

## JOSÉ FERNANDO DE CASTRO GONÇALVES

Motivation and consequence of travelling in the architecture of Le Corbusier: Voyage d'Orient and Latin-american travel<sup>1</sup>



JOSÉ FERNANDO DE CASTRO GONÇALVES

196

Motivation and consequence of travelling in the architecture of Le Corbusier: Voyage d'Orient and Latin-american travel

José Fernando de Castro Gonçalves Architect, PHd in Architecture from the Escola Técnica Superior d'Arquitectura de Barcelona (ETSAB), Adjunct Professor from the Departament of Architecture from the Faculdade de Ciências e Tecnologia da Universidade de Coimbra. josefgoncalves@sapo.pt

#### Abstract

The travels of architects have changed the thought and the architectural production of modernity, because the experience of travelling reveals that it is essential for the knowledge of architecture to incorporate a sensorial approximation of the constructed space, and because history has been rediscovered as a tool for designing, that goes beyond a simple catalogue of styles and aesthetics.

The purpose of travelling had different consequences in the architectonic production, but in the flow of ideas and cultures that it allowed, it's possible to see the evolution of a path that founded a unique and truly modern design method.

If we observe the travels of modern architects and compare it to the ones that the architects who underwent the Grand Tour in the 18th and 19th centuries made, we realize that while the knowledge of the territory is essentially the same, in the productive results of said contact with history and the architectures of the past we find different essences. Those differences are a result of the way that man places himself in relation to the past: the modern architect questions history in a different way because, by releasing himself from its stylish manifestation, he sees it as a thought and interprets it out of a need to do it. In that sense the first two decades of the 20th century show the most revealing mutations in the context of the architect's travels of long duration, because they coincide and participate in the flow and contamination of the ideas that accompanied the emergence of the artistic movements of the period. The use of history as a source, as an operative tool for the construction of the new artistic foundations that are part of modern design, shall be responsible for the complexity of purposes and expressions that modern architecture will incorporate. In hindsight, it constituted an alternative way to construct the modern identity, indifferent to the pressure of the industry and of the metropolis. All of this is demonstrated in the architecture of Le Corbusier, in the period after his trip to Latin America.

Key-words: Architecture. Travel. Experience. Knowledge.

## The travels of the architects

The travels of architecture have marked architectural thinking and production in modern times, whether due to the experience of the trip revealing that architectural knowledge necessarily incorporates a sensorial connection to the constructed space, or due to the rediscovery of history as a project tool which goes far beyond a showcase of styles.

The reasons for traveling and the travel programs have had different consequences on architectural production. However, it is in the transit of ideas and cultures rendered from these travels and which go back from the Middle Ages to the first decades of the XX century that we are able to trace the evolution of a route that founded a unique and truly modern project methodology.

If we take a look at the travels of modern architects, comparing them with the travel journals and experiences left by the architects and writers who took the *Grand Tour* of XVII and XIX, we realize that, while for the acquaintance with the territory the same routes are basically repeated, having at times the same writers and travel guides as reference, while for the productive outcomes of the contact with the history and architecture of the past, we find crucial differences. And, these differences result, mostly, in the way that man faces the past: the modern architect questions history differently, for he sees it with the mind and interprets it with the need.

In this sense the first two decades of the XX century present the most relevant mutations in the context of lengthy architecture travels, because they coincide and participate in the transit and contamination of ideas that accompanied the appearance of the artistic avant-garde at that time.

By rejecting the languages of the past, the mentors of modernity look for new principles for the art of the post-industrial revolution, in a sense that goes beyond its most evident mimetism. Although the return to the roots of the Greco-Roman world reveal a parallel with the same movement of renovation of the renaissance period, the synthesis achieved through this travel experience will solve the sterility of the creative process that initiated with the machine and mass production precept. The theme will be that of the travels of Lewerentz, Asplund, Le Corbusier, Alvar Aalto, Mies Van der Rohe, Bruno Taut, Louis Kahn's etc. and their consequences.

This niche of history as an operative tool for the modern project, after having been freed from its stylistic manifestation, would be responsible for the complexity of meanings and expressions that modern architecture would come to incorporate. Ultimately, the construction of the modern architecture identity became possible, which was an alternative to the pressures exerted by the industry and the metropolis. This is demonstrated by the evolution of Le Corbusier's architecture between the period of his travels to the East and the beginning of the 30s, right after his trip to Latin America in 1929.



# Travel to the East 1910-1911

Le Corbusier (1887-1965) was one of the modern architects whose trips most clearly contributed to the construction of a strongly personalized theory and practice of architecture. Understanding his voyages is therefore, a means of understanding his work.

From La-Chaux-de-Fonds, in the Swiss Mountain ranges where he was born and where he initiated his studies, Le Corbusier would set out to his first and most noted architecture travels before the war: the trip to Italy in 1907 and the trip to the East in 1919/11.

In the first trip, at the early age of 20, Le Corbusier heads to Italy for a period of two months and a half (September to November) in order to get to know Milan, Florence, Siena, Bologna, Padua and Venice. There are few documents, drawings and photographs left from this route. However, there are enough to demonstrate the cultural reconnaissance characteristic he was imbued with.

Three years later, in April 1910, Le Corbusier sets out on another voyage, in the direction of Germany, where he will study the new movements in the applied arts. This trip, sponsored with a scholarship from the La Chaux-de-Fonds Art School, will end up having an unforeseen meaning: motivated or not by the contacts he made (among which,Tessenow), Le Corbusier heads from Berlin to the East through the Danube route, in search of a course that had not been contaminated by the "sins" of the industrialized West. In a letter he wrote to William Ritter (a literary mentor whom he writes to regularly) before leaving, Le Corbusier speaks of the banality of the modern German architecture and stresses the emotion that the illuminated spaces, the marble, the light in the classical architecture had provoked in him and which in turn became an obsessive part of the planning of this dream trip. Everything in this forthcoming trip leads him to this happy land "where, parallel to the shoreline, the rectilinear marbles, the vertical columns and the entablatures shine." (Le Corbusier, 1911)<sup>1</sup>

- The trip, which would last till May 1911, has a work program in line with a typical *Grand Tour*. Defined by L'Eplattenier, his professor, this program presupposed a method of investigation and disciplinary discovery that would incorporate two influences connected to and associated with the XIX century:
- on the one hand, it is evident from his Carnets and in the book Voyage d'Orient (edited 54 years after the first edition was interrupted by the 1914 war) the connection with Goethe's Italian Journey<sup>2</sup>, either because



Quoted by Gresleri, Giuliano, Dal Diario al Progetto: I Carnet 1-6 di Le Corbusier. Lotus 68, Milan, 1991, p.13
Johann Wolfgang von Goethe was in Italy from 1786 to 1788. The work Italian Journey was published in 1816-1817.

> it constructs a discourse based on a naturalist vision imbued with cultural and scientific curiosity, whether because in his journey the narrative abandons the references to nature and to costumes to focus on the architectural aspects (this disciplinary detour becomes quite apparent in the *Carnet* because it coincides with him diminishing his writing and photography and centering on drawing);

on the other hand, the influence of the Baedecker guide on the Carnets
3 and 4 is evident from Istambul to Bridisi, and especially, in the L'Italie
des Alpes à Naples, either in the suggested routes (although in a reverse order, from South to North), or in the work mentioned as reference there.

Two other interlocutors accompany Le Corbusier in the *Grand Tour*: his friend August Klipstein, an art historian and collector, who goes with him from Dresden to Athens and William Ritter, who orients him literarily, and has already been mentioned. Ritter recommends authors with a very descriptive colorful realism which helps him to overcome cultural barriers and allow him to physically take part of the spots; he goes from spectator to leading figure: in Istambul Le Corbusier will even walk around dressed as a Turk! Behaving and thinking as Turk was also possible due to the duration of their stay coming very close to being a residence, in an integration that would lead to the statement that "how painful is the encounter with tourists! (...) They are Philistines in exodus, branded more than ever due to being away from their habitat and marching around." (LE CORBUSIER, 1993:139) [1]



Klipstein e Le Corbusier in Pera, Turkey 1911

Fonte: Fondation Le Corbusier, picture L4(19)188 © FLC/SPA, 2013



The *Grand Tour* has always had some sort of travel record associated with it, some form of ownership that is sometimes translated into the physical possession of objects. For Le Corbusier this travel record is done with the tools or supports he uses – a Moleskine notebook, photographic camera and binoculars – and through his note-taking, letters, drawings or photography. However, in some cases, especially in the first part of the trip, he purchases pottery and artifacts which he classifies as products of primitive or "pure" state. This illustrates the art/technical balance he is seeking. The travel experience acquires a



property format... the conquest idea from the German expression *an* sich reissen, where the word reise (trip)<sup>3</sup> is derived from.

However, his most renowned travel records would go beyond the articles sent to La Feuille d'Avis from La Chaux-de-Fond who partially financed the trip, which he registers in the Carnets de Voyage - the notebooks that are behind the Voyage d'Orient text. The VI Carnets<sup>4</sup> from the trip to the East are not organized chronologically (the second one forays more elaborately into themes that were covered in the first), nonetheless, they walk hand in hand with the Le Corbusier's musings regarding the themes that came up as the trip progressed. He registers in text form, the routes, the ambiences, the customs, the architectural and anthropological characteristics, as well as notes and drawings, many drawings. Drawings which demonstrate in the measurements of the monuments of the past a "profound" and intuitive project logic - the drawings, most especially from the south of Italy to Rome, reveal interpretative and reconstructive intentions he will utilize late in some projects and works [2]. The notes and drawings from the Carnets also serve, in an independent way, as a document source for the manifests he edits in Vers une architecture (1923), Urbanisme (1925), e L'art decoratif d'aujourdhui (1925).

### Picture 2

Canopy Sketch, Le Corbusier

Source: Carnet du Voyage d'Orient n.º5, p.69 1911 © FLC/SPA, 2013



Besides the Carnets, photography will be one of the novelties that Le Corbusier incorporates into his travel registers, just as S. Lewerentz had done the previous year. His fascination for the XIX century scientific program, which becomes apparent in the artistic avant-garde program of the *Esprit Noveau*, will initially be seen as a defense of an imaging method that revolutionized a change in taste, and whose importance is highlighted in the final notes of the *Voyage D'Orient* edition:

I waited sixty years before being able to define the tipping point wherefrom the current knowledge and taste for art spread. It was the inventor of the cliché «simili» ... who caused the direct and integral use of photography, I mean the automatic use, without the use of the hand, a real revolution! (LE CORBUSIER, 1993:140)





<sup>3.</sup> Paul Kruntorad. L'orizzonte ampliato. Lotus 68, p.123

<sup>4.</sup> Ver Gresleri, op. cit.

> Aware of the distinctiveness of this new technique, he uses photography more as a way of capturing the moment before making any notes or drawings rather than merely documenting his presence in places (something he also does) [3]. However, as time progresses the camera was put away due to the suspicion of it being a register that fixes (or keeps) without seeing. In the Italian route, most especially in Pompeii and Villa Adriana, this reservation will lead him to opt for drawings, in an increasingly faster manner, which registers only the essential.

#### Picture 3

Le Corbusier em Atenas, Setembro 1911

Fonte: Fundação Le Corbusier, fotografia FLC L4(19)63 © FLC/SPA, 2013



It is significant that his travel narrative ends in Naples on 10 October, 1911, where the register of the Carnets focuses on drawings and in strictly architectural themes. Apart from the obvious explanation, which was the fatigue from a trip that had lasted months, this change in register made it seem as if the notes drawn and the intensity of what was revealed from that point of view, annulled any word.

## About the pedagogics of the Trip

As we said, Le Corbusier went on the Grand Tour in search of a culture that had not been contaminated by the productive detours of the industrialized world, with particular reference to the mass production of goods "masked" as handcraft or eclectic constructions of cultural and architectural expressions that were formerly genuine.

Apart from this disciplinary quest, in the route to and including Istanbul in the **Voyage D'Orient**, Le Corbusier speaks of the landscapes and the men who inhabit them, revealing a discovery process that values the emotion of being faced with the unknown. The journey, the discovery, the reading and the interpretation are "emotion provokers" which allow him to overcome the determinism of the modern discourse and sterile debate on applied art. But what really distinguishes him from the architects of the *Grand Tour* of the past is the notion of a renewal, having begun at a "pure" stage which is associated with the definition of a new man, later integrated in the *Esprit Noveau* and *Vers une Architecture* (1923) manifesto.



> The main result of this documental withdrawal will be the definition of a paradigmatic work method that will center on the continuous reuse and regeneration of forms. History, and in this sense, the knowledge acquired from contact with the works of the past became a tool which allowed questioning of how and why something was designed and knowing how to design:

I strongly resented this sole and noble task of the architect, which is opening the soul to fields of poetry, putting at stake with rectitude materials in order to make them useful. [...] By God! How painful was the enthusiasm that came upon us in these temples of the Orient! And, when leaving, I was filled with shame. However, the hours spent in the silent sanctuaries inspired in me a youthful valor and truehearted wishes of being an honest builder. (LE CORBUSIER, 1993:157,158)

The drawings, notes and measurements are thus not an end in themselves, but rather become a design. Le Corbusier himself speaks about this in a footnote, at the end of the book:

(...) At the outset of this first trip to the East I still didn't have the habit of taking exact measurements of the objects that called my attention. Nevertheless, the awareness of the dimensions took over me subsequently, hence my designating the man with the hoisted arm, the key to all architecture. (LE CORBUSIER, 1993:182).

This eagerness for measuring, which we find from Renaissance to Modernity, will become an obsession that will lead him to projects of the systematization of construction, of the city, and of nature itself and will take him to his corollary Modulor (1942), which measures man to get to the universal!

Notwithstanding, the enormous impact of the mosques and of the city of Istanbul and this occupying a central part of the narrative of the trip, it will be, however, in the ruin of Athens, Pompeii and Rome that he will discover the true nature of the problem with the architecture. Places of forms and spaces where the wholeness and the uniformity of the material, as well as the confirmation of a simple geometry that regulates the architectural fact, leads him to state: "j'aimerais les rapports geometriques, le carré, le cercle et les proportions d'un rapport simple et caracterisé." (GRESLERI, 1991:16)<sup>5</sup>

We would, thus, be able to understand his writings from a new prism, as treaties which teach us to look, as well as the five points of modern architecture, as a visual conception manifesto which releases architecture from the integrative shackles of the past.

This visual approximation, which liberates the architectural critique from the canonical historical interpretation (which leads everyone to see the same things the same way), is still infused with the symbolism with which it is inevi-



<sup>5.</sup> In Gresleri opus cit, p. 16. Le Corbusier's contact with the Cristal chain are well-known: Hacia el cristal – text by Osenfant and Jeanneret from 1923. In the Carnet 4 (p. 167) there is a drawing of a St. Peter Pinacle in the 1<sup>st</sup> basilica: the omphalos, the legendary holy stone fallen from heaven and that marked the "navel of the world", or the center of the earth, that was in the Temple of Apollo in Delphos. There are remarkable similarities between this drawing and Bruno Taut's, 1914, Cristal Pavilion.

> tably associated; so much so, that it is interesting to note a request presented to A. Klipstein, his travel companion, that he may be allowed to make a first solitary visit to the Parthenon, as if it were a ritualistic greeting. Nearly at the end of the Voyage D'Orient text, Le Corbusier, remarkably, states:

Those who, while practicing the art of architecture, should find themselves at a specific moment of their career having an empty brain and a heart rendered by doubts, faced with the task of bringing to life dead matter may understand the melancholy of my soliloquies in the midst of the ruins – my chilly exchanges with the mute stones. I, many times left the Acropolis with shoulders laden by a heavy presentiment, without daring to confront myself with the fact that I would one day have to work. (Le Corbusier, 1993:182)

But work, he did, and in a prolific manner. Even though, the reflection of what he learned in his travels on his projects is evident and has been widely investigated (notice the direct and indirect Turkish and Roman influences applied to the villas he built before the first world war, the reflection of a more accurate plastic proposal which congregates an operative and abstract synthesis for modern times will only emerge over the 20s; first in the Purism sphere and later in architecture. Nonetheless, at distinct periods and in works throughout his professional life, there is a lack of reference, subtle or otherwise, to the ambiences, symbols or landmarks that he had discovered in those first travels, which leads to a chain reaction that explains the link between the challenges he proposes himself and the solution proposals he finds.

# Chain Reaction – from the trip to the Orient to the trip to South America.

Le Corbusier's theoretical and architectural production following this trip was strongly marked by post-war political and economic circumstances, in the sense that the latter demanded an artistic and architectural clarification. The actions and propositions that will lead the way to the Modern Movement are all encompassed in it. In fact, the opportunity generated by urban growth that accompanied the economic recuperation of that period led to the creation of architectural manifestos whose methodologies of urban and architectural recuperation took on a strong conceptual radicalism, which explains, among other things, the proselytization characteristic of the artistic proposal of Purism and the architecture of the *Esprit Noveau* in which Le Corbusier was involved.

During this period, between the end of the first war and the economic crisis of 1929 that ravages the industrialized world, his works acquire not only a program (the residence and the city), but also a precise constructive meaning.

As corollary to this modern project, based on the progressive and machinist principle the new man was destined to, we highlight the transition moment



of the production of the Weissenhofsiedlung and Stuttgart houses of 1927 [4]; transition not only because they constitute an architectural paradigm to the themes that he is engrossed in at the period, but also explain the reason for a trip to Latin America. A trip that that would have unforeseen consequences not only to his own production but also to the other modern architects involved in the International Modern Architecture Congresses (Congrès Internationaux d'Architecture Moderne– CIAM) which he directed immediately after his trip.

#### FIGURE 4

Weissenhofsiedlung, Le Corbusier's Houses, Stuttgart, 1927

Fonte : Fondation Le Corbusier, picture FLC L1(2)37 © FLC/SPA, 2013



# Le Corbusier at the Weissenhofsiedlung

As stated previously, the architectural vanguards of the period between the wars were dominated by drawings of that house, and it is in these that the most revolutionary architectural ideas of the XX century were explored. However, this centralization is derived from the emerging social problems of the metropolis and of the opportunity created by the new construction materials that are a result of industrialization, but the means of modern broadcasting, with their publications, universal exhibits and contests will be the ones that propitiate the radicalness of the avant-garde proposal; as a last analysis "the exhibition venues were converted into laboratories" (COLOMINA, 2009:6) that through the exchange between the architects that took part in them a conceptual and constructive experimentation would be expedited. In fact, and once again quoting Beatriz Colomina, "The most radical and influential proposals in the history of modern architecture were conceived in the context of the temporary exhibits" (COLOMINA, 2009:07), because they were used both as a space for the public divulgence and cognizance of the progresses concerning the urban and architectural problems of the metropolis, and as a place for the transformation of the modern inhabitation concept.

It is in this context that we should view the architecture of the Weissenhofsiedlung of Stuttgart, integrated into a larger scale exhibition of the house, *Die Wohnung*, and organized by the Deutsche Werkbund to aid in the reflections of the effects of industrialization in the different forms of contemporary life.

Le Corbusier's interest in the effects of industrialization on artistic manifestations, particularly in architecture is evident at least since 1914, the data where





> he formulated the Dom-ino houses proposal – a project that was more conceptual than architectural, made for houses that required a simple and very systematic construction, intended for the foreseen post First War reconstruction period. This interest becomes more intense when it comes to Purism, a vanguard movement that he founded with Ozenfant and that gave origin to the first modern manifesto of architecture called *Vers une architecture* (1923), with the recompilation of texts from the *L'Esprit Noveau* which he wrote between 1920-1921<sup>6</sup>,

> This texts evinces an apology to the "aesthetics and architecture of the engineers" with which he will resolve the traditional production dichotomy of the engineers and architects (whose complementarity he will demonstrate in a diagram) [5]; however, it also defines, as we have demonstrated, a method of dealing with the history of architecture, which is explained in the analogy between the evolution of the car models from 1907 to 1921 and the evolution of the Paestum to the Parthenon.

#### PICTURE 5

Diagram – Architects Vs Engineers, Le Corbusier

Fonte : « La Maison des Hommes » de François de Pierrefeu et Le Corbusier, Editions Plon, Paris, 1942 ©FLC/SPA, 2013



Although it is an apology to machines, it still makes it clear that the mere technical response is insufficient for a construction problem "with the material we build houses. This is construction... however; something suddenly touches our

6. L'Esprit Noveau is identical in foundation equivalence as Bauhaus is to Germany or De Stijl is to Holand.



heart and makes us feel good, happy... This is architecture. "If" my house is practical, it's as good as an iron path or a telephone, but it doesn't touch my heart..."(LE CORBUSIER, 1978)<sup>7</sup>

Thus, with the mechanism, Le Corbusier discovers a law that regulates the design, the function and the construction, but the results are always oriented by sense of visual conception of the forms that touch the heart; and perhaps because it is not seen with the eye, these forms are primary and strongly contrasted: cubes, pyramids, cylinders, spheres, etc. Thus, a circle is closed, because these are precisely the forms that will bring together, in his compositional synthesis, the modern mechanical universe and the classical architectural culture.

These principles of mechanization applied to architecture had already generated other projects, among which the Citrohan house (1922), whose prototype came out precisely at the Weissenhoff de Stuttgart [6], emblematically stands out. It will be just a step to get from there to the "inhabitation machine", but more due to the conceptual principle rather than the effective assumption of the problems of a pragmatic nature which make a house function as a machine.

#### Picture 6

Citrohan House, Le Corbusier, 1922

Fonte: Fondation Le Corbusier, picture FLC L3(20)9 ©FLC/ SPA, 2013



The aesthetics of the machine are, therefore, a script for the new architecture, and most importantly, envisaged for the ideal man and not so much for the underprivileged of the industrial revolution ; this is explicit in the 1925 *Esprit Noveau* Pavilion, which works as a demonstration of the potential of the new architecture. This proposal transforms the house into a receptacle; an empty box where the body's and the spirit's functions are freely processed. Free, but in an orderly manner, of course!



<sup>7.</sup> Free translation from Hacia una arquitetura, 1978.

> Perhaps after the 1925 Paris exhibit, Mies Van der Rohe invites Le Corbusier in 1926 to build two houses in the design he is developing for the Weissenhoff de Stuttgart; and also allows him to choose the place. Le Corbusier choose the most visible terrain, at a spot where everyone passes by in order to access the exhibition; however, he proposes the construction of houses that better fit the scope of themes he had been developing on the effects of industrialization on the contemporary forms of life, rather than the concerns of subsistence dwelling needs, mass production and economic construction, which the Germans were occupied with.

> This change in ideological position, or, more prosaically, the privilege conceded to a Swiss/Frenchman (unjustified in many people's opinion), will be the basis of the reasons that prevented the German architects from embracing the houses with enthusiasm; not only because the houses did not take up a minimal or economic space, for they were the biggest and most expensive houses of the compound, but also because they were decorated with typically bourgeois gewgaws that were laden with past memories. It might be clarifying to take a look at the architectural and equipment design themes that the Germans who were present at the exhibition were occupied with, in order to understand the scope of this contention!

> Whatever the reason may be, the fact of the matter is that the houses were received insipidly by the critics who accused Le Corbusier of building for an urban man who did not fit the laborer profile: "the intellectual is certainly a man our times, but is he really the kind of person whose demands and needs should determine the residential architectural forms?" (WEDEPHOL)<sup>8</sup>

Nonetheless, the houses not only withstood the criticism, but also, and most importantly due to it, enjoyed extraordinary consequences.

On one hand, it was there that the "the five points for a new architecture" were formalized, a designation that arose in a monograph on the houses written by Alfred Roth (with Le Corbusier's participation as a collaborator)<sup>9</sup> and that created an exceptional opportunity for internationally propagating Le Corbusier's architecture ideas to the public in general. Although the conceptual and constructive enunciation of the house resting on the reinforced concrete technique does not propose a new project methodology, much less a specific formal result, the conceptualization and optimization process of the construction system would lead to a substantial modification of the modern architecture. Consider this: the Dom-ino (1914) system constituted a first rationalization and systematization rehearsal of a construction process; however, it was only in the Citrohan house that he first processed his architectural formulation where the "five points" would encompass his maximal technical and conceptual de-



<sup>8.</sup> Edgar Wedephol quoted by Stanislaus Von Moos, in Le Corbusier: Elements of a Synthesis. Rotterdam: 010 Publishers, 2009, p. 147.

<sup>9.</sup> Alfred Roth. Two Houses by Le Corbusier and Pierre Jeanneret, 1927.

> velopment. Now, it is in Stuttgart that the house is built as a prototype and is presented as a perfectly identifiable canon where one may find: freestanding support pillars, open floor plan; long horizontal sliding windows; vertical facade free from supports; roof gardens, although it was the Villa Savoye (1929) that would transform him into the icon of the consecration of methodology.

> On the other hand, the fact that the houses were equipped with furniture identical to the proposal for the *L'Esprit Noveau* Pavilion, and not with design products of industrial manufacturing, had immediate consequences to Le Corbusier's work.

Although he was very successful in Paris, he did not have the same luck in Germany, where the aforementioned principle of decorations and furnishing was strongly criticized due to it being linked to the bourgeois elite. Consequently, Le Corbusier would associate himself with Charlotte Perriand (1903-1999), for a period of ten years, in order to draw and produce the modern furniture10. His idea of interior equipment was profoundly changed due to this failure. Le Corbusier does not forgive failures. [7]



Finally, in 1928, while still basking in the enthusiasm generated by the Stuttgart exhibition and with the intent of creating a platform for the reflection of the new architecture, which was plainly emerging in the European architectural avant-garde scope, the first CIAM is organized. Promoted in the La Sarraz Castle by its owner, the Countess of Mandrot, a woman who appreciates modern art and Le Corbusier's work in particular, this meeting will amplify the divergence or even the latent dissidence between the German and French modern program, in this case having the Franco-swiss master as its main protagonist. Realizing that the ideological orientation generated there and most importantly that the CIAM meeting would inevitably take place in Germany (Frankfurt,

10. Charlotte Perriand had just received great acclamation from the critics at the Salon d'Automne of 1927. Although she was the one who sought out Le Corbusier's Atelier, it was only after his visit to the 1928 Salon, where her work was once more being exhibited that her collaboration was accepted. C.PERRIAND in *Io Charlotte*, Tra Le *Corbusier*, Léger *e Jeanneret*. Roma/Bari: Editori CLF Laterza, 2006.

#### Picture 7

Chaise Longue, Le Corbusier and Charlotte Perriand

Source: Inside The machine for living, The Monacelli Press, p.96



> 1929) and would discuss subsistence dwelling/Existenzminimum, a theme he would not be able to dominate, LeCorbusier becomes uninterested in the meeting and tries to find a good reason for his absence<sup>11</sup>. To this end, he had Blaise Cendrars, his friend from La Chaux-de-Fonds, who lived in Brazil, invite him to take a trip through the Americas, where he, of course, uses the opportunity to "teach" the locals to do business. It's worth mentioning the conferences that gave origin to *Precisões* (1930), and the projects for Rio de Janeiro, are among other results that arose from this trip.

#### Picture 8

Sketches, Le Corbusier, Rio de Janeiro

> Source: Fondation Le Corbusier,Plan FLC 32091©FLA/SPA, 2013



However, the flight that took him to The Americas also guided him in the direction of profound changes in the way he views the city and the landscape. In The Americas he travels by plane (flown by Saint-Exupery) and sees the territory in a new dimension; this is reflected in the registers made by drawings that have decisive alterations. Indeed, unlike the sketches from the Voyage D'Orient, where we only subtly realize a representation that alters the framing of the construction with the landscape in order to have an "ideal" representation, in the drawings he makes in Brazil, especially the ones made in Rio de Janeiro, the register not only includes the landscape but also the transformation wrought by the project. Le Corbusier sees through architect eyes and registers what he wants to transform, freeing himself from the simple geometric forms, in order to allow himself to be dominated by the place, as well as being absorbed by it. [8] A process whose conceptual matrix will come close to explaining the way Lúcio Costa designed Brasília by using a discovery his master made in his own country.

11. His disenchantment or even fury for losing to the Genève Palace of Nations in the contest, contributed to this forced withdrawal.



> Another direct effect from this, which confronts him with new balances between the power of nature and manual labor when faced with the creation of the machinist, is the emergence of a new sensibility of construction, especially when it comes to final physica e artisan's work. His works will then become, for this reason or another, more expressive in the choice of construction materials and finishes, introducing as an alternative to the refinement of the industrial product, the texture and dirtiness of the laborer's hand. The white plaster from his Purist works of the 20s will simply be eliminated, and he will explore with greater expression and constructive rigor the materials with which he will hereinafter conceive his works [9]. In this image, we can picture this conceptual transformation by the reverse order of the construction phases.

#### Picture 9

Maison La Roche – Two Moments In The Work. Le Corbusier, Paris 1923-25

Fonte: Fondation Le Corbusier, pictures FLC L2(12)74 e FLC L2(12)22 © FLC/SPA, 2013



This trip to Brazil and Argentina will, in its turn, have decisive consequences in another level: a self-sufficient life in enclosed spaces at sea for two or three weeks would take him to a new line of work, one that is founded on the transatlantic metaphor, which justifies the Unité habitation concept; of life in a receptacle; of the building as a city. Not coincidentally, at the IV CIAM in 1933, where he will go back to dominating and will give birth to the Athens Chapter, the encounter takes place aboard a ship.

212 Motivação e consequência da viagem na arquitetura de Le Corbusier: viagem ao Oriente e América Latina

Motivation and consequence of travelling in the architecture of Le Corbusier: Voyage d'Orient and Latin-american travel

#### Picture 10

Axonometry of the Stein houses, Le Corbusier and Tugendhat, Mies van der Rohe

> Source: author's drawing



## **Final Notes**

In the scope of the collateral effects that Le Corbusier's work effected in the temporal space between such decisive trips to his path of production, the two houses of Stuttgart would be even more seminal to various modern architects, not only due to its evident attractiveness and editorial success in the following years, but also due to the possibility of contacts and exchange of information that would predictively occur. Consider this: was it a coincidence the fact the first Villa Stein drawings which started in 1926 were close in theme to the Citroan house (elevated platform, stairs connecting to the ground, indented volume in the rooftop, terrace) and that these same themes were repeated by Mies Van der Rohe in the Tugendhat de Brnö (1928-29) house [10]? Were the meetings between the two men in 1926, and documented in a well-known photography, the occasion when Le Corbusier explained to Mies their topics and new discoveries in the design of the house?

It's worth noting that Mies' house values its interior space, where the residential possibilities of the Barcelona special model are evidenced. However, the volumetry of the house has no connection with the neoplasticism of the pavilion. However, the formal approximations and the exterior composition, which may be only a coincidence with the design phase in the works of Le Corbusier (which in fact he may have never even seen) cannot be overlooked in a work that is necessarily known as the second house of Stuttgart: notice the construction over a platform, the metallic structure of the first floor, the horizontal volume and the finishing of the terrace with visors or roof slabs to create shading. [11]

Motivação e consequência da viagem na arquitetura de Le Corbusier: viagem ao Oriente e América Latina Motivation and consequence of travelling in the architecture of Le Corbusier: Voyage d'Orient and Latin-american travel

#### Picture 11

The Glass Room, Lilly Reich

Source: The Glass Room, Simon Mawer, Civilização 2008



Perhaps the curious misconception of a Portuguese publishing house that publishes a novel set in the house from Mies with a picture of Le Corbusier's house from Stuttgart, could be a sign... who knows, perhaps Le Corbusier himself, wherever he may be, insists on minimizing our mistakes.

## References

BENTON, Tim. **The Villas of Le Corbusier and Pierre Jeanneret 1920-1930**. Basel: Boston, Berlin, Birkhäuser, 2007.

COLOMINA, Beatriz. La Casa de Mies: exibicionismo y coleccionismo. **Mies Van** der Rohe: Casas, 2G, n.48/49, Barcelona: Gustavo Gili, 08.09., p. 4-21.

GIEDION, Siegfried. Mechanization Takes Command: a contribution to anonymous history, London: Oxford University Press, 1948; W.W. Norton & Company, New York, London, 1975.

GOETHE, H. W. **Viaje a Italia**, El peregrino apasionado. Caracas: Editorial Berenguer, 1945.

GRESLERI, Guiliano. Le Corbusier - Voyages d'Orient Carnets. Milão: Electa Architecture, 2002.



4 Motivação e consequência da viagem na arquitetura de Le Corbusier: viagem ao Oriente e América Latina Motivation and consequence of travelling in the architecture of Le Corbusier: Voyage d'Orient and Latin-american travel

\_\_\_\_\_. Dal Diario al Progetto: I Carnet 1-6 di Le Corbusier, Lotus 68 Milão, 1991.

KRUNTORAD, Paul. L'orizonte ampliato. Viaggio in Italia come paradigma. Lotus. Milão, n.º 68, 1991, pags. 122-128.

LE CORBUSIER (JEANNERET, Charles-Edouard). El Viaje de Oriente. Murcia: Librería Yerba, 1993.

LE CORBUSIER. **Hacia una arquitectura** (Vers une Architecture, 1923). Barcelona: Editorial Poseidón, 1978.

LE CORBUSIER, **Precisões sobre um estado presente da arquitectura e do urbanismo**. São Paulo: Cosac&Naify, 2004.

LUCAN, Jacques. Le Corbusier une encyclopédie. Paris: Centre Georges Pompidou, collection Monographie, 1987.

MANSILLA, Luis Moreno. **Apuntes de viaje al interior del tempo**. Barcelona : Colección Arquithesis, num.10, Fundation Caja de Arquitectos, 2001.

MARCUS, George H. Le Corbusier: inside the machine for living. New York: The Monacelli Press Inc., 2000.

MOOS, Stanislaus Von. Le Corbusier: Elements of a Synthesis. Rotterdam: 010 Publishers, 2009.

PERRIAND, Charlotte. Io Charlotte, tra Le Corbusier, Léger e Jeanneret. Roma/ Bari: Editori CLF Laterza, 2006.