



# DOI: http://dx.doi.org/10.4995/LC2015.2015.794 Le Corbusier and the "Lection of the *gondola*"

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**Abstract:** In light of the reflections developed by Le Corbusier through the "oeuvre plastique" and his intense relationship with the city of Venice, the gondola became the paradigm of an "artistic creation" which, while having to bow to the principles of "utility" linked to the tangible world of the "machinist era" on the one hand, on the other met the expressive requirements of "beauty" connected to the spiritual needs of modern man.

The encounter with the gondola describes this "duality" which pervades all the works of Le Corbusier always in search of a synthesis between "measure" and "lyricism", representing a "plastic manifestation" that points to some theoretical principles and foundations of artistic "action", outlined through the concept of "Outil", the expression and instrument of a necessary "harmony" between mankind and the world.

**Resumen:** A la luz de las reflexiones desarrolladas por Le Corbusier a través de la "obra plástica" y su intensa relación con la ciudad de Venecia, la góndola se convirtió en el paradigma de una "creación artística" que, si bien tiene que someterse, por un lado, a los principios de "utilidad" vinculados al mundo tangible de la "era mecánica", por otro lado cumplía los requisitos característicos de "belleza" relacionados con las necesidades espirituales del hombre moderno.

El encuentro con la góndola describe esta "dualidad" que impregna toda la obra de Le Corbusier, siempre en busca de una síntesis entre "medida" y "lirismo", lo que representa una "manifestación plástica" que apunta a algunos de los principios teóricos y fundamentos de la "acción" artística perfilados a través del concepto de "Outil", la expresión e instrumento de una necesaria "armonía" entre la humanidad y el mundo.

*Keywords:* Le Corbusier; Gondola; Venice; Plastique acoustique; Outil; Oeuvre plastique; L'angle droit. *Palabras clave:* Le Corbusier; Gondola; Venecia; Plástica acústica; Outil; Obra plástica; El ángulo recto.

#### 1. Venice is a totality

On 26 July 1934, on the occasion of the conference organized in the Doge's Palace in Venice by the *Institut International de Coopèration Intellectuelle*<sup>1</sup>, Le Corbusier participated with a talk entitled "La leçon de la gondole. L'art et les masses contemporaines<sup>2</sup>".

As Antonio Foscari recounts<sup>3</sup>, the invitation from senator Alfredo Rocco did not receive an immediate positive reply due to his commitments to the Algeri project in that period.

His subsequent interest in the conference can perhaps be attributed to the construction, in progress at the time, of the new industrial centre of Porto Marghera and, above all, of the adjoining residential settlement. This would explain the content of the second part of Le Corbusier's talk which was entirely focused on the topic of housing and its organization within the modern city.

His relations with Luigi Pavan, the director of the port, and Baroness Catherine d'Erlanger, which led him to write a letter dated 25 September to Giuseppe Volpi - promoter of the new industrial and residential settlement of Porto Marghera - show how Le Corbusier foresaw the opportunity to *"build a residential city at Porto Marghera which would be a poem like the city of Venice<sup>4</sup>"*, using the theoretical principles of *Ville Radieuse<sup>5</sup>* (1935), then formalized in the urban development plan for the new city of Antwerp which was partly destroyed by the bombings that took place during the war.

In addressing the topic of the conference, the "relationship between art and contemporary society", after a short introduction on the importance that artistic manifestations assume in human life, Le Corbusier maintained that the establishment of a "new machinist civilization<sup>6</sup>" can only occur by "harmonizing new and revolutionary factors with the elements and permanent needs and desires of the human conscience<sup>7</sup>".

In order for this phenomenon to affect the entire community and not just the corporation of artists it is necessary for "human activities to be brought back through an invisible and profoundly natural force to a unanimous law, a unanimous attitude, total harmony<sup>8</sup>".

Le Corbusier would return to Venice in 1951 for the CIAM summer school<sup>9</sup>. At the opening ceremony he held a conference that highlighted how the lagoon city represented the paradigm of this "*totality*", described in 1934 as a "*unique phenomenon*" of "*total harmony, complete purity and cultural unity*<sup>10</sup>".

<sup>&</sup>lt;sup>1</sup> On this topic in relation to Le Corbusier's talk see the papers by De Sabbata, Massimo: "Les Arts contemporains et la Réalité. L'Art et l'État". In Talamona, Maria (Ed.): *L'Italie de Le Corbusier*. Paris: Édition de la Villette, 2010. pp. 100-109; and Foscari, Antonio: "À Venise en 1934". In Talamona, Maria (Ed.): *L'Italie de Le Corbusier*. Op. cit. pp. 200-209.

<sup>&</sup>lt;sup>2</sup> Le Corbusier: "La leçon del la gondole. L'art et les masses contemporaines". In Tamborrino, Rosa (Ed.): *Le Corbusier Scritti*. Torino: Einaudi 2003. pp. 233-243.

<sup>&</sup>lt;sup>3</sup> Foscari, Antonio: "À Venise en 1934". In Talamona, Maria (Ed.): L'Italie de Le Corbusier. Op. cit.

<sup>&</sup>lt;sup>4</sup> Ibid. p. 209.

<sup>&</sup>lt;sup>5</sup> Le Corbusier: *La Ville radieuse*. Boulogne-sur-Seine: Editions de l'Architecture d'Aujourd'hui. Collection de l'équipement de la civilisation machiniste, 1935.

<sup>&</sup>lt;sup>6</sup> Le Corbusier: "La leçon del la gondole. L'art et les masses contemporaines". In Tamborrino, Rosa (Ed.): *Le Corbusier Scritti*. Op. cit. p. 234.

<sup>&</sup>lt;sup>7</sup> Id.

<sup>&</sup>lt;sup>8</sup> Ibid. p. 235.

<sup>&</sup>lt;sup>9</sup> For Le Corbusier's talk at the CIAM summer school in Venice in 1952, see the essays of Von Moos and Stanislaus: "À propos de Venise". In Talamona, Maria (Dir.): *L'Italie de Le Corbusier*. Op. Cit. pp. 76-87; by the same author: "Alla

Among his Venetian experiences, we should remember the project for the New Hospital of Venice<sup>11</sup>, a work commissioned in the summer of 1962 and never completed due to his death on 27 August 1965.

In addition to the "polemical" aspects that had arisen at the time, the scientific literature is unanimous in highlighting the "controversial" character of this project in relation to Le Corbusier's poetics of the period<sup>12</sup>. It is difficult to say if this work, that took place during the dénouement of Le Corbusier's relationship with Venice, would have materialised as planned on paper. Le Corbusier's untimely death would not allow us to provide an answer to this question, anyhow the significance of his complex relationship with the lagoon city cannot be understood by devoting an analysis solely to this project.

This should take place within a reflection inserted in a broader context of reading and understanding of the role that the city assumed for Le Corbusier as part of his overall work. I believe that this is the meaning that should be attributed to the statements in the letter addressed to the engineer Giovanni Favaretto Fisca, then Mayor of Venice, dated 5 October 1962: "*L'autorité doit déclarer Venise Ville sacrée<sup>13</sup>*", which reduced to a few words the intense interest and deep admiration that the city of Venice, like Paris, stirred up in Le Corbusier as he pursued his rich production and laborious artistic research<sup>14</sup>.

veneziana. Le Corbusier, il turismo e la "crisi dell'utopia". In Talamona, Maria (Ed.): *L'Italia di Le Corbusier*. Milano: Electa, 2012. pp. 201-217. A part of the talk's transcript has been translated in Italian and published under the title: "À propos de Venise" in *Venezia Architettura*. N°1. 1952. pp. 6-9.

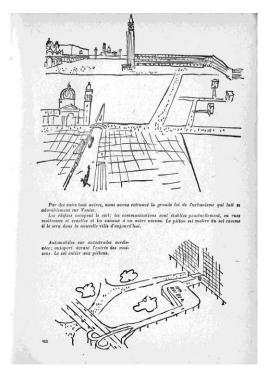
<sup>&</sup>lt;sup>10</sup> Le Corbusier: "La leçon del la gondole. L'art et les masses contemporaines". In Tamborrino, Rosa (Ed.): *Scritti*. Op. cit. p. 235.

<sup>&</sup>lt;sup>11</sup> On the project of the New Hospital of Venice see Farinati, Valeria (Ed.): *H VEN LC hôpital de Venise Le Corbusier 1963-*70: inventario analitico degli atti nuovo Ospedale. Venezia: IUAV Archivio Progetti, 1999; Petrilli, Amedeo: *Il testamento di Le Corbusier: il progetto per l'Ospedale di Venezia*, Venezia: Marsilio, 1999; Mattioni, Emilio: "La vicenda del Concorso preliminare per il nuovo Ospedale di Venezia". In Talamona, Maria (Ed.): *L'Italia di Le Corbusier*. Op. cit. pp. 377-389; Reichlin, Bruno: "L'Ospedale di Venezia. Congetture sulla genesi del progetto". In Talamona, Maria (Ed.): *L'Italia di Le Corbusier*. Op. cit. pp. 390-409; by the same author: "L'atelier era un vaso di Pandora". Cinquant'anni di progetti rivisitati da Le Corbusier & Co. L'Ospedale di Venezia, 1960-1965". In Reichlin, Bruno: *Dalla «soluzione elegante» all'«edificio aperto». Scritti attorno ad alcune opere di le Corbusier*. Mendrisio: Mendrisio Academy Press, 2013. pp. 389-414; Sarkis, Hashim (Ed.): *Case: Le Corbusier's Venice Hospital and the Mat Building Revival*. Munich-London-New York: Harvard University Graduate School of Design, 2001.

<sup>&</sup>lt;sup>12</sup> For further study on the events and figures that contributed to the formulation of the New Hospital project in Venice, see the essays of Reichlin, Bruno: "L'Ospedale di Venezia. Congetture sulla genesi del progetto". In Talamona, Maria (Ed.): *L'Italia di Le Corbusier*. Op. cit.

<sup>&</sup>lt;sup>13</sup> Letter dated 3 October 1962 from Le Corbusier to the Mayor of Venice, Giovanni Favaretto Fisca, FLC I2-10.

<sup>&</sup>lt;sup>14</sup> Several papers described this intense relationship between Le Corbusier and the city of Venice, including Von Moos, Stanislaus: "À propos de Venise". In Talamona, Maria (Ed.): *L'Italie de Le Corbusier*. Op. cit.; by the same author: "Alla veneziana. Le Corbusier, il turismo e la "crisi dell'utopia". In Talamona, Maria (Ed.): *L'Italia di Le Corbusier*. Op. cit.; by the same author: "La leçon de Venise". In Le Corbusier: *Album La Roche*. Milano: Electa, 1996. pp. 24-40; Duboy, Philippe: *Le Corbusier, Croquis de voyages et études, Paris*. Paris: La Quinzaine littéraire, 2009; by the same author: "L.C.B.N. 1915". In *Casabella*. 1987. N°531-532. Milano. pp. 94-103; Brooks, A. Harold: *Le Corbusier's formative years*. Chicago: University of Chicago press, 1997; Von Moos, Stanislaus; Ruegg, Arthur (Ed.). *Le Corbusier before Le Corbusier*. London: Yale University press, 2002; Gresleri, Giuliano: *Viaggio in Toscana (1907)*. Venezia: Marsilio, 1987; Herausgegeben, von Christoph Schnoor: *La Construction des villes*. Zurich: gta-Verlag, 2008; by the same author: "L'Italia come modello di spazio urbano: i riferimenti a Venezia, Firenze e Roma ne *La Construction des villes*". In Talamona, Maria (Ed.): *L'Italia di Le Corbusier*. Op. cit. pp. 175-187.



1. Drawing taken from the text by Le Corbusier (in collaboration with François de Pierrefeu): La Maison des hommes. Paris: Éditions Plon, 1942. p. 155, under which he wrote: "By quite different paths we have found the great urban planning principle that Venice illustrates so admirably". ©FLC-ADAGP.

#### 2. A beauty of entirely mechanical origin

At the conference of 1934, in describing his arrival in the lagoon city, Le Corbusier's admiration was not only directed towards the buildings of Venice but, in turning his gaze to the stairway that led down until it touched the water, his attention rested on one object in particular: the *gondola*.

"My initial astonishment was provoked not by the romanticism of the gondola, but rather by the impeccable structure of this vehicle, so purely rational<sup>15</sup>".

Le Corbusier continued by equating the *gondola* to an aeroplane in terms of its mechanical aspect and tracing the artistic figure of this object "of abstract art" to a "beauty of entirely mechanical origin<sup>16</sup>".

The "machine" is a topic that points to a multitude of meanings and that often, as Le Corbusier himself affirmed, cost him *"many reprimands<sup>17</sup>"* due to an often inappropriate and superficial interpretation of its meaning.

Although connected to a specific object, the meaning of the term "machine" first and foremost expresses an aesthetic principle, the content of which must be sought within the pictorial experience, a privileged place of the master's poetic research<sup>18</sup>.

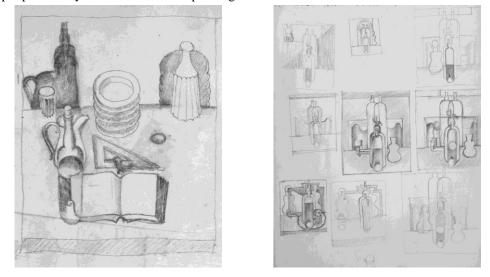
<sup>&</sup>lt;sup>15</sup> Le Corbusier: "La leçon del la gondole. L'art et les masses contemporaines". In Tamborrino, Rosa (Ed.): Le Corbusier Scritti. Op. cit. p. 235

<sup>&</sup>lt;sup>16</sup> Id.

<sup>&</sup>lt;sup>17</sup> Ibid. p. 240.

At the end of the 19th century, after the theoretical premises connected to impressionist painting most linked – to define them in a nutshell – to the investigation on phenomenal data, thanks to the fundamental analytical mediation of Cézanne and post-Impressionism, as highlighted in the artistic manifesto of purism<sup>19</sup>, the reflection on the phenomenological dimension of the form became predominant<sup>20</sup>.

As regards the iconographic reading of purist compositions, while a series of recurring objects can be recognized - a glass, a pile of plates, a violin, a bottle, a box of matches, an open book - in reality the iconological dimension of the representation does not lie in the intrinsic value of these elements but rather in the system of their relationships specified by the artist within the painting.



2. Le Corbusier, Preparatory drawing for *Nature morte à l'oeuf*, 1919 (FLC 1599) and compositional studies of *Natures mortes* contained in the *Album La Roche*, 1922. ©FLC-ADAGP.

Le Corbusier himself asserted that a work of art is the result of a process of association, common ground for painting and sculpture too:

"A work of art is an association, a symphony of consonant and engineered forms, as much for architecture and sculpture as for painting<sup>21</sup>".

<sup>&</sup>lt;sup>18</sup> In support of this assumption I propound what Le Corbusier wrote: "The basis of my research has its secret in the uninterrupted practice of the plastic arts. There we must find the source of my freedom of spirit and my possibilities of developing". Extract of the text written by Le Corbusier for the exhibition in Palazzo Strozzi, Florence 1963, translated into Italian in Comitato per le Manifestazioni Invernali a Firenze (CMIF): L'opera di Le Corbusier: mostra in Palazzo Strozzi. Firenze: Giuntina, 1963. p. 215.

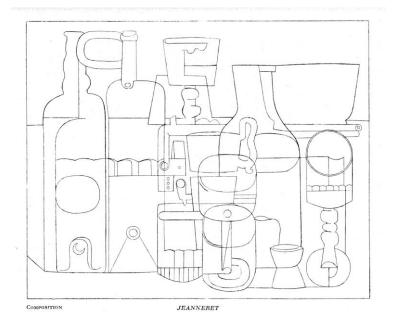
<sup>&</sup>lt;sup>19</sup> I refer to the journal: L'esprit nouveau: revue internationelle illustree de l'Activite Contemporaine: arts, lettres, sciences. Paris, 1920-1925.

<sup>&</sup>lt;sup>20</sup> I refer in particular to the reflection on the structure and the process of specifying the form through its phenomenology which characterized post-impressionism according to the main lines indicated by Rewald, John: *Il post-impressionismo da Van Gogh a Gauguin.* Firenze: Sansoni, 1967; of the writings consciously dedicated to this topic in painting see Kandinskij Vasilij Vasilevic: *Über die Formfrage.* In Kandinskij Vasilevic; Marc Franz: *Der Blaue Reiter.* Munich: R. Piper & Co Verlag, 1914.

<sup>&</sup>lt;sup>21</sup> Jeanneret, Charles-Edouard; Ozenfant, Amédée: "Le purism". In L'esprit nouveau: revue internationelle illustree de l'Activite Contemporaine: arts, lettres, sciences. N°4. Paris 1920-1925. p. 376.

It is the extreme importance assigned to the process over the final form of the work that allows the meaning of the pictorial representation to be understood.

The purist compositions evince the meaning of an "*architecturée*<sup>22</sup>" painting in which the subject of the artwork is the system of formal and spatial relationships between the elements in the picture which are exclusively subjugated to the representation of a logical "constructive" structure, where the term "construction", in the fields of painting and architecture, refers to the combination of parts and elements that can comprise a unitary system.



3. Le Corbusier, *Composition*. (from Jeanneret, Charles-Edouard; Ozenfant, Amédée: "Idées personnelles". *In L'esprit nouveau: revue internationelle illustree de l'Activite Contemporaine: arts, lettres, sciences*. N°27. Paris 1920-1925). ©FLC-ADAGP.

It is in the semantic dimension of the pictorial work that a profound difference with respect to cubist painting can be recognized. Bruno Reichlin<sup>23</sup> highlights how in Picasso the arbitrary assembly of heterogeneous pieces and parts generates complex forms with one or more external references: guitars, heads and so on. In purist painting, on the other hand, the figures are perfectly recognizable so that the resulting object only consists of its formal and constructive value without external references.

Cubism is still a "representative" artistic experience insofar as the iconological dimension of the work is linked to the object represented. Whereas in purist painting the "constructive" value is represented by that described: the subject is the compositional logic that generates the overall form of the painting.

<sup>&</sup>lt;sup>22</sup> For a more in-depth examination of the meaning this term assumes within the purist pictorial experience of Le Corbusier refer to the text by Mango, Roberto: *C. E. Jeanneret-Le Corbusier: la peinture architecturée 1918-1928.* Roma: Officina, 1986.

<sup>&</sup>lt;sup>23</sup> Reichlin, Bruno: "Jenneret-Le Corbusier, painter-architect". In Blau, Eve; Troy, J. Nancy (Ed.): *Architecture and cubism*. Cambridge: Canadian Centre for Architecture - Montréal: MIT Press, 1997. pp. 195-218.

Purist poetry expresses very clearly what can be described as the aesthetic principles that the "machine" conveys, transmitting, as Le Corbusier asserted: *"an aesthetic of purity, of precision, of the relationships that help to trigger the movement of the mathematical mechanisms of our soul*<sup>24</sup>*"*.

Purists look at the "machine" not as an object in itself but as a system of elements which, through mutual sizing and positioning criteria, constitute a functioning and precise device. In this sense they were interested in understanding and applying its "device" meaning through the reading and transformation of a specific "construction logic" in the pictorial form.

When Le Corbusier claimed that: "*an aesthetic, a work of art are first of all systems*<sup>25</sup>", propounding some reflections of Paul Valery<sup>26</sup> he was essentially conceiving of the work of art as a "construction" in which analysis, organization, calculation and planning perform a fundamental role.

All human constructions are the result of thinking, humans build for abstraction through the rational organization of the "materials" - which they find in the world they inhabit - in a series of symmetrically and consistently determined relationships and relations.

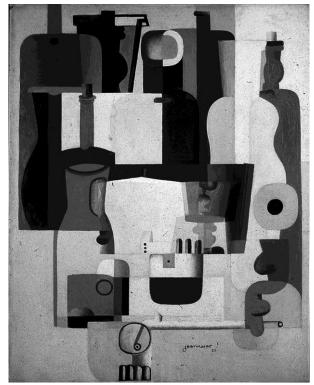
The great aesthetic revolution set in motion concerned attributing the art placed within the work to the construction of the work. The artistic value of the object is connected exclusively to its "*poiesis*<sup>27</sup>" - understood here as everything related to the production of the works - to making as construction, the shaping of a thought, the principle that allows the permanent sovereignty of the artistic form over reality.

<sup>&</sup>lt;sup>24</sup> Le Corbusier: "La leçon de la machine". In Tamborrino, Rosa (Ed.): Le Corbusier Scritti. Op. cit. p. 151.

<sup>&</sup>lt;sup>25</sup> Jeanneret, Charles-Edouard; Ozenfant, Amédée: "Sur la Plastique". In L'esprit nouveau: revue internationelle illustree de l'Activite Contemporaine: arts, lettres, sciences. N°1. Paris 1920-1925. p. 48.

<sup>&</sup>lt;sup>26</sup> I refer in particular to a text by Valery, Paul: "Eupalinos ou l'Architecte". In *La Nouvelle Revue Française*. N°90, Paris 1921, pp. 237-285, contained within Le Corbusier's personal library (FLC V 112) and of which he wrote "*he felt and beautifully translated the same deep and rare things an architect feels when creating*". Quotation cited in the paper by Scapolo, Barbara: "Eupalinos o l'architetto", o del fare consistente". In *Paul Valéry Eupalinos o l'architetto*. Milano-Udine: Mimesis Edizioni, 2011. pp. 89-117.

<sup>&</sup>lt;sup>27</sup> I am referring to the concepts of *"poietica"* and *"estetica"* described in Valéry, Paul: "Discours sur l'Esthétique". In Hytier, Jean (Ed.): *Oeuvres*. Éditions Gallimard: Paris, 1957. pp 1294-1314.



4. Le Corbusier, Nature morte, 1925, Millers Collection, Meridan U.S.A. (FLC 323). ©FLC-ADAGP.

## 3. Observe these things in their plastic arrangement

While the "mechanics" of the *gondola* are proof of the existence of *"fundamental links between cause and effect, essential when the object, as in this case, has always served to meet human requirements<sup>28</sup>"*, this *"marvellous thing<sup>29</sup>"* stimulated Le Corbusier's interest also - and perhaps above all - due to its "plastic characteristics":

"Gondolas represent, with each element they are comprised of and the juxtaposition and assembly of their forms, wonderfully harmonious and incisive ensembles that arouse emotions like great sculpture<sup>30</sup>".

The description continues illustrating how the different elements of the structure, the oar support, the curved and tilted carriage of the *gondola*, and the seat and its metal structure are properly ordered and configured specifying a skillful *"plastic arrangement<sup>31</sup>"*.

In the article L'*Espace indicible*<sup>32</sup> (1946) Le Corbusier started off by asserting:

*"Taking possession of the space is the first gesture of living beings, humans, animals, plants and clouds, the fundamental manifestation of balance and solidity. The first test of existence is that of occupying space*<sup>33</sup>*".* 

<sup>&</sup>lt;sup>28</sup> Le Corbusier: "La leçon del la gondole. L'art et les masses contemporaines". In Tamborrino, Rosa (Ed.): *Le Corbusier Scritti*. Op. cit. p. 235.

<sup>&</sup>lt;sup>29</sup> Le Corbusier: "A propos de Venise". Op. cit. p. 6.

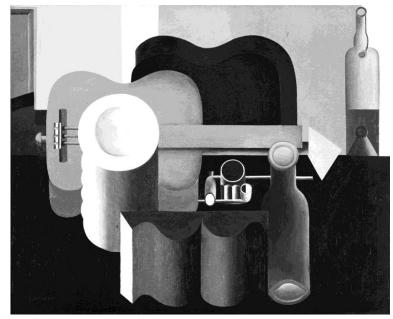
<sup>&</sup>lt;sup>30</sup> Le Corbusier: "La leçon del la gondole. L'art et les masses contemporaines". In Tamborrino, Rosa (Ed.): *Le Corbusier Scritti*. Op. cit. p. 236.

<sup>&</sup>lt;sup>31</sup> Id.

<sup>&</sup>lt;sup>32</sup> Le Corbusier: "L'espace indicible". In L'Architecture d'aujourd'hui numéro hors-série. Paris. 1946. pp. 9-17.

In purist research the topic of space was already of great interest as testified by the reflections explicated in some papers of *Esprit Nouveau*<sup>34</sup>.

In the Twenties "phenomenal transparency", as described by Colin Rowe and Robert Slutzky<sup>35</sup>, represented a specific compositional technique governing the organization of the elements within the painting. Through the use of several parallel planes perceived simultaneously, the aim was to "construct" the pictorial space, therefore to specify the third dimension through a description of the compositional procedure that generated its form. The three-dimensional nature of the painting is not "represented", but "presented" as the logic of association and organization, thereby indicating a totally abstract space.



5. Le Corbusier, Nature morte à la pile d'assiette et au livre, 1920, MoMA, New York U.S.A. (FLC 306). ©FLC-ADAGP.

Around 1927-1928 a profound change occurred which affected linguistic vocabulary on the one hand and, on the other, the syntax that configured the pictorial space.

Previously in the *Esprit Nouveau* pavilion of 1925 Le Corbusier had exhibited, alongside glassware items - the usual elements that comprise the basic vocabulary of the purist repertoire - shells, pebbles, roots and bark, which he enjoyed collecting here and there during his travels and summer walks along the beach of *Cap-Martin*.

The article  $Unite^{36}$  (1948) describes this unusual interest in objects from the natural world which, in referring once again to some reflections of Paul Valery<sup>37</sup>, indicated the start of a radical renewal of Corbusian poetics.

<sup>&</sup>lt;sup>33</sup> Ibid. p. 9.

<sup>&</sup>lt;sup>34</sup> "the purist syntax is the application of constructive and modular means; it is the application of the laws that generate the pictorial space". In Jeanneret, Charles-Edouard; Ozenfant, Amédée: "Le purism". Op. cit. p. 386.

<sup>&</sup>lt;sup>35</sup> Rowe, Colin; Slutzky, Robert: *Transparence: réelle et virtuelle*. Paris: Demi-Cercle, 1992.

<sup>&</sup>lt;sup>36</sup> Le Corbusier: "Unité". In *L'Architecture d'aujourd'hui numéro spécial*. Paris. 1948.

<sup>&</sup>lt;sup>37</sup> In Paul Valéry's Eupalinos dialogue, Socrate recounts the discovery on the seashore to Fedro: "Right there I found one of those objects released by the sea, a white object, of untainted whiteness. Burnished, hard, soft, light, it shined in the sun, on the smoothed sand, dark and sprinkled with sparkles; I picked it up, blew on it, rubbed it on my cape, and its singular form

"From 1918 to 1927 my paintings borrowed the forms of bottles, jugs and glasses, seen on the top of a table of a bistro or restaurant. Strict discipline, harsh but productive discipline: it must be sought and it must be found. Towards 1928 I wished to expand the circle of my pictorial vocabulary and I introduced what I called "objects à réaction poétique", a thousand modest things that contain, summarize and express the laws of nature<sup>38</sup>".



6. "*Objects à réaction poétique*" at Cap-Martin, photo by Lucien Hervé. (The Getty Research Institute, Los Angeles). ©J. Paul Getty Trust. Le Corbusier holding a bone in his hand, photo by Lucien Hervé. (FLC Objets à réaction poétique 1-48). ©FLC-ADAGP.

In 1940 Le Corbusier was forced to stay for a period in Ozon, in the Pyrenees. During this time a radical transformation of his pictorial research occurred which, through his fascination with the *objects à réaction poétique* reproduced within the *Peinture Acoustique*<sup>39</sup>, led to the production of a series of compositions, pictorial first and then sculptural, entitled *Ubu*, *Ozon* and *Panurge*.

The paintings abandoned the rigid geometrization of the forms in favour of more curvy lines; "constructive<sup>40</sup>" colours, with homogeneous layering, were replaced with more material tones that accentuated the chiaroscuro contrasts. The black outline appeared which emphasized the figurativeness of the objects represented.

In total purist "abstraction" the elements in the composition - although their recognizability was conserved - were denied the chance of any possible reading of their own autonomy of meaning, in this sense becoming "signs", linguistic entities that acquired the value of meaning only insofar as parts of a syntactic construction.

Something different occurred for the objects populating the *Peintures Acoustiques* which can be attributed a figurative value recognizable precisely in virtue of the use of external references belonging to the natural world.

stopped all my other thoughts. Who made you? I thought". In Paul Valéry Eupalinos o l'architetto. Op. cit. p. 47. (Original Title. Valery, Paul: "Eupalinos ou l'Architecte". Op. cit. )

<sup>&</sup>lt;sup>38</sup> Le Corbusier: "Unité". Op. cit. pp. 45-46.

<sup>&</sup>lt;sup>39</sup> Jornod, Naima; Jornod, Jean-Pierre: Le Corbusier (Charles Edouard Jeanneret): Catalogue raisonné del l'oeuvre peint. Milano: Skira, 2005.

<sup>&</sup>lt;sup>40</sup> Reference is made to the distinction between "*grande gamme, gamme dynamique*" and "*gamme de trasition*", which outlines an eminently "constructive" use of colour within the purist compositions described in the paper by Jeanneret, Charles-Edouard; Ozenfant, Amédée: "Le purism". Op. cit.



7. Le Corbusier, Racine et cordage, 1931 (FLC 4684). ©FLC-ADAGP.

The process of reducing the "figures" to "signs", which characterizes the "abstraction" of the purist period, is not reflected in the *Peinture Acoustique* or in the subsequent series *Ubu*, *Ozon* and *Panurge* where the objects represented are the bearers of meaning in themselves assuming their own "iconic" character in the composition.

The rhetoric device used in the two periods was completely different: a metonymic directrix was replaced by a metaphoric directrix, the logical presentation of the pictorial fact was replaced by its representation.

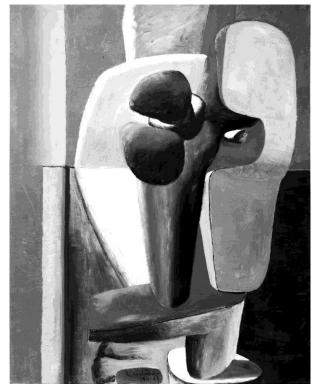
In the paper *l'Espace Indicible* (1946), Le Corbusier clearly explained the characteristics of this new research which aimed to produce a "*plastic reality*" in direct contact with the space capable of leading to the "*indicible*<sup>41</sup>":

"A form that moves away from the dish in order to express the value and to lead (when the debate between intuition and control is over which lasts for the entire time the work is being made) to a sort of plastic painting according to the requirements of the canvas (two dimensions), but that expresses the volume according to the

requirements of the spirit<sup>42</sup>".

<sup>&</sup>lt;sup>41</sup> Le Corbusier: "L'espace indicible". Op. cit. p. 16

<sup>&</sup>lt;sup>42</sup> Id.



8. Le Corbusier, Ubu IV, 1940-1944, (FLC 126). ©FLC-ADAGP.

The forms are no longer two-dimensional, but they express their three-dimensionality in relation to the space of reality as well as the abstract plane of the painting.

Further testimony by Le Corbusier, taken from the paper Unité (1948), is revealing:

«In the autumn of '40 I found myself painting, on sheets of typing paper, some inventions in which drawing became increasingly indispensable, classifying the forms, making them search for a real space  $^{43}$ ».

The "abstract" qualities of three-dimensionality identified as a logical construct can be replaced with the "plastic" nature of the forms that no longer construct the pictorial space but rather represent it. The object no more assumes just the value and role of a constructive element of the space, but it occupies it, describing its figurative character through its volumetric attributes.

It is no coincidence that, starting from 1944, the *Ozon, Ubu* and *Panurge* paintings launched a season of studies for the sculptures referred to as "acoustic" in collaboration with the Breton cabinet maker Joseph Savina<sup>44</sup>.

It should be pointed out how, once again, Venice and the *gondola* also recurred in this disciplinary area of Le Corbusier's artistic research. As Debora Antonini<sup>45</sup> recounts, the glass sculpture entitled *Harmonies architectoniques* - made in 1952 for the exhibition of the Centro Studio Pittori Arte Vetro in Murano - was built

<sup>&</sup>lt;sup>43</sup> Le Corbusier: "Unité". Op. cit. p. 55.

<sup>&</sup>lt;sup>44</sup> For a complete overview of the type of operative interaction between the two artists see Le Corbusier: *Œuvre complète*.
Vol. 5. 1946-52. Zurich: Edition Girsberger, 1953. pp. 240-245; Sers, Philppe, *Le Corbusier, Savina. Dessins et scultures*.
Paris: Fondation Le Corbusier, 1984; Le Couédeic, Daniel: "Joseph Savina, l'improbable compagnon de route". In Fondation Le Corbusier (FLC): *Le Corbusier l'oeuvre plastique*. Paris: Édition de la Villette, 2005. pp. 26-53.

<sup>&</sup>lt;sup>45</sup> Antonini, Debora: "La sculture de verre". In Talamona, Maria (Ed.): L'Italie de Le Corbusier. Op. cit. pp. 148-159.

on the model of an  $Ozon^{46}$  sculpture in which it is possible to recognize, among the elements comprising it, a thre-dimensional figure that reproposes the typical form of the oar rest of a Venetian *gondola*.



9. Le Corbusier, Harmonies architectoniques, 1952-1953. (FLC C2(10)118). ©FLC-ADAGP.

Again in Espace Indicible (1946) Le Corbusier asserted:

"The key to aesthetic emotion is a spatial function<sup>47</sup>".

While at the time of the *Esprit Nouveau* the perception of rational order was enough to meet the requirements of the spirit, the encounter with the *objects à réaction poétique* expanded the horizon of the plastic and poetic possibilities of the artistic manifestation.

The forms explicated their expressive function through the relationship with the space of the natural world - no longer constructing a totally abstract one - to which Le Corbusier turned his attention in order to investigate those properties capable of exciting and expressing, through the "secret of the form<sup>48</sup>", that poetic phenomenon linked to the *"plastique acoustique<sup>49</sup>"*.

In that period Le Corbusier abandoned pure abstraction to question the criteria and outcomes of representation. The need for constructive coherence was accompanied by the expressive question, in the knowledge that,

<sup>&</sup>lt;sup>46</sup> Le Corbusier, sculpture no. 3, *Ozon*, 1940-47, Fondation Le Corbusier, Paris.

<sup>&</sup>lt;sup>47</sup> Le Corbusier: "L'espace indicible". Op. cit. p. 9.

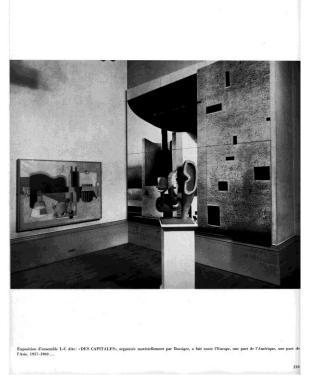
<sup>&</sup>lt;sup>48</sup> On this topic refer to the article by Pauly, Danièle: "Il segreto delle forme". In *Casabella*. 1987. N°531-32. pp. 94-120.

<sup>&</sup>lt;sup>49</sup> "This type of sculpture comes under what I call acoustic plastic, in other words forms that emit and receive". Letter from Le Corbusier to Savina dated 28 August 1947, in Sers, Philippe: Le Corbusier, Savina. Dessins et sculptures. Op. cit. p. 89.

perhaps, the logic of construction was not in itself able to produce that perfection of the form capable of touching the feelings of humans, giving them pleasure and reawakening love and a sense of beauty in them.

Le Corbusier seemed to contribute to the debate described by Robert Klein on whether the work of art consists of a rational organization of the parts that form it or of spiritual enchantment inherent in the sensitive aspect and *Gestalt*<sup>50</sup>, claiming that:

"L'extraordinaire porte ouverte par le cubisme sur un infini disponible de la manifestation plastique ne se referme nullement sur le trésors de la réalité. Le champ s'étend entre deux extrêmes du support plastique, l'éminentement représentatif et le totalement abstractif<sup>51</sup>".



10. Le Corbusier, travelling exhibition "des dix Capitales", 1957-1960. (From Le Corbusier: L'Atelier de la recherche patiente. Paris: Editions Vincent Fréal, 1960. p. 216). ©FLC-ADAGP.

### 4. The discovery of a magnificent "Outil"

The gondola, in describing a "purely rational creation" expressive of a "entirely mechanical beauty" and in producing a "plastic invention that seduces by means of an aesthetic quality that only belongs to great art", constitutes a magnificent "Outil<sup>52</sup>".

<sup>&</sup>lt;sup>50</sup> Klein, Robert: La forma e l'intelligibile: scritti sul Rinascimento e l'arte moderna. Torino: Einaudi, 1975. p. 163. (Original Title: Klein, Robert: La forme et l'intelligible, écrits sur la Renaissance et l'art moderne. Paris: Gallimard, 1970).

<sup>&</sup>lt;sup>51</sup> Le Corbusier: "L'espace indicible". Op. cit. p. 14.

<sup>&</sup>lt;sup>52</sup> Le Corbusier, *Entretiens de Venise*, 25-28 July 1934, "Les Art contemporains et la Réalité" and "L'art e l'État" conference organized by the National Institute for International Cooperation and the Italian National Commission for

At the 1934 conference at Doge's Palace in Venice, Le Corbusier described the *gondola* as an object that represented the most suitable solution to the needs of water-based transport, that emerged when the lagoon city was founded. In French, "*outil*" does not so much express the meaning of a tool as a "means" through which to achieve a purposel, but the more precise meaning of a "tool" or "instrument", that enables and facilitates human activity within his living reality.

In *Je prends Venise a témoin*, an introductory essay on the Antwerp plan, as part of *La Ville radieuse*<sup>53</sup> (1935), Le Corbusier claims that "*Venice in its entirety is made of d'outillage*<sup>54</sup>". On an urban scale, the homes, public buildings, churches, transport tools and their respective parking spaces represent the "equipment of the city", that is the set of "*outils*" made by man according to his needs. Venice is the paradigm of this composition-design concept that constructs its own inventory of components and parts, combining them according to a plan or a programme in order to represent a "*knowing and just outillage*<sup>55</sup>".

At the conference for the CIAM summer school in 1952, describing the "*major point of Venice*" namely that "*Venice is on a human scale*<sup>56</sup>", the lagoon city once again became the morphological reference for the formulation of the 7V *Theory* applied to districts of Chandigarh in the new capital of the Punjab.

As in *Je prends Venise a témoin*, here too Le Corbusier dwells on the need to separate car and pedestrian traffic within the urban structure of the modern city. The "district", a unit in which the space for residential settlements in the new Indian capital is arranged, orders and ranks the seven types of flows by analogy with what happens on the Venetian *insule*, thanks to the water and pedestrian paths on the ground.



11. Le Corbusier: *Je prends Venise a témoin*. In *La Ville radieuse*. Boulogne-sur-Seine: Editions de l'Architecture d'Aujourd'hui. Collection de l'équipement de la civilisation machiniste, 1935. p. 128. ©FLC-ADAGP.

Cooperation, with the support of the International Art Biennale of Venice (FLC A3-2). In Talamona, Maria (Ed.): L'Italie de Le Corbusier. Op. cit. p. 10.

<sup>&</sup>lt;sup>53</sup> Le Corbusier: La Ville radieuse. Op. cit.

<sup>&</sup>lt;sup>54</sup> Id.

<sup>55</sup> Ibid. p. 269.

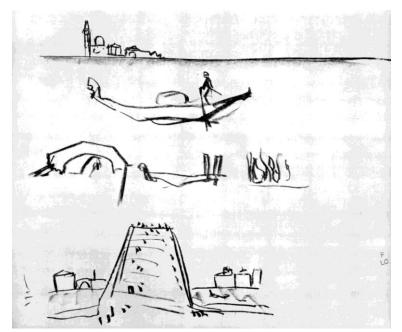
<sup>&</sup>lt;sup>56</sup> Le Corbusier: "À propos de Venise". Op. cit. p. 7.

But while the "*Outils*" are constructed by man as a response to essential practical needs linked to the concept of "utility", they also express their own "formal value". During the conference of 1952 Le Corbusier, drawing some distinctive elements of the lagoon city on the blackboard, commented:

"Venice is made up of elements so clear that all phenomena of architecture and town planning arise and appear, there is a choice of vertical forms, domes, pediments, bridges... there is that extraordinary element, that fantastic thing that is the gondola, an absolutely marvellous centuries-old tool<sup>57</sup>".

He then went on to stress:

"The gondola is a miraculous thing! The gondola is one of the most beautiful tools that humans have created, and it has but one master, mankind<sup>58</sup>".



12. Drawings produced by Le Corbusier during the conference held for students of the CIAM school in Venice in 1952 entitled "À propos de Venise". (From Le Corbusier: "À propos de Venise". In *Venezia Architettura*. N°1. 1952. pp. 6-9). ©FLC-ADAGP.

As in the case of the "*machine*", for "*outil*", the meaning of this term refers to broader discussions on the value and the role of human creativity and on the artist's mission in the world, attributed to some considerations described in *Poème de l'angle droit*<sup>59</sup> (1955).

The *"outil"* constitutes the final lithography of the iconostasis of the poem: the "right angle". The exhaustive critical reading by Juan Calatrava<sup>60</sup> immediately highlights the metaphorical meaning of this image which summarizes, through the vertical and horizontal line, a dualistic vision of the world, a binary pattern that

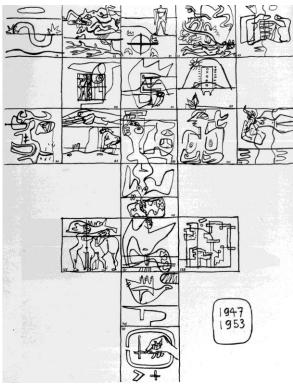
<sup>&</sup>lt;sup>57</sup> Ibid. p. 6.

<sup>&</sup>lt;sup>58</sup> Id.

<sup>&</sup>lt;sup>59</sup> Le Corbusier: Le Poème de l'Angle droit. Paris: Éditions Tériade, 1955.

<sup>&</sup>lt;sup>60</sup> Calatrava, Juan: "Le Corbusier e Le Poème de l'Angle droit: un poema abitabile, una casa poetica". In Le Corbusier: *Le poème de l'angle droit*, Milano: Mondadori-Electa, 2007. pp. 166-185.

pervades the entire work, whose leitmotif leads to the clarification of the relationship between humans and the universe.



13. Le Corbusier, "iconostasis". (From Le Corbusier: Le Poème de l'Angle droit. Paris: Éditions Tériade, 1955). ©FLC-ADAGP.

As in Venice in 1934, Le Corbusier also dwelt on water in his talk at the CIAM summer school in 1952:

"Venice is like a water level. In the storms of life and in the difficulties of an enterprise, you need to have two things in order to build: a water level and a plumb line<sup>61</sup>".

Water, "*the essential tool in the structure of Venice*<sup>62</sup>", is one of the fundamental themes in the *Milieu* series of the poem, as it helps to outline three key questions about human creation<sup>63</sup>: the "level", that represents the unstable balance of fluids by analogy with the precariousness of the human equilibrium; the continuous and cyclic "transformation" of water represented by the different states of water during the day; and finally the "Law of the Meander", a metaphor from his incessant and arduous quest for truth that is found not so much at the end of the process than as during the process itself, represented by the continuous struggle of the current to find its riverbed.

<sup>&</sup>lt;sup>61</sup> Le Corbusier: "À propos de Venise". In Venezia Architettura. Op. cit. p. 6.

<sup>&</sup>lt;sup>62</sup> Id.

<sup>&</sup>lt;sup>63</sup> Contained within the following is a brief summary of the reflections on the *Milieu* series formulated in the essay of Calatrava, Juan: "Le Corbusier Le Poème de l'Angle droit: un poema abitabile, una casa poetica". In Le Corbusier: *The poème de l'angle droit*. Op. cit.

The horizontal line, drawn from the water level to its liquid state, is associated, in relation to the meanings connected to the alchemical tradition of the "Philosopher's Stone<sup>64</sup>", with the "feminine principal", the symbol of Nature in which mankind is forced to act. This convergence between the horizontal of the natural world and the vertical of mankind and its works - described through the representation of the "new architectural principles" in the *Esprit* series of the poem - once again finds its figurative reference in lithography *A.3. Milieu* of Venice which describes, through the water and its architecture, the perfect synthesis between nature and man.

A relationship emancipated by the dominant character pervading the early reflections on urban planning of 1924<sup>65</sup>, to attain a dualistic vision of human activity that asserts a principle of "total harmony" through a criterion of the "reconciliation of opposites" and a "pact of solidarity" with the natural world.

L'univers de sos yeurs repos In in platian borde' & horison ace tournée vers le ciel vitirons l'espace in concerable ngquici insatti Reposer setendre le tos an sol ..... Mais je me duis mis bebout ! puisque tre es Ozoit te voilà propre aux actes. Oroit de platean terrestre 29

14. Le Corbusier, A.3. Milieu. (From Le Corbusier: Le Poème de l'Angle droit. Paris: Éditions Tériade, 1955). ©FLC-ADAGP.

If the "right angle" becomes an "outil" through which humans specify their rapport with the world, this harmonious relationship with nature is also, and above all, expressed through the construction of "outils". The creative activity becomes a moment of mediation through the cosmos and the human microcosm which occurs through the synthesis between rational order and poetic activity.

<sup>&</sup>lt;sup>64</sup> For a more thorough symbolic interpretation of the *Poem of the Right Angle* with an esoteric slant refer to the text by Moore, A. Richard: "Alchemical and mythical themes in the Poem of the right angle, 1947-1965". In *Oppositions*. 1980. N°19-20. pp. 111-139.

<sup>&</sup>lt;sup>65</sup> "Mankind undermines nature, tears it apart, opposes it, fights it, and settles there". Le Corbusier: Urbanisme. Paris: Éditions Crès, Collection de "L'Esprit Nouveau", 1924. p. 40.

As Le Corbusier asserted in Rome in 1937<sup>66</sup>, the object of art conveys a *"formal and visible<sup>67</sup>"* intention, the outcome of which is a mental process of abstraction that orders, according to the rules of thought, forms that evoke the feelings of the spirit through the perception of the eye.

The right angle is not only the symbol of primordial harmony between mankind and the cosmos, but it describes the theoretical principles and rules of "making". The *"outil"*, of which the *gondola* is the most successful paradigm, as well as being an object that meets the requirements of "useful", constitutes a "plastic phenomenon" that arouses emotions through its form.

This desire to combine "nature" and "geometry", "measure" and "lyricism", which pervades the entirety of Le Corbusier's artistic research, also explains the shift from the totally abstract nature of the purist language to the reflections on the *"objects à réaction poétique"* placing Le Corbusier's work within what can be considered as tension in modern artistic research caught between "abstraction" and "figuration".

The total abstraction undermines the relationship between mankind and nature, not allowing the emotional function connected to the "lyrisme des objects naturels". The objects of the natural world constitute, as Le Corbusier affirms, a set of "emotional elements, because they are the manifestation of the great natural events, of true laws that, if carefully chosen, are themselves factors of extraordinary plasticity and surprising material effects<sup>68</sup>".

Abstraction and figuration are not just two chronologically distinct moments of Le Corbusier's plastic research, but describe two key aspects of the creative process related to the constructive and expressive issue of the artistic form. The work of art is neither mere imitation, nor is it the absolute denial of reality, but a logical construction of thought that can express meanings only through its manifestation and relationship with the sensitive reality of the natural world.

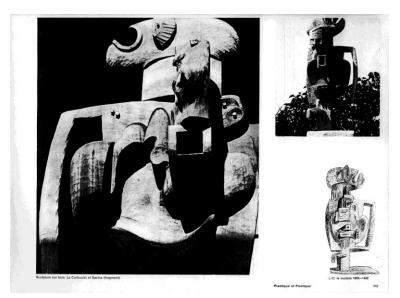
Through the concept of the "*outil*", it seems that Le Corbusier wishes to bring the artistic substance of man's work to a broader need for synthesis between "thought" and "form", "material" and "spirit", "immanent" and "transcendental" which is only expressed in the work of man through an unavoidable convergence towards the "Unity" of the two fundamental supports of plastic manifestation: "*the imminently representative*<sup>69</sup>", which, through figuration, allows the material and therefore expressive function of the form, and the "*totally abstract*<sup>70</sup>" which, through the logic of construction, specifies its material structure.

<sup>&</sup>lt;sup>66</sup> "Les tendances de l'architecture rationaliste en rapport avec la collaboration de la peinture et de la sculpture", talk by Le Corbusier at the Conference of the Arts entitled "Rapporti dell'architettura con le arti figurative", held at the Alessandro Volta Foundation on 23-32 October 1936 in Rome. In Tamborrino, Rosa (Ed.): *Le Corbusier Scritti*. Op. cit. pp. 281-294.
<sup>67</sup> Ibid. p. 284.

<sup>&</sup>lt;sup>68</sup> Le Corbusier: "Le lyrisme des objets naturale". FLC B2(16)1.

<sup>&</sup>lt;sup>69</sup> Le Corbusier: "L'espace indicible". Op. cit. p. 14.

<sup>&</sup>lt;sup>70</sup> Id.



15. Le Corbusier, sculpture *Totem*, 1950, Paris, FLC. (From Le Corbusier: *Œuvre complète*. Vol. 5. 1946-52. Zurich: Edition Girsberger, 1953. p. 243). ©FLC-ADAGP.

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