



Modernism in Havana: its aesthetic dimension through molds

c o n t e x t

During the first four centuries following its foundation, from the 16th to the 19th centuries, Havana's urban development increased significantly within the proposed walls (which had been planned since 1603). Parallel to its inner expansion, new urban structures were added in its surroundings as of the 18th Century, and continued to grow towards what were later to be known as the city outskirts. However, it was in the 20th century, especially during the first half, when most of the city was developed.

The turn of the century was marked by a change in power: from 1898 to 1902 the American interventionist government took over the country and in 1902 the Republic was established. Thus, ending the four centuries of Spanish colonial domination and opening the era of American control, which lasted half a century. The image of the city was modified by the accelerated construction development brought about by this change, the impressive population boom and the subsequent stages of economic prosperity to come, and our country was eager to show its new face. The new century meant the arrival of modernity, and the rupture with colonial tradition.

The foundations of the modern urban infrastructure were laid down after 1898, during the American intervention, and the first decades of the 20th Century. The city opened up itself completely to innovation. Streets were paved, electrical streetcars were inaugurated in 1901, in 1902 the first automobiles were introduced, from 1908 to 1913 the sewage system was created, the first radio were broadcasted in 1922, the first air flight took place in 1933, and the first television transmission was made in 1950 (Cuba was the third country in the world to introduce that technology).

This prosperity also had a clear impact in the urban and architectural scenarios, and turned Havana into a modern metropolis. The construction of significant structures begins, for instance construction works of the Malecón sea wall started in 1901, the University of Havana from 1906 to 1944, the Central Railroad Station in 1912 (railroads had been operating in Cuba since 1836)... The neighborhood of Las Murallas was also consolidated as a civil and public center (incredible buildings were located there, such as the Galician Society built in 1915, the Asturian Center from 1927, and the National Capitol built from 1910 to 1929). Several other neighborhoods were developed and populated like El Vedado, and Miramar, some of the guidelines of the Plan for Urban Enhancement and Expansion of Havana designed by Jean Claude Nicolas Forestier in 1925 were implemented, with excellent contributions aimed at increasing the environmental quality of the city...

During the first two decades of the prosperous 20th century, and as usual until a bit later than in the rest of the world, the eclectic architecture prevailed in Havana and the rest of the country. Eclecticism is abundant and very diverse in itself, it widespread all over the city characterizing its architectural image, as a sort of giant wallpaper upon which the rest of influences overlapped. Simultaneous to Eclecticism, Art Nouveau (which should be called Modernism) emerged in Havana's architectural discourse.

p r e f a b w o r k s h o p s

"Prefabrication workshops" or "casting workshops" placed a decisive role both during eclecticism and modernism, and even later in the 30's with the emergence of Art-Deco, in the dissemination of the style, giving rise to what is known as "mould architecture".

The essence of the outreach of the products of these workshops was the shift in the vision of construction techniques brought about by the new century. Prefabrication prevailed overall: on the skin, through different aesthetics; on the skeleton of buildings, as structural solutions for roofs and floors, with the broadly disseminated “beam and slabs” system, made up of steel beams and concrete beams, which could be either imported from the United States or produced by the workshops.

Cement was the key material on mould architecture and the one to best serve its purposes. Cuba was the first Iberoamerican country to produce cement and the first factories were established in the late 19th Century, namely in 1895. The large-scale use of cement and the existence of highly productive and efficient prefabrication workshops, gradually replaced the work of stonemasons, because there was no longer a need for highly specialized labour and it was possible to produce similar pieces. “While a stonemason took three days to make a Corinthian capital (...), a meeting workshop could produce three capitals per mould every day” (Zardoya, 2001: 49).

Initially, moulds were made carving the positive original in wood, to cast the plaster mould, and then the final piece was cast in cement. Due to the rapid deterioration of wood positives after a number of moulds had been cast, they were soon replaced by plaster reinforced with henequen threads, thus, enabling replication and mass production. A broad variety of elements for exteriors and interiors were produced with cement, or plaster casting, such as columns, their capitals and bases, arch keystones, consoles, bay frames, mascarons, balusters, cups, garlands, fleurons, and mouldings...

The pieces produced by these workshops could be purchased per unit or linear meters and could be selected from the available stock or ordered *ad hoc*. Thus, mouldings for interior decoration, for example, were sold in 1,40 m units. In addition, each piece underwent a comprehensive process which included their design (considering the way in which the positive mould is to be separated from the mould made for the specific piece), breakdown, reinforcement (if required), transportation security measures, assembling method on site... everything; the complete process.

There were even some workshops which not only produced ornamental pieces but construction elements such as roofs, concrete blocks, terrazzo floors, mosaics, etc.

Prefabrication workshops proliferated throughout the city and became so specialized that marked their areas of influence in which one can easily identify the prevalence of certain ornamental motives, which are unique, and differ from those used in other neighbourhoods. They were short staffed, usually five or six workers; most times family members. They used to compete among them to increase their profits, prestige, and creativity. They always kept themselves up to date with current fashion trends.

Another interesting feature of the workshops was that they not only manufactured pieces but worked also as designers and construction workers. The workshops ensured a certain unity within the diverse architectural repertoire and advocated for rule-based construction works as provided by the Urban Bylaws.

In 1925, the journal of the Colegio de Arquitectos (Association of Architects) advertised about a dozen workshops, but the number increased significantly, including among others:

- «**El Arte Moderno**» (Modern Art), of brothers Guillermo and Antonio Ignacio i Simó, from Palma de Mallorca. Their ad read: «Reinforced Cement Ornaments». It was announced as the largest in America according to El Arquitecto journal: “*Large workshops, manufacturers of cement, granite, plaster, and artificial marble ornaments, terrazzo floors, funerary art, water tanks, and bricks*”. Opened in the early 20’s, in 1925 they manufactured granite, artificial marble, terrazzo floors and plaster. They disseminated various motives of the Spanish neo-renaissance and transcended to the Art-Deco period. The offices and private chambers of the owners were located to both sides of a modest eclectic one-story building, while the workshops were at the back,

covering almost the complete block. The workshop continued operating until the 50's under owners Pascual and Bosch.

Alejandro Ramírez (main street), Jesús del Monte and Omoa streets. Across the Quinta Los Dependientes, 10 de Octubre municipality. (ECLECTIC PRODUCTION WORKSHOP).

* There are records of another workshop named «**El Arte Moderno**», registered in 1914 by owner Martín and Co., located on Marina and Atarés, Old Havana municipality.

- «**El Arte Industrial**» (Industrial Art), owned by Antonio Puig, announced itself with the sign: «Reinforced Cement Ornaments», but it also manufactured concrete blocks. Calzada de Luyanó no.203, 10 de Octubre municipality.
- «**Crepo y Co**», Union Concrete «**La Fe**». Jesús del Monte no.40, Old Havana municipality.
- «**Crepo y Loredo**», «**La Fe**». Jesús del Monte no.38, Old Havana municipality.
- «**El Crédito**».
- «**Fundición de Cemento**» (Cement Casting), owned by Mario Rotllant, which operated until the 20's. Franco y Bejumedá, Centro Habana municipality.
- «**La Industria**» (The Industry), Antonio de la Nuez, owner. Calzada de Jesús del Monte no.231-237, Old Havana municipality.
- «**Naranja y Co.**».
Calzada del Cerro no.669 y no.671, Cerro municipality.
- «**Naranja Capella y Ca.**».
Calzada del Cerro no.729, Cerro municipality.
- «**Taller de Cemento Armado y Ornamentación**» (Ornaments and Reinforced Cement Workshop), property of Isidro Masiá. San Lázaro no.305, Centro Habana municipality.
- «**Cuban Concrete Co.**».
Calzada de Belascoáin no.131, Centro Habana municipality.
- «**Havana Concrete Co.**».
Calzada de Infanta no.65, Centro Habana municipality.

And those owned by:

- Serrá, Ustrell y Llobet.
- Cayetano Tarruel.
Calzada de San Miguel no.224.
- Nuez y Hno, which operated until the 20's.
- Francisco de la Nuez.
Calle Enamorados no.11.
- Antonio Vacante.

After 1910, other workshops emerged:

- «**Rovira y Cía.**».
- «**Talleres de Ornamentación**», Manuel Pascual, owner.
- «**América Concreto Co.**».
- «**Cía. Cubana de Fundición de Cemento**».
- «**Cuban Vitrolite Comp.**».

- «**El Moderno Invencible**», owned by Servando Seara.
- «**Duque y Co.**», in which the decorative elements of the Bacardí building (1930) were produced.

And others owned by:

- Rolando Montrón.
- Pedro Crespo.
- Antonio Nuez.
- Baltasar Ultrech.
- Jaime Palmer
- Alonso Figueras y Co.
- Manuel Padró.
- Caballero y Font.

These are only thirty of the existing workshops, 'cause we couldn't list them all here...

the role of Catalanian immigrants

The irruption of Modernism within Havana's architecture is closely linked to the phenomenon of prefab workshops, in which the Catalanian community, settled in the city as of the 19th Century, played a decisive role for most workshops were owned by Catalanians.

The Catalanian migration was a massive phenomenon which goes back to as early as the 16th Century. From the 16th Century to the 18th Century it was mostly sailors, soldiers and missionaries the ones to arrive in the island, but after Catalanian ports were authorized to trade with the Americas in 1778 the doors to legal migrants were opened up.

This migration was always well organized; people interested know before hand how they were going to insert themselves within the local context. Some didn't succeed but others did and they either returned to invest their fortune in their hometown or decided to settle themselves in the island. Some started as small merchants and shopkeepers and gradually managed to climb up to important positions in the areas of cigars, finance, large-scale trade, ports, railroads and the sugar industry. A broad range of professions and occupations were represented, specially the ones dealing with our area of interest, architecture and construction. A large number of well qualified craftsmen, masons, blacksmiths, glassworkers, cabinetmakers and others were soon known to be skilled, fast, steady and austere workers.

Catalonian master builders acquired in their homeland vast experiences on construction works, which enabled them to expand their formal repertoire and consolidate their mastery of relevant techniques. Their knowledge background was one of the factors that allowed them to make significant contributions in the architectural scenario of the final destination of their forced migration.

From 1790 to 1840 Catalonia wasn't very prosperous, as a result of the impact of the Industrial Revolution and the hardships brought about by the war against the French Republic, the Napoleonic invasion, the absolutist reinstatement of Fernando VII, the loss of the Spanish colonial empire in the American continent and the long civil war (known as the first Carlist war).

During the period of economic bonanza of the early 20th Century, also known as the "dance of millions" or the "years of plenty", Cuba was a luring destination to undertake business. It's not strange then that many Catalanians decided to try their luck in the island. Thanks to their settlement and their prefab workshops, the features of Modernism spread all over Havana.

Master builders of the new Catalanian community made use of their experiences in manual works and their construction traditions. The components of an architecture made by and for Spaniards, namely houses and shops, came out of their workshops.

Catalonian *Mario Rotllant i Folcarà* has been acknowledged as the most important of Modernist authors. Brought up in the artisan environment of La Ribera, Barcelona, he studied sculpture and travelled to Cuba twice. In 1906, on his second trip, he decided to settle his residence in the island. He opened a workshop with 30 craftsmen, which advertised as a workshop of "Artificial Stone and All Sorts of Cement Ornaments», specifying the assorted stock of columns, stairs, balustrades, consoles, and even funerary monuments. With the passage of time the workshop expanded its stock to include fountains, benches, statues, vases... park and garden furniture.

Mario Rotllant was very versatile: he patented and traded a prefab system, decorative mouldings, water deposits and filters and even septic tanks. He was also acknowledged as a designer of façades, buildings, funerary monuments and exhibition pavilions. His works were of such quality that he received three "special awards" during the 1911 Cuban National Exhibition. Throughout his career he designed 35 modernist buildings, 35 eclectic buildings and several façades.

But in addition to Mario Rotllant, the names of Jaime Cruanyas, Ramón Magriñá, Joseph Planas Rivas or Alberto de Castro could be added to the list of renowned Modernists.

In 1916, after the creation of the Colegio de Arquitectos, the fate of the Catalonian community involved in construction works in Cuba changed.

The new professionals graduated from the School of Architecture strongly rejected the imported style, which had little to do with the academic composition standards. In fact, they despised Catalonian master builders, whom they considered their rivals, and started questioning their importance and contributions. They labelled them as mere masons, criticized Modernism for its excessive use of decorations and blamed workshops for their proliferation.

Since then their scope of influence decreased which led to the disappearance of workshops. Mario Rotllant, for instance, had to change his business from the mass production of prefab pieces to the manufacture of ice boxes, to later return to his country.

t h e s c o p e o f M o d e r n i s m

Although the saying goes "clothes don't make the man", the reality is we only get to see 10% of men when they're dressed. While Modernism limited itself to the stylish transformation of buildings' skin, Modernist façades are crucial for a clear understanding of the different stages of Cuban architecture.

The new formal repertoire afforded by Modernism:

- it gave rise to an unprecedented expression at the level of facades, overlapping their eclectic composition:

modular divisions in facades varied according to the width of lots: "on the ground floor of houses with a width ranging between 8,00 and 12,00 m. it was common to use four columns. Thus, three intercolumniations were established which govern the modulation of the other elements of the facade" (Zardoya, 2001: 65). The remaining components which make up the image were to be adjusted to this prefixed and constant fragmentation. In the case of smaller lots -6,00 m.- "it was customary to use only two columns on the ground floor" (Zardoya, 2001: 65). In light of the height limits provided by the Construction Standards and their relationship with the width of lots, facades have a marked verticality.

- the traditional space distribution was not questioned:

the horizontal space of houses maintained the typical distribution by store of rooms in a row along a corridor (which architect and critic Felicia Chateloín has denominated "train-like houses"), which started with double parlours for formal and intimate gatherings, divided only by a pair of columns over a common pedestal, in which the yard continued

to be the area all rooms faced and aired out to. It is likewise common to find “twin houses”, in which yards face each other but are divided by a party wall in order to preserve privacy.

the vertical space of houses remains unchanged as laid out by the Construction Standards which under Article 96 provide the permissible measures for each street category. Free heights in the vicinity of 5,00 m. were commonly used on ground floors and upper stories, column pedestals and skirting boards used to be slightly lower in an attempt to reduce verticality. Bathrooms and kitchens were extremely and unavoidably high given their reduced dimensions per store. In general terms, all rooms are characterized by their verticality.

- the general solution of the construction system is preserved, based on the technique of architrave column (system of beam and slabs), structure walls and brick partitions.

Although it remained at a rather epidermic level, Modernism was pioneer in transforming the business of the small-scale mould architecture of prefab workshops into an artistic product, and in the introduction of high buildings in Old Havana, a context characterized by low height.

Initially, Modernism coexisted with Eclecticism; it was an ephemeral expression, the result of punctual enthusiasm. Eclecticism was a very energetic style. It gained ground, and its massive expansion led to the decline of Modernism by 1916. Eclecticism learned from the experiences of prefab workshops. In light of “defeat”, many workshops adjusted their work to the prevailing aesthetic to survive a little longer.

l e g a c y

Modernism was able to impose its aesthetic thanks to the contributions of prefab workshops and the industriousness of their Catalonian owners and workers.

The influence of the movement shortly outlived the 1920's. Its features could be easily recognized in details of subsequent architectural styles until the Modern Movement rejected decoration. As a result prefab workshops disappeared, and subsequently the knowledge of the trade was also lost.

Today, most part of Havana's modernist architecture is on hold, worn out, partly collapsed. Its legacy was scarce in contrast with other trends, with isolated exponents scattered throughout the city grid. Only two cases are the exception of that rule, namely streets Cárdenas and Manrique, examples of urban level concentration.

The reason why there are several modernist exponents concentrated on Cárdenas street is perhaps to be found in the Catalonian descent of their owners, most of them merchants and shopkeepers. The consistency between the style of buildings and the elements supplied by prefabrication workshops can be easily found in the group of Modernist buildings located on Cárdenas, which is a rare thing, because according to the construction records of most of these buildings, the orders were all placed with the same workshop, owned by Cayetano Tarruel located on Ayesterán and Domínguez, actively engaged in the construction industry. The Modernist houses of Cárdenas street defined its marked modern appearance in the early years of the Republic, nevertheless they later fell in an unexpected lethargy state, as did the rest of buildings under this movement.

The impact of Modernism has been much discussed over 50 years of theory and research, and it is slowly awakening from its lethargy and awaiting an accurate assessment of its meaning. It wasn't until the late 20th Century, during the 1990's, that we've been able to get rid of prejudices to take an unbiased look at Modernism. 40 (1960-1990) long years denying its Catalonian fatherhood and raising undeserved accusations.

In 1965, in an article published by magazine Cuba, professor Joaquín Weiss (1965: 73) stated that “regardless of the origin of construction workers serving in Cuba, there are no reasons to

talk about Catalonian influence on the Cuban architecture of the time simple for the plastic magnificence of some buildings”.

This thesis was reiterated by Vivian Acosta (1969: 56) in 1969, according to her “although some elaborated decoration of Catalonian origin was successfully combined with the baroque legacy of previous works, which cannot be classified as Art Nouveau, it is difficult to acknowledge a pure Catalonian influence within exponents of said style”.

In her book “Catalunya a Cuba: un amor que fa història”, Tate Cabré (2004: 86) cites the position of two outstanding Cuban intellectuals: the first by a legend of Cuban and Universal literature, Alejo Carpentier, who claimed that modernist houses “were misplaced, poorly ventilated, usually built according to the aesthetic notions of the Catalonian master builders we had to endure at the time to the detriment of the classic standards”; the second by Emilio Roig de Leuchsenring, former City Historian (1938 until his demise in 1964), who acknowledged that “it was the time of twisted columns, intertwined curves (...) all in all denominated, scornfully, barbershop style”

A most recent view, which differs from the above mentioned, was expressed by Eduardo Luis Rodríguez (1998: 79) -architect, critic and researcher- in 1998. He believes that “if the influence received by a movement or style is to be defined by the resemblance of local examples with certain foreign models, and further reinforced by the origin of the authors and promoters of the works, there’s no doubt that Cuban Art Nouveau, owes a great deal to Catalonian Modernism”.

There haven’t been middle terms in the considerations on how much the modernist heritage owes to Catalonian immigrants settled in the island. There’s been exclusive positions like Weiss’ and Acosta’s, absolute rejection among young professionals in the 1950’s, and inclusive views like Rodríguez, who stated that “without the presence of the strong Catalonian community (...) Cuban Art Nouveau would have limited itself to few isolated examples of little value, which wouldn’t have marked a turning point in the country’s cultural evolution” (Rodríguez, 1998: 78).

Summing up, modernist architecture, which has transcended without proper preservation and has been modified and subject to aggressive occupation, is valuable and deserves to be preserved.

In order to avoid ending with a taste of oblivion, stillness and endless wait, we must note a couple of endeavours undertaken and in full development: the creation of the Trade School and the restoration of Cárdenas 101.

The Trade School Gaspar Melchor de Jovellanos, cosponsored by the Office of the City Historian and the Spanish Agency of International Cooperation, was created in 1992. 85 youth are studying 12 specialties: stone hewing, plaster casting, masonry, carpentry, ironworks, gardening, archaeology, plumbing, electricity, glassworks, mural painting and decoration painting, for two years. Thus, people are being trained in trades, neglected for over 40 years, which our heritage needs urgently.

Cárdenas 101 is an example of restoration of at least one of the modernist exponents. After years of arrangements, change of collaborators and works, it is still in progress, but it has already managed to recover part of its woodworks, cups, fleurons... and works will even reach the delicate dome over the corner balcony which collapsed years ago.

The first veil that clouded the fair recognition of the values of Modernist architecture has already been lifted. It is now necessary to lift the second, not so light, the creation of a structure, system, or whatever you call it to support it, beginning with its classification. The first step has already been taken: Havana is here today.

As Pablo Coelho says “only one thing makes a dream impossible: the fear of failing”. There’s no room here for fears or failures, only for the dream of preserving our heritage and the possibility of doing so with our own efforts.

Bibliography

Acosta Julián, Vivien: *De Europa a Cuba. Art Nouveau.* Revista Universidad de La Habana, Enero - Marzo 1969, Año XXXIII, No. 193, pp. 45-69.

Cabré, Tate: *Catalunya a Cuba. Un amor que fa història.* Edicions 62. Barcelona, 2004.

Chateloín Santiesteban, Felicia: *La arquitectura del molde, un patrimonio en peligro.* Revista Cimientos, Vol. X, No. X, 2003, pp. 41-47.

García Rodríguez, Greta y Moreno Ponce de León, Patricia: *Calle Cárdenas: tres tiempos y un espacio.* Facultad de Arquitectura, ISPJAE, 2002. (Tesis de Licenciatura).

Rodríguez Fernández, Eduardo Luis: *La Habana, Arquitectura del siglo XX.* Barcelona, Editorial Blume, 1998.

Weiss, Joaquín: *Art Nouveau, la rama cubana.* Revista Cuba, 1965, pp. 72-76.

Zardoya Loureda, María Victoria: *Algo más del estilo sin estilo.* En: *Arquitectura de la Casa Cubana*, Universidad de la Coruña, Febrero 2001, pp. 59-80.

Zardoya Loureda, María Victoria y De Ignacio Vicens, Guillermo: *Ornamentos por encargo.* Revista Opus Habana, Vol. V, No.1, 2001, pp. 44-52.