through the contemplation of great sights. The intimate dialectic suggests to the subject that he has the power to devise his own space, also outside the space itself. Intimate space is the honey in the hive<sup>15</sup>, it is that which gives it perfume, identity, and meaning. Each material has its own space and its power, passing through the surfaces that a geometrician might attempt to define. It is through the immensity that the two spaces, that of intimacy and that of the world, become consonant. The statement "*The immensity is in us*" thus exemplifies openness towards the reality surrounding us and also serves as the key to the awareness of a universal spatial aspect.

## **II. Aesthetic Remembrances: the Logos of Le Corbusier**

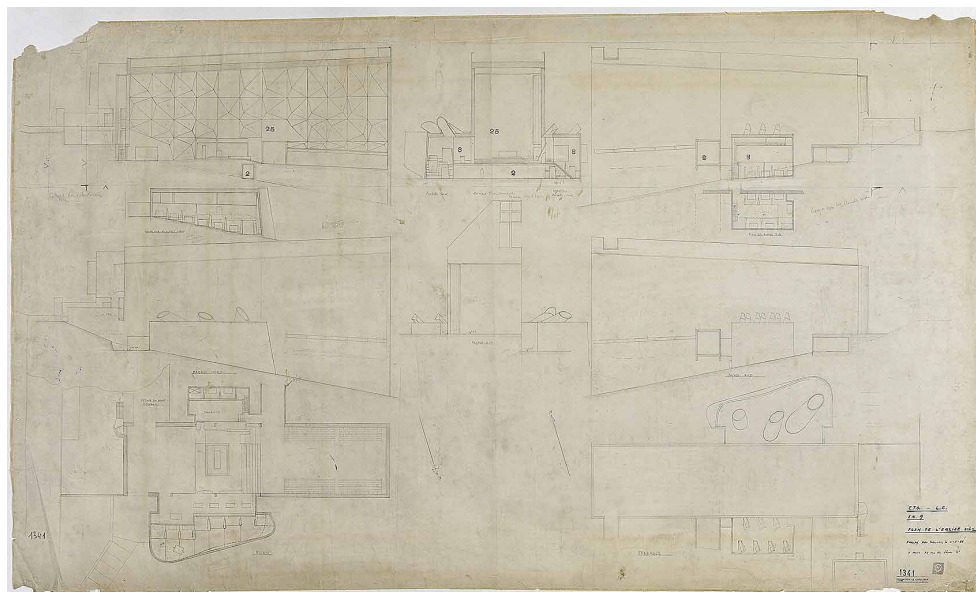
We have seen how sensitive memory can be developed through different poetic figures. Aesthetic remembrances are linked to humans' sensitive involvement within a natural or constructed space. Sensitive perception is the first step in our relationship with the *Atmosphere* of a place or space.

*Atmosphere: in meteorology this term, deriving from the Greek (ἀτμός, "vapour", and σφαῖρα, "sphere") denotes the gas envelope surrounding a planet. Although its use has been metaphorical since the 18th century along with some forerunners*





**FIG. 6**  
Le Corbusier. Notre Dame  
du Haut. Ronchamp.  
FLC 07427.



**FIG. 7**  
Le Corbusier. Couvent  
Sainte Marie De La Tourette.  
FLC 07427.

*(aura, Stimmung, genius loci)*, it has boomed only recently in the humanities. The latter, in fact, bypassing positivist conventions and endorsing more spatial and affective paradigms rather than temporal and cognitive ones, focus more on the vague and expressive *qualia* of reality (the *how*) than on its defined and quantified materiality (the *what*). Never wholly detached from its climatic meaning of immersion in the weather-world, as recently emphasized especially by ecological anthropology, atmosphere, first of all, is a colloquial term meaning a "something more" one feels "in the air" without being able to precisely express it – let alone rationally explain it.<sup>16</sup>

Thus architecture makes it possible to analyse the relationship between the human being and the experience of living, which pre-exists judgement. It is well known, that man learns to be in the world in the same way as he learns to inhabit: "I dwell, you dwell. The way in which you are and I am, the manner in which we humans are on the earth, is *Buan*, dwelling. To be a human being means to be on the earth as a mortal. It means to dwell" (Heidegger, 1971, p.145).

Architecture can be related to our approach to *phenomenological* space, thanks to the main concept of *Genius loci*<sup>17</sup>, introduced by Christian Norberg-Schulz as a key to an initial *phenomenological* approach to built space. This phenomenological tradition can be translated into the Contemporary Architecture theories of Juhani Pallasmaa, Steven Holl, Alberto Pérez-Gómez and Peter Zumthor<sup>18</sup>. Modern Architecture provides several examples of this type of approach. Here we should focus on one of the most important approaches: that of Le Corbusier.

The Architecture and the theories of Le Corbusier are apposite for our Bachelardian lecture on the elements, and the reconciliation of their particular nature with Aesthetic involvement<sup>19</sup>. In the following paragraph, we focus on the arrangement of the elements of a poetic nature in Le Corbusier's interior architecture.



**FIG. 8**  
Le Corbusier. Interior of the Couvent Sainte Marie De La Tourette: "light cannons".  
Fonds: Jorge Torres.

## ***2.1. Couvent - Sainte Marie De La Tourette & Notre Dame Du Haut Ronchamp: Two examples of Einföhlung.***

The Church, a space for *recollection*, is the place where we can find all the forms of *intimate immensity*. Le Corbusier uses two elements to underline the essentiality of his projects: *Light* and *Colour*.

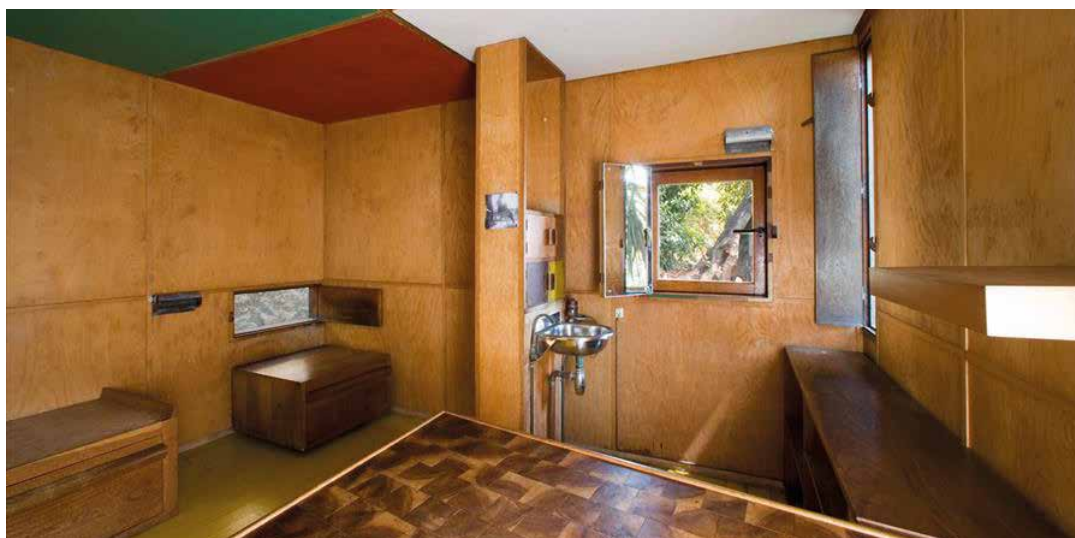
### **Light and darkness.**

The half-light in which these two churches are immersed is broken by arcane lights that, by means of unique methods, are brought into the interior so that the light in the church varies at each moment of the day, in line with the movement of the sun.

The choice of a completely *naked* interior leaves space for the light, which illuminates a magical, mystical, *indescribable* space. The *indescribability* of space is the characteristic of locations, which Le Corbusier manages to bring to maximum intensity through a *shock* that depends on perfection of execution rather than on proportions.

*When a work achieves the maximum intensity, proportion, quality of execution, perfection, a phenomenon of "indescribable space" is produced: the places radiate physically. They determine what I call "indescribable space"; that is, a shock that does not depend on dimensions, but on the quality of perfection. It belongs to the realm of the elusive<sup>20</sup>.*

In front of the sacristy of La Tourette, the "light cannons", three truncated cone shaped skylights allow for the penetration of shafts of light. The dimensions of absolute spirituality are the fruit of the measures used by the Le Corbusier's Modulor, but also of the chromatic and material choices made for the project.



**FIG. 9**  
Interior of Le Cabanon. FLC.

### Colours

Polychromy<sup>21</sup> plays a fundamental role in the designation of each meaning: the cracks in the choir on the south wall are green, red and yellow; the cracks on the north wall, white, yellow, green and red; the balustrade dividing the aisle and crypt, blue and yellow; next to the imposing blue ceiling, the canons; the concave wall of the confessional, red; and the chromatic features in the crypt are intensified as they permeate the elements, thus focalising on the surrounding area.

### 2.2. *Le Cabanon, l'espace indicible: Aesthetic Remembrance.*

"The happy man is the man who performs all the acts of his domestic life, where he sleeps, where he studies, where he receives his friends in 15 square meters.<sup>22</sup>" The structure of the Cabanon, which represents the ideal condition for the architectural project, is the synthesis of idealization and personal use, conceived as a gift and pursued as a "life-refuge". Within this macro-object of "poetic reaction", Le Corbusier uses the Modulor to illustrate the strong cohesion between essential functionality and pure aesthetics. Two wooden beds, a desk, two stools, a wardrobe, a shelf and a toilet minimally answer human needs, fundamental necessities becoming forms and objects of use.

The harmony of the colours and the sensations of the landscape outside, in which we find this "nest", are repeated and echoed in the overwhelming abundance of the interior. On contemplating the Mediterranean landscape that protects and envelops (χώρα) the Cabanon, the onlooker perceives the phenomena of complex compositions that are reconnected to the solutions defined by Le Corbusier.

Thanks to Le Corbusier's examples, we have illustrated how architectural elements promote the *phenomenological* approach to the space. The spirit and knowledge of simple everyday gestures are the products of an initial sensible perception. In Le Corbusier's examples, we can find a strong spatial existentialism, with space acquiring its absolute poetic nature. Moreover, worthy of mention is the role played by the characteristics of a sensitive memory in interpreting the architecture.

In conclusion, it is of fundamental importance to use the study of sensitive memory in order to consolidate and, above all, to implement, our experiential participation in space.

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## Notes

- 1 Giuliano, Gresleri, José, Oubrerie. *Le Corbusier, Viaggio in Oriente* (Firenze : Faenza Edizioni, 1974).
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