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Cuban heritage: the architecture of the revolution. The importance of awareness

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ABSTRACT

The Cuban Socialist Revolution - one of the most important pages of contemporary Latin American history - deeply changed the internal relationships of the country's political, social and cultural structure. With its anthropocentric influence, architecture suffered the most from these changes given its close connection with society and economy. From its earliest moves, the Revolutionary Government initiated a vast plan of "Welfare Architecture" intended to change the irrational and immoral social divide traced by the dictatorship and the bourgeoisie.

The pressing need to build houses, schools, factories and hospitals quickly and at minimal cost led to the increasing use of prefabricated elements with their consequent uniformity, monotony and aesthetic mediocrity. New urban and suburban areas emerged as the result, putting at risk the beauty of the natural environment and cities, threatening to turn their inhabitants into cogs in an unstoppable housing and production machine, but conceiving in some cases works of profound architectural value (Portuondo, 1966).

KEYWORDS

Cuba, Cuban architecture, conservation, heritage, Plaza de la Revolución.

REPORT FROM HAVANA

The title of the essay, "Report from Havana", refers to an article by Sergio Baroni, published in October 1992 (Fig. 1) in the eighth issue of the new series of the magazine "Zodiac" edited by Guido Canella who, from 1989 to 2000, gave to the architecture semi-annual magazine, founded by Adriano Olivetti in 1957, an international character among the most important projects of contemporary architecture (Baroni, 1992).

In the editorial, Cannella dictates the outlines of a possible "Latin American Laboratory" which will later become one of the central themes of his research:

«... and since cities seem to grow better out of crises, one wonders whether Latin America has not now become a laboratory that will eventually revitalize the West's own architecture also.» (Canella, 1992: 12-14).



Figure 1. Cover of issue 8 of 'Zodiac', October 1992 dedicated to Laboratorio Latinoamerica (ZODIAC, 1992; 8).

«This is precisely the sense of this 'report'; it does not aim at providing a comprehensive overview of the current architecture in Cuba, but rather some considerations on particular aspects that may demonstrate its evolutions.» (Baroni, 1992: 171).

Culturally and economically excluded from the North American blockade, Cuba had to undertake, from the first years after the victory of the revolutionary front, alternative paths of development. This led to the experimentation of new forms and building techniques, creating a singular identity relationship with the context.

«In the end, Cuba did nothing more than behaving like other First World countries, with the same wars, colonization and revolutions that filled them with pride but in a different era.» (Cuadra, 2019: 18).

The aspiration was to promote national welfare by adopting reforms aimed at reaching an equitable distribution of income. This would have allowed the country to realize one of the dreams that guided the revolution: achieving equality among social classes. To do so, the State rolled out programs designed to guarantee effective access to basic services (education, health, work and housing) and ensure social equality for all Cuban citizens. Among these programs, the "literacy campaign" promoted in 1959 by the revolutionary government to respond to the high illiteracy rate in the country has been one of the most important and successful ones. At the time, illiteracy was particularly widespread among the elderly and the Campesinos living in the countryside. Through the campaign, the young revolutionaries promoted a capillary diffusion of education within the Cuban territory (Fig. 2).



Figure 2. Cuban literacy campaign, 1961 (Granma 22.12.2016).

It was necessary the construction of hundreds of internal secondary schools, that become the "centres" of the new Cuba" (for pupils aged between 12-16 years who divided their time between study and work, carrying out all the activities of associated life within the school), to give life to one of the most audacious cultural operation of the Cuban Revolution (Salinas, 1971).

Therefore, architecture played a primary role in this period of major reforms. Education, health, work and housing, in addition to their cultural and educational value, require typological and settlement planning and suitable structures (Coyula, 2002).

After 1959, architecture became a revolution itself: the means by which to achieve the country's new goals, namely to guarantee a dignified life for all citizens and, step by step, to revive the fortunes of the nation after the years of dictatorship and American control. The new government adopted the slogan "Revolucion es construir" (Fig. 3), in a period, the initial one, that represents one of the most politically and culturally intense moments of the Cuban Revolution (Cuadra, 2019).

«Revolución ES CONSTRUIR. The slogan means that Revolution is about doing, and changing by doing; good intentions are not enough, and it is not enough to talk, discuss or propose, everything must be accompanied by actions.» (Cuadra, 2019: 46).



Figure 3. Revolucion es construir (Cuadra, 2019).

Sergio Baroni analyzed this first phase of the revolution with particular attention, sensing the birth of an experimental laboratory of Cuban architecture. He recognized the Escuela Nacional de Arte (ENA), 1961-1963, and the Ciudad Universitaria José Antonio Echeverría (CUJAE) 1960-1964, both built in Havana, as foundational to this process (Baroni, 1992).

«Two contemporary projects that chose opposite typological and linguistic solutions, revealing themselves emblematic and premonitory in this.» (Baroni, 1992: 163).

As early as 1960, Fidel Castro and Ernesto Guevara identified the area previously occupied by the American bourgeoisie's Country Club as the ideal and symbolic place to build the National Art Schools (ENA), a new cultural hub for the new Cuba. A 'Three Worlds' school centre, with five schools of modern dance, ballet, music, plastic arts, and dramatic arts, intended for students from Africa, Asia and Latin America.

The project was entrusted to the Cuban architect Ricardo Porro and two Italian architects, Vittorio Garatti (Fig. 4) and Roberto Gottardi, and it initially envisaged a single architectural body. Later, as the design phases progressed, they decided on five independent schools. This choice allowed the creation of a place of architectural and artistic continuity, integrated into the landscape, that could be a source of inspiration for students and teachers.

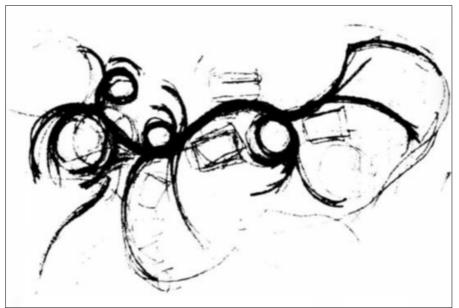


Figure 4. Garatti, V. Drawing by Studio Ballet School, Avana, 1961 – 1963 (Alini, 2020).

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Porro, Garatti and Gottardi succeeded in conceiving a unique and unrepeatable complex, designed to fit exactly the surrounding environment with its various slopes, elevation changes and obstacles posed by nature. They created an architecture that could be used in full, without any distinction between interior and exterior and between structure and paths (Fig. 6) (Semerani, 2001).

At the opposite end of the spectrum, the CUJAE (Fig. 5), home to the Istituto Politecnico Superiore de Tecnológia de La Habana, represents an architectural counterpoint to the artistic-cultural path of the Art School. The first, a prefabricated university town located close to the capital's production centre, the second, an organic architecture set in the green of the ENAs.

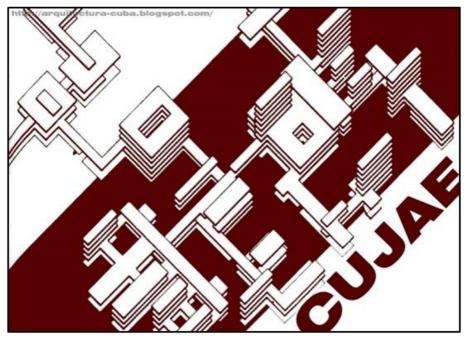


Figure 5. Alonso, H. Azze, E. Fernandez, J. Ciudad Universitaria J. A. Echeverria, Havana 1960 – 1964 (Lapidus, 1966).

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The fundamental principle of the CUJAE project is base on the industrialization process through the use the newest and best-performing construction materials and techniques, and the rejection of traditional Cuban construction methods. The "lift slab system" (Lapidus, 1966) was adopted. This technique is based on the use of reinforced formwork placed on the ground where concrete was poured, and then lifted and fixed to the previously erected pillars. The result reflects a substantially orthogonal geometry, leading to the rational use of space and light (Fig. 7).

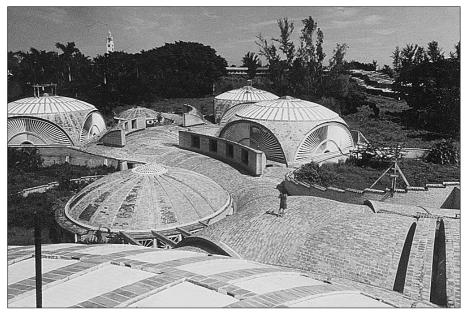


Figure 6. Garatti, V. Ballet School, Havana, 1961 – 1963 (Alini, 2020).



Figure 7. CUJAE University, Faculty of Architecture, Havana 1960 – 1964 (Barisone & Pozzi, 2021).

The reduction of structural elements determines the uniformity of the complex, but above all, the designers' search for a functional solution that implies a dynamic spatial variation. A variation that envisages an alternation of structure, architectural volumes, open and closed spaces, and differences in height as a characterizing factor. An architectural and spatial coherence is maintained by the constant presence of the open plan, favoring the flow of people in the buildings. This choice implies not only the possibility of adopting useful solutions to satisfy functional requirements but also allows future expansions without distorting, the existing constructions from a technical and aesthetic perspective. The idea is that the form should not be conceived as an aesthetic crystallisation but as a continuous becoming. A direct relationship is manifested between architecture and volumes, with their necessary functional interior and exterior spaces. Spaces that recognize the importance of the urban context, of the landscape, of architecture and engineering - whose close relationship allow to express their creativity in full. The spaces are rich in the rationality described at the beginning. The coldness of technology and industrialization is balanced by the warmth and sharing of the university life.

«They characterize the advent of a new type of university student: optimistic, stoic, closely linked to production and human issues, and to life: the future communist technician.» (Lapidus, 1966: 14 - 15).

«If the question is: What is the Revolution? The answer is the "Revolution is architecture", the Revolution is designing by integrating rationality with poetry, exalting technique, and elevating the relationship between man and nature within society.» (Cuadra, 2019: 72).

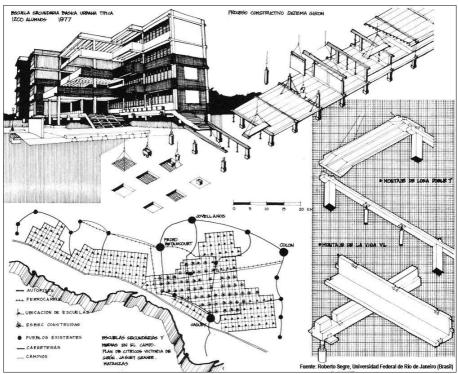


Figure 8. Graphical representation of the school construction (Lapidus, 1966).

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It is therefore evident that the architectural technique represented by the CUJAE possesses great intrinsic values. It can adapt to countless different spatial contexts, it allows the use of fewer and more economic resources, and lastly, it permits a rapid construction.

«The Art Schools (ENA) follow one path while the CUJAE follows another, but both aim at the same goal, they are profoundly architectural.» (Lapidus, 1966: 14 - 15).

The difference between these two realities immediately placed the experimental laboratory identified by Baroni at a crossroads. On one hand, the country was in urgent need of structures that could meet all the requirements dictated by the development programmes and reforms. On the other hand, the amount of time was limited and so was the capital available for investment. Inevitably and understandably, this pushed towards the industrialization of architecture. Prefabricated construction methods (Fig. 9 & Fig. 10) were identified as the best technical option to be applied throughout the country. Technicians, architects and craftsmen moved towards new forms giving rise to a new urban landscape over the years.

«The imperative need to build houses, factories, schools, hospitals, etc. in a short period and at a minimum cost led to the increasing use of prefabricated elements, with the consequent uniformity, monotony and aesthetic mediocrity.» (Portuondo, 1966: 5 - 6).

« [...] To cope with the huge demand for projects and construction with minimum resources. [...] In the construction sector, modernization took the form of industrialization, typification and prefabrication.» (Garrudo, 1978: 42).

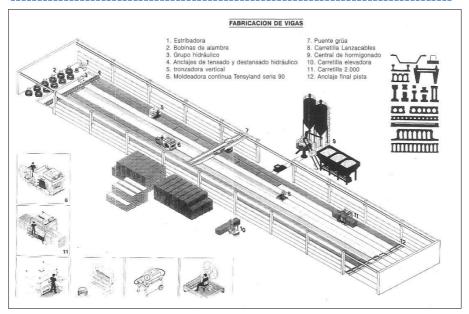


Figure 9. Axonometry of the beam moulding machine planned for the Giron system (Cuadra, 2019).

INVESTIGATION INTO CUBAN ARCHITECTURE 1960-1990

Based on these considerations, during our research period in Havana, we decided to identify and catalogue (Fig. 10) a substantial number of emblematic architectures (in the urban context of the city) from the revolution period under examination (1960s-1990s).

Thanks to the support of Prof. Sergio Rayman Iglesia - professor at the Colegio Universitario San Gerónimo de La Habana - and the participation of architects and engineers active in the local national territory, it was possible to identify the buildings that best represented the state interventions implemented during the Revolution (Barisone & Pozzi, 2021).

The survey aimed at creating a sort of identity document for each of the architectures identified and mapped. For each building, information has

been provided on the author, the date of construction, the construction method, the primary function and any changes of use that may have occurred over time, and the current state of conservation. In addition, a short critical text focusing on the typological and compositional aspects was produced to allow a better understanding of the buildings censed. The census, in addition to being a valuable tool for increasing knowledge about modern architecture in Latin America, highlighted the widespread state of abandonment of buildings and the contestual lack of valorization projects.

Noting the current state of degradation, we deepened into the evolution of the Cuban legislative framework related issues of conservation, valorization and maintenance of cultural heritage.

In 1963, the Cuban Revolutionary Government enacted Law No. 1117 which instructed the Consejo Nacional de Cultura to take charge of restoration and recovery initiatives of colonial architecture throughout the country (Fig. 11). This did not lead to the desired developments and resulted in few and isolated interventions.

During these years, both institutions and people lacked awareness on the importance of preventive action to protect and invest in the conservation of the architectural heritage (Fig. 12).

The 1970s represented a fundamental decade with regard to the subject of valorisation in Latin American countries like the enactment from UNESCO of the Ley Federal sobe Monumentos y zonas arqueologicos, artisticos e historicos (Ley Federal Sobre Monumentos Y Zonas Arqueologicos, Artísticos E Historicos, 1972).

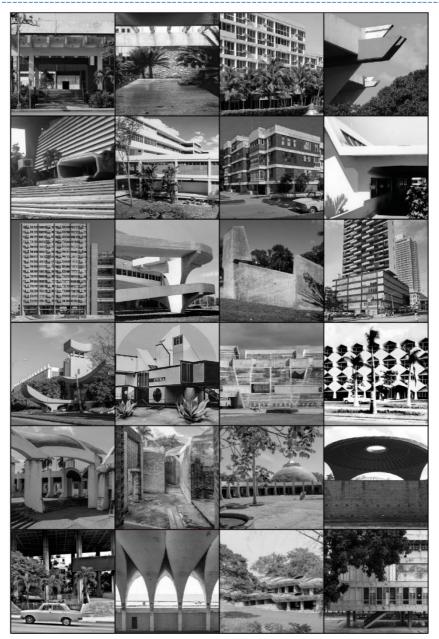


Figure 10. Barisone, M. Pozzi, N. Census extract (Barisone & Pozzi, 2021).

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Cuba kept pace with this innovative current introducing a series of laws and regulations on the protection, valorisation and conservation of the Cuban heritage. This process coincided with the new socialist Constitution in 1976 and the promulgation of two important executive laws by the Asemblea Nacional del Poder Popular in 1977:

- Law No. 1: Protección al Patrimonio Cultural.

- Law No. 2: Declaración de Monumentos Nacionales y Locales.

(Gaceta Ofical Republica De Cuba, 6 Agosto 1977).

In 1979, the Executive Committee of the Council of Ministers issued Decree No. 55 concerning the implementation of Law No. 2, (Decreto 55: Reglamento Para La Ejecución De La Ley 2 De Los Monumentos Nacionales Y Locales, 29 Novembre 1979) The Decree legally established the concepts, principles and regulations that determined the process for the conservation of the architectural and urban heritage. Further, it introduced the so-called degrees of protection of assets entered in the Register of National and Local Monuments. The implementation of these laws and decrees led to the creation of new institutions, such as the Consejo Nacional de Patrimonio Cultural (CNPC), which regulates the national register and governs the training of restoration and conservation technicians; and the Oficina del Historiador which, directed by Eusebio Leal Spengler since the 1980s, restored the heritage of La Habana Vieja with dizzying dynamism. This created a connection between Cuba and the rest of the world attracting funding and tourism. and the rest of the world, in order to attract funding and tourism.

The historic centre of the city of Havana is the result of centuries of layering of architectural heritage, with visible signs of decline and deterioration associated with the city's growth.

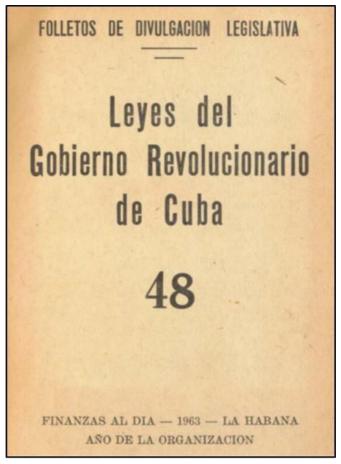


Figure 11. Leyes del Gobierno Revolucionario de Cuba, No 48, 18 July 1963 (URL-1).

Eusebio Leal Spengler recognized that the displacement – in the 20th century - of the richest segments of the population from the historic centre of the capital to new and more comfortable areas led, over time, to the formation of a city fabric with a very high density of low-income population. The Oficina del Historiador succeeded in reorganizing the strategic planning process and integrated it into its broader urban version - including the

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restoration of buildings and urban spaces and the management of economic resource (Niglio, 2015).

The financial resources favourable to this development were provided by hotel companies, international cooperation, real estate investments, donations and bank loans that allowed for the immediate investment in social programmes and projects that generated wealth and contributions to the heritage restoration programme (Zardoya, 2019).

The fundamental goal of the Oficina del Historiador is outlined by a quote from Eusebio Leal:

«The art of restoration lies in being able to respect the passing of time, to respect the succession of its stages that may have retained traces of value, in which the identity and personality of buildings and houses are nested.» (Spengler, 2011).

In 1982, Eusebio Leal saw his efforts recognized with the UNESCO declaration of the fortified city of La Habana Vieja as a World Heritage Site. In the same period, following this cultural development, a growing interest in twentieth-century architecture emerged within the country. New courses of study were founded in the faculties of Architecture, and significant texts on modern Cuban architecture were published (Rodriguez, 2012).

- 'La Habana. Apuentes historicos, consejo nacional de cultura' (Roig, 1963 – 1964).
- 'Diez años de arquitectura en Cuba Revoluciónaria' (Segre, 1970).
- 'Cuba, the architecture of the revolution' (Segre, 1977).

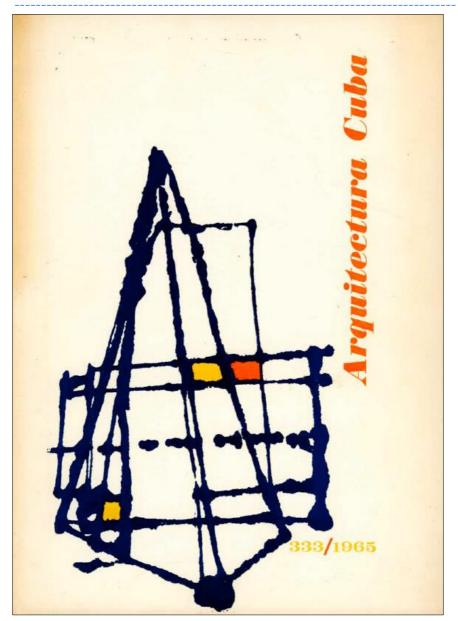


Figure 12. Cover of "Arquitectura Cuba 333/1965" (Biblioteca Nacional De La Habana).

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With the introduction of these texts in the universities and with the growing interest in its Architectural heritage, Cuba began to take part in important international events.

In the 1980s, "The International Congress of Architecture and Urbanism" - a free organisation of progressive architects - was founded, inspired by the tradition of the International Congress of Modern Architects (CIAM) dissolved in 1959.

Cuba's participation in the Fourth Congress in Germany (1985) and the Fifth in Sweden (1987), as well as the Sixth Congress (1989) in Havana, increased the awareness on the value of modern architecture and promoted the introduction of courses on this subject within the national universities.

THE IMPORTANCE OF AWARENESS

«What I would like the most is awareness about the importance of Cuba's 20th-century architectural heritage, which does not exist, or is very limited.» (Rodriguez, 2012: 47).

The hope of Eduardo Luis Rodriguez (also the author of *La Arquitectura del Movimiento Moderno. Selección de Obras del Registro Nacional, do.co.mo_CUBA*, 2011) contributed to the reflection on the reasons for Cuba's lack of awareness on the value of the architecture produced during the Revolution. Indeed, there is almost a kind of stigmatisation of the post-revolutionary architectural heritage.

Excluding the coastal areas, inside the capital (fig. 13), tourism is concentrated almost exclusively in the restored and revalued *Habana Vieja*, Havana's historic centre. The Cuban protection system as well seems to promote the most central areas, dating back to the colonial period. The attention devoted to the redevelopment of *La Habana Vieja* is in fact not

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remotely comparable with the neglect that the architecture of the second half of the 20th century has suffered and is still suffering. Perhaps as it is less understood in its innovative structural and technological aspects, due to the original use of new prefabrication components for the definition of the same expressive as well as distributive characteristics of the buildings (Azcue, 1989).

Resuming the slogan *Revolución es Construir*, after the military and political victory of 1959, the revolutionary government needed to face a new battle, no longer against an enemy in flesh and bones, but against social inequality to finally guarantee a dignified existence for every Cuban citizen.

Architecture was tasked of giving a new face to the entire state, not for the need of a new national architectural style - or simple improvements to urban fabric - but to respond to the enormous social and economic emergency in which the country had found itself upon overthrowing Batista's dictatorship (Cuadra, 2019).

Should the industrialization and typification of architecture considered a choice or an inevitable decision?

To meet the great challenges posed by the revolutionary government, architecture had to evolve in an extremely short period of time, adapting to the few building materials available on the island and the limited available funds. Moreover, politically and commercially isolated from the West, the alliance with the Soviet Union presented itself as the only possible way to import construction and architectural techniques based on the prefabrication and use of reinforced concrete. In conclusion, if Sergio Baroni's "Report" was intended to give a valuable judgement on what today is considered the "Cuban" architecture of the Revolution, this essay attempts to see its possible evolutions by observing, deepening and cataloguing the architectures built between 1960 and 1990. A period which led - thanks to

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the careful use of geometry, functional distribution and construction elements - to unique examples of architecture that are not ascribable to standardization alone (Baroni, 1992).



Figure 13. Garatti, V. Design of the bay of Havana, 1971 – 1972 (Alini, 2020).

An excerpt from Ernesto Guevara's speech at the closing of the 1st International Meeting of Professors and Students of Architecture, in Havana, in 1963:

«In the beginning, the limitations were consistent; our scientists could not carry out the desired research. [...]

Concretely, in the exercise of the profession you represent, a person's creative spirit is tested. [...]

The problem must be considered according to the materials at our disposal and the service they have to provide; the solution is what our experts must find [...]

Therefore, they must fight as if they were fighting against nature, against factors outside the will of man, so that they can realize their desire to build the new society with their own hands, with their own talent and knowledge, in the best possible way.» (Guevara, 1964: 13-14).

THE CASE STUDY OF PLAZA DE LA REVOLUCIÓN

The case of *Plaza de la Revolución* (fig. 14) - a place that, following the 1959 victory, became a symbol of political and revolutionary struggle – is useful to better understand the dynamics of protection, management and valorisation of Cuba's architectural heritage.



Figure 14. Map showing the expansions of Havana (ARQUITECTURA CUBA No 340/ 1971).

Built in the 1940s in memory of the Cuban patriot and martyr José Marti, it included, as a scenic backdrop, a large monumental tower dedicated to him. After the Revolutionary victory on 1 January 1959 the Square acquired a unique historical value testifying, to present days, the internationally recognized "theatre" of major gatherings of the people. This immense commemorative area has not been able to evolve over time, nor it has been able to reinvent itself for hosting events and activities open to citizens, despite the revalorization attempts. Between the end of the 1960s and the beginning of the 1970s, a team of urban planners and architects was tasked by the National Council of Culture with foreseeing and planning the future expansion and development of the city, defining the *Plan Maestro* (Azcue, 1989).

The urban area of *Plaza de la Revolución* was entrusted to Vittorio Garatti (already author of the ENA's Ballet and Music Schools in the former Country Club) who, recognizing the critical issues of the square, developed a requalification project (fig. 15).

The objective was to reduce the phenomenon of the "city" - i.e. a place rich in interest but populated only during daylight hours thanks to the presence of government buildings and cultural centres (like the national library) and emptied of meaning and social attractiveness at night and during nonworking days. They, therefore, sought to create a new hub that, respecting the political-administrative function of the area, would encourage a constant and active presence of Cuban citizens and tourists. The result was supposed to be a cultural and recreational place that conserved the nature of the gathering area at the base of the monument named after José Marti unchanged. New central axis would have connected the square with the redeveloped area behind it, including commercial, recreational and educational activities (Alini, 2020).



Figure 15. Garatti, V. Azcue, E. Quintana, A. Isoba, M. Galvez, S. The Masterplan of "Plaza de la Revolución" 1968 – 1971 (Alini, 2020).

Despite the Cuban government's intentions, to date nothing has been realized of the valuable architectural, urban and functional proposal *for Plaza de la Revolución* envisaged in the 1968 Plan developed by Vittorio Garatti with Jean Pierre Garnier, Max Vaquero, Eusebio Azque, and Mario Gonzales.

In its current state, the square occupies an area of approximately 12 square kilometres, circumscribed by a carriageway ring consisting of roads with at least five lanes in each direction, and with the José Martí monument at its centre, surrounded by non-accessible green spaces and an extensive area of bare asphalt. The part considered to be a "gathering" space, which normally accommodates tourists and visitors interested in the site and the memorial is a rectangular widening of approximately 25,000 square metres furnished only by artificial lighting, completed and renewed in 2019. The lack of

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services and attractions leads to an intense, but disoriented, flow of tourists. Buses and taxis pour in dozens of people who, after a quick glance and few photographs leave the area, further underlining the detachment from the principles and history that this place embodies. All of this further denotes how the only part of the city experienced by tourists remains La Habana Vieja, thanks to the many amenities present, such us museums, hotels, bars, restaurants, concert halls, cultural centres, and universities, among others (Collado et al., 2014).

However, the recent focus on the preservation of Cuba's 20th century architectural heritage and, in particular, the declaration by the DPPFH (*Dirección provincial planificación fisica de La Habana*) in 2012, has brought back to the forefront the still pending issues for Plaza de la Revolución. Among the initiatives, it is worth mentioning the Ideas Competition, with a deadline of 17 November 2022 (launched by TerraViva Competitions), for a redevelopment project for *Plaza de la Revolución*, aimed at positively reinterpreting the entire area to allow once again to express its full potential (Terraviva Competitions, 2022).

REFERENCES

Alini, I. (2020). Vittorio Garatti - Opere e progetti. Clean Edizioni, Napoli.

Azcue, E. (1989). "Plaza de la Revolución". Arquitectura Cuba, (374), 34 – 49.

Baroni, S. (1992). "Reporte de La Habana". Zodiac, (8), 161 – 184.

Barisone M. & Pozzi N. (2021). *Rapporto da La Habana. Indagine sull'Architettura Cubana 1960 – 1990. "Prime ipotesi per Plaza de la Revolución"*. [Master Thesis, Politecnico di Torino]. https://webthesis.biblio.polito.it/17173/

Canella, G. (1992). "Laboratorio Latinoamerica". Zodiac, (8), 6 – 13.

P a g e 61 | 64

- Canella, GE. (2006). Architettura di Retroguardia e laboratorio d'oltremare. Per una scuola nazionale di architettura all'Asmara. CLUP, Milano.
- Coyula, M. (2002). *Havana: Two Faces of the Antillean Metropolis.* The University of North Carolina Press.
- Cuadra, M. (2019a). *La arquitectura de la revolución cubana 1959-2018*. Kassel University Press, Germany.
- Cuadra, M. (2019b). *Aspiraciones y Espacios de una Revòlucion.* Kassel University Press, Germany.
- Cuadra, M. (2019c). *De primera mano. Entrevistas con sus protagonistas y cronistas.* Kassel University Press, Germany.
- Gaceta Oficial De La Republica De Cuba (1977). Edicion ordinaria. La Habana, 6 Agust 1977.
- Garrudo, E. (1978). "Escuela vocacionales". Arquitectura Cuba, (347 348), 42.
- Guevara, E. (1964). "Discurso del dr. Ernesto Guevara en la Clausura del Encuentro de Profesores y Estudiantes". *Arquitectura Cuba*, (331), 13 14.
- Lapidus, L. (1966). "Ciudad Universitaria J. A. Echeverria". *Arquitectura Cuba*, (336), 15 16.
- Leal, S. (2011). *"El patrimonio cultural cubano y su conservación"* available at: https://www.ipscuba.net/ipscuba-net/hemeroteca/archivohemeroteca/ck3-cultura-y-sociedad/el-patrimonio-cultural-cubano-y-suconservacion/ (accessed 07 November 2022).
- Cuba. (1961). *Leyes Del Gobierno Revolucionario De Cuba*. Finanzas al Dia, Ministerio de Hacienda Talleres de la Imprenta Nacional de Cuba.
- Ley Federal Sobre Monumentos Y Zonas Arqueologicos. Artisticos E Historicos (1972), Diario Oficial, 6 May 1972.
- Niglio, O. (2015). *Conservación de centros históricos en Cuba (Volumen I)*. Aracne Editrice, Roma.

- Portuondo, J. (1966). "Por una arquitectura cubana y Socialista". Arquitectura Cuba, (336), 5 6.
- Reglamento Para La Ejecución De La Ley 2 De Los Monumentos Nacionales Y Locales(1979).Decreton°55,availebleat:https://ru.unesco.org/sites/default/files/cuba_decreto55_spaorof.pdf
- Rodriguez, E. L. (2012). *La Arquitectura del Movimiento Moderno Selecion de Obras del Registro Nacional.* Edicion Union. Collecion Arquitettura y Ciudad, Cuba Avana.
- Roig, L. (1963 1964). La Habana, apuentes historicos, Consejo nacional de Cultura, Cuba - La Habana. availeble at: https://archive.org/details/EmilioRoigDeLeuchsenringLaHabanaApuntesHi storicosTomol/page/n7/mode/2up. (accessed 07 November 2022)
- Salinas, F. (1971a). "La escuela revolucionaria como embrion de la comunidad futura". *Arquitectura Cuba*, (339), 2 4.
- Salinas, F. (1971b). "La Revolucion en la educacion". Arquitectura Cuba, (339), 20 32.
- Segre, R. (1970). Diez años de arquitectura en Cuba Revoluciónaria. Union, La Habana.
- Segre, R. (1977). L'architettura della Rivoluzione. Marsilio Editori, Venezia.
- Segre, R. (2005). Arquitectura y Urbanismo Modernos, capitalismo y socialismo. Felix Varela, Cuba - Avana.
- Semerani, L. (2001). "Cuba Le scuole nazionali delle arti a L'Avana, Vittorio Garatti, Roberto Gottardi e Riccardo Porro". *IUAV, giornale di istituto* (7), 1 – 12.
- Spengler L. (2011). El patrimonio cultural cubano y su conservación, cultura y sociedad. Availeble at: https://revistaconsinter.com/revistas/ano-vinumero-xi/capitulo-01-direitos-difusos-coletivos-e-individuaishomogeneos/la-proteccion-del-patrimonio-cultural-una-vision-desde-elderecho-cubano/(accessed 07 November 2022)

- Terraviva Competitions (2022, Nov 7). *The Cuban Square a Public Space* [r] Evolution in Havana. Terravivacompetitions. Retrieved November 7, 2022, from https://www.terravivacompetitions.com/the-cuban-square-competition-2022/
- Zardoya, L. (2019). *La Arquitectura de La Revolución Cubana 1959-2018*. Kassel University Press, Germany.