



View of the connection to the lobby of the building of the Arq. Raul Chorão Ramalho, where one can see the interpretation of identical shade panel to that used in the original project outside the building as well as the bust of Henry the Navigator.
Photo by Luis A.



Design Activism in the Context of Macao

Adding Layers to Architectural Intent

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Architect Raúl Chorão Ramalho designed four buildings in Macao, after the dissolution of the GCU (Gabinete Colonial de Urbanização) and a change in policy that saw the architectural design of the buildings being transferred from the ministry staff to private practice. This article focuses on the most significant of the four buildings that the Portuguese master designed for Macao: the EPM or Portuguese School of Macao, formally known as Escola Comercial Pedro Nolasco; and on the building’s struggle to ‘survive’ as a post-classical monument in a city that navigates on a fragile balance when it comes to heritage conservation.

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Licenciado em Arquitectura pela Faculdade de Arquitectura da Universidade do Porto. Tem desenvolvido extensa actividade de projecto em Macau e na China, nas áreas de arquitectura, planeamento e paisagismo. A sua obra construída inclui o projecto da Praça Nam Van (Medalha de Ouro da Arcasia 2005-2006), o Parque Urbano Sai Van (Medalha de Ouro AAM e Menção de Excelência da Arcasia) – ambos em co-autoria com Manuel Vicente e Carlotta Bruni –, a Sala de Leitura da Escola Portuguesa de Macau (Louvor de Inovação atribuído pela UNESCO em 2012 – UNESCO Asia-Pacific Heritage Awards) e a renovação do edifício do Quartel dos Mouros, edifício incluído na Lista do Património Mundial da UNESCO.

MODERNISM

The first incursions into the East by modern European intellectuals at the beginning of the 20th century, from Hermann Hesse, Bruno Taut, Pierre Jeanneret and others, from India to Japan, all had a significant impact on certain developments of Modern architecture.

The fact that there was a paradigm shift from the Neoclassical, joined by a belief in the democratisation of technology and industrial aesthetics, and its expansion through colonial empires, pushed for a new symbolic system of expression in architecture.

The publication of *Ornament is a Crime* (or *Ornament and Crime*) by Adolf Loos and *Vers Une Architecture* by Le Corbusier, marked the shift into a new ‘empty sheet of paper’ in the 20th century, away from 2,000 years of Vitruvian stigma

The fascination of these intellectuals with the East was not only related to the fascination with otherness, but mainly with (re)discovering how elementary human reactions to the environment had matured through time: re-discovering the essential balance between form and function and how the historical balance between the individual and the collective (pleasure) had been dealt with: with a perspective of pure philology of form, a soul-searching endeavour away from 19th century

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Portuguese School of Macao. Facade detail. Photo by António Mil-Homens.

opulence and decadence, and towards a new collective idealism.

These were founding moments of re-evaluation that culminated in Orientalism by Edward Said, and Post-colonial studies.

It is in the light of all these events that the Portuguese School of Macao and its location at the heart of Macao is an extremely valuable urban

Portuguese School of Macao. Detail. Photo by António Mil-Homens.



artifact. It contains all these cultural and civilisational question marks in its formal roots, and deals with them creatively. It reflects this conflict of discourse of the 20th century, trying to re-invent a place for architecture through the management of light, open space (the open plan), orientation, natural ventilation, proportion, and submission to a total system of order and universalism. The plastic expression of the materials (concrete, glass and steel), and the urban exposure of the complex are solid manifestations of both the paradigm of Modernism and this re-discovery of the East as a purifying journey.

I love the Portuguese School building. It is a great building by any measure. It emanates order towards the surrounding urban fabric, unfolding order from within to construct the urban and the architectural fabric simultaneously, defining the urban block in a straightforward and yet complex manner by building up scale and monumentality from the street in, towards the set-back main block. It constructs its urban presence in an ambiguous manner, showing its progression of built layers to the passer-by outside, thus revealing the complexity of the program and offering a formal depth to the street section that innovates the experience of walking by and driving by. It offers a wholesome architectural experience to the man in the street.

For me, while growing up in Macao, it was very inspirational to have the presence of this building in town. Even though I didn't study there, I did use the building a lot. The gym has a formal street entrance that made it easily convertible for community use, for shows, theatre performances and gatherings, in a city that in the 1980s had very few cultural venues.

AWARENESS

The EPM building is a masterwork. It is built on a scholarly discourse, with several cross-cultural concerns (back in the 1960s) and with a great capacity to introduce elegance on an urban scale. It marked our generation's collective memory, as a great example of what Modernism could do, in the tame and docile Portuguese manner of producing rupture, whilst understanding continuity. I have grown out of my relationship with it.

The Portuguese School of Macao stands proud on the corner of two structural axes of the city. I



Portuguese School of Macao. Details. Photo by António Mil-Homens.

will elaborate on the multitude of dimensions that I recognise in this building. The School was built from 1963 to 1969, after the design of Raúl Chorão Ramalho, who was asked to design a technical school by a local organisation (APIM) that focused on promoting the technical education for the Macanese community. He designed three other projects for Macao in the same period.² The school was one of the first buildings erected in the sanitary reclamation that was underway since the 1950s in the Praia Grande bay, and which defined a small grid structure extending out from the convex curve of the Praia bay, as a service centre consolidation of the historic south facing bay.

The main hall of the school's original block is a very engaging social space. It runs the whole length of the classroom block at ground level, forming a slightly elevated axis that is cut away from the street and projects itself towards the patios on both sides. This hall brings in the community, making the whole school interact with the community of parents and related Portuguese-speaking institutions, while not allowing the street in.

Raul Chorão Ramalho is an essential Portuguese architect, with completed work in Brazil, Portugal, Azores, Madeira and Macao. His generation affirmed itself after the Second World

War, a period that saw the possibility of bringing modernity into Portuguese culture, especially through the arts and architecture.

The Centro Comercial do Restelo complex of 1951 and the Funchal Chapel of 1953 were designed by Ramalho in the same period. They revealed Ramalho's development of a controlled use of the structure and the affirmative role of materials that express their plastic value whilst defining the spatial intentions for the project.

With these projects, Chorão Ramalho launched a particular form of Modernism, one which avoided objectifying architecture and which was concerned with transforming the city through the interactions that architecture can establish.

The Portuguese School building corresponds to a particular type of European brutalism; one which introduces complex transitional spaces, using ceramic panels deeply integrated with the architecture and not purely decorative.

There was a big intervention in the school in 1999, upon the handover of Macao to the PRC, where a new classroom block was added on the southeast edge of the plot, replacing the original canteen and covered recess. This project, by architect Carlos Marreiros, tries to emulate Chorão Ramalho's original architecture. The most striking element of Carlos Marreiros' new



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block, from the front street view, is a red roof that Marreiros refers to as a Portuguese cockscorb.³ This 1999 intervention saw the whole of the Portuguese language curriculum from primary school to the end of high school operating under one roof.

The building by Chorão Ramalho, even though losing some of the pergolas that mediated the interior with the open space, kept its integrity and public presence.

PROTECTION

From regular user of the building, as a child, I became actively involved in defending it when it became at risk of being demolished in 2004. It is

formally still under risk today, having been de-classified in the 1990s. I have published articles, given interviews and organised a petition in 2007 to stop a set of decisions that would culminate in the demolition of this architectural masterpiece. In the same year, the school board was looking into adding a small extension to the school to house a reading room for the primary school students. When asked to design the addition we took this challenge as an opportunity to push the stakes, on the civic awareness of this building, and modernism in general, and to improve the building with our intervention.

As a result, our intervention was awarded a UNESCO award for architectural innovation on heritage interventions in the greater Asia Pacific

region. The design intent was not only an exercise of understanding Chorão Ramalho. It was also a will to find new ways of looking at his work, and in the long run, an exercise on activism through design.

The building is under threat since 2003. Then in 2004 we saw the initiation of a movement when the Architects Association of Macao (AAM) hosted the Arcasia Congress of Architects' meeting in Macao and many architects reflected on the significance of this building. This had a strong effect on the local press at the time, which voiced the significance of the building. In the small article which I wrote in 2007 in *Arquitectura Macau*, our Association's journal, and which I entitled *Journey to the East*, I tried to speak not so much on why I personally appreciated the building, but on what I thought it meant to Macao and to the historiography of Modernism and its cultural transmigration: the phenomenological effect of having this modernist artefact, coming out of the Portuguese *inteligencia* and erected directly on Chinese ground. It was a very gracious coincidence that in his search for a new order of things, this disciple of Le Corbusier and Frank Lloyd Wright found himself building his conceptual model of a public building on Chinese territory: Macao.

Modernism was very determined in establishing a new expression for architecture, and in so doing, found faith in eastern systems of composition and the aesthetics of a new place for man, between nature and the built form. The European architectural avant-garde of the beginning of the 20th century needs to be credited for its soul-searching through studying and understanding eastern philosophy.

In February 2007, we prepared a petition to the Portuguese Government, signed by over 60 architects, from both Macao and Portugal, which I handed to the Prime Minister of Portugal in the library of the EPM School, during his official visit to Macao. The petition explained why his Government should not go ahead as a partner in the sale of the school property, and why the Portuguese government should not be involved in the type of business that had already alienated the Chinese Central government in the pre-handover period.⁵

DESIGN AS INTERVENTION

Also in 2007, the school was in need of a Reading Room. The school library, located in one of the low blocks along the street, facing two patios

on the southwest and the northeast, was the existing reading environment, but the school needed a proper space to practice collective reading for primary school students, who have different linguistic environments at home, and need different types of reading pedagogy to apprehend the language. The Portuguese School gave us a challenge: to keep the patio, or a feeling of the patio, and simultaneously design the new reading room in that same patio footprint, next to the library. To think about how the patio could remain, not only as a memory, but as a presence of light and vegetation, and simultaneously with an urge, unlike in other projects, not to engage with the site with an affirmative action, but to use the project to act as an invisible agent trying to understand the existing fabric.

The Portuguese School building corresponds to a particular type of European brutalism; one which introduces complex transitional spaces, using ceramic panels deeply integrated with the architecture and not purely decorative.

We recalled the house by Carlo Scarpa⁶ designed around a tree, the one of which he said that the patio and the rooms had been an exercise on understanding how to surround the tree, to the point that the soul of the tree survived even after the tree was gone.

The people at the EPM School were very concerned not to lose the garden altogether. The scale of the existing patios was very controlled, so we wanted to arrange a space that could still mirror and retain that scale. The original building has a repetitive structural portico that becomes complex in the patios, as the patios break the repetitive order of the interior, creating a musical cadence to the longitudinal section of the building. Upon understanding the structural grid of Chorão Ramalho's project, our strategy evolved into establishing further orders of complexity inside the patio, by extending and subdividing the grid of the

View of the interior of the reading room. The pre-existing building is in the illuminated perimeter. Photo Luis A.



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Portuguese master into its own fractional geometry. The densification of these geometrical intentions into space is supported by a logic of void and transparency rather than structure and form: the ultimate aim of this project resides in its invisibility: in order to preserve the qualities of light and scale of this iconic building.

We started the design by redrawing the existing school building. We realised in the process that the whole building had a continuous belt of glass panels running along the edge of the whole ground floor, with a horizontal metal frame running along at a level 2.10 meters from the floor which works to separate the doors from the ventilation windows, that otherwise have no gender difference in the Modernist lexicon. We made use of this placement in the pre-existence to set our reading room slab at exactly that level, and found out that the height of the exterior walls of the patios, even though outside of the glass and steel belt, still respected the same 2.10 metric, allowing for our metal structure to rest right on top of it. As a result, the new slab becomes almost invisible from the surrounding street space, but makes for a very low ceiling. The choice of lowering the level of the reading room derives from just finding the right proportion of the space from a fixed ceiling height which was determined by the framework of Ramalho’s project.

One of the first challenges the design faced was how to keep the outdoor, open feeling of the space while paradoxically filling it with a new addition. Having carefully studied the building we developed a plan that was a simple extension of the building’s structural grid—resulting in both a reduction of structural steel needed as well as allowing the creation of a small U-shaped exterior space around the perimeter of the room. The new reading room was also clad almost entirely in glass allowing for a direct connection to lush vegetation in the retained areas of the patio. Further large portions of the roof, especially at the entryway, were made transparent, and we carved out a small area in the center to become a sort of ‘patio inside a building inside a patio’. All of these efforts came together to create an incredibly open, bright, and airy space that allows visitors the sensation of reading in the middle of a tropical garden.

The reading room was also submerged almost 1.0m in order to keep the height of the extension the same as the existing patio walls, making it virtually invisible as a new addition from the outside. Likewise

the glass walls and sliding doors have a mullion pattern that echoes and respectfully pays tribute to the existing building.

So the framework of our intervention was set: to fit all the presence of the reading room as an integration into the geometry of the modernist fabric. Our solution was to install a metal structure detached from the four façades of the school, forming a grid in line with the concrete gridlines of the Modernist pre-existence, and then sandwich the slab in-between the new horizontal metal beams, at the same height as the door sills of the old building.

The center of the patio was cut away to leave an existing palm tree and just enough space around it to bring in light. A subtle inversion in the construction system was also operated: the metal in the modernist building isn’t structural. The reading room project adopts a full metal structure, while aligning all the structural elements with the concrete columns.

The resulting scale of this space, structured from a small light source at the centre towards the more diffused light on the edge against the modernist building is a new scale and typology of light, not present in the building before, and very reminiscent of the light found in local Chinese temples.

The connection to the main hall of the school is performed through a glass box that separates the reading room from the rest of the building, allowing for a full visual of the Modernist block from the inside out. We prolonged the edges of the new metal beams towards the pre-existent concrete columns making them almost touch, as a gesture to express the will to relate.

In 2012, this small intervention on the Modernist building received the UNESCO commendation for innovation in the 2012 cycle of the UNESCO Asia-Pacific Awards for Cultural Heritage Conservation. The commemorative plaque, placed inside the reading room was unveiled by the director of the UNESCO Asia-Pacific center. The building, which was declassified in the 1990s and is totally unprotected to date, suddenly was armed with a UNESCO recognition in its interior, which not only lauds the reading room intervention, but more significantly praises the Modernist building that houses the reading room. The commemorative plaque reads:

Inserted in the courtyard of the Portuguese School of Macao, the new reading room has provided an understated contemporary addition to this

aesthetically noteworthy 1963 modernist complex. The new steel and glass pavilion is seamlessly integrated with the original buildings, responding sensitively to their scale and architectural language. By demonstrating an elegant approach to extending the school’s usable space in a highly

dense urban context that faces redevelopment pressure, the new Reading Room contributes an additional layer of architectural significance to a modern heritage landmark and enhances the continued functionality of this icon of the Macanese Portuguese community.⁷ **RC**

NOTES

- 1

The GCU or Gabinete Colonial de Urbanização was created in 1944 by the Portuguese Ministry for the Colonies, based in Lisbon with the role of researching and undertaking the necessary planning actions required in all the Portuguese colonies.
- 2

The EPM School or Portuguese School of Macao, the kindergarten on Guia Hill, the public servant’s tower block in Avenida Sidónio Pais, and the twin houses for government cadres in Avenida Coronel Mesquita.
- 3

The porcelain-handcrafted cockerel from Barcelos is an icon that represents Portugal.
- 4

The Portuguese Government is a shareholder of the EPM through the Ministry of Education, thus an active decision maker in regard to the school in the post-handover period.
- 5

The government of Macao issues special land concessions for educational purposes that legally should not be the object of sale to a third party, and should be kept as an educational resource.
- 6

The great and enigmatic Italian modern architect, who introduced powerful narrative qualities to his projects which were then extended to the labor of detailing.
- 7

Citation from the jury of UNESCO Asia-Pacific Awards for Cultural Heritage Conservation 2012

BIBLIOGRAPHY

Bhabha, Homi K.

The Location of Culture. New York: Routledge, 1994.

Campello, Glauco de Oliveira.

O Brilho da Simplicidade: Dois Estudos sobre Arquitetura Religiosa no Brasil Colonial. Rio de Janeiro: Casa da Palavra, 2001.

Correa, Charles.

A Place in the Shade: The New Landscape & Other Essays. New Delhi: Penguin Books, 2010.

Dourado, Guilherme Mazza.

Modernidade Verde: Jardins de Burre Marx. São Paulo: Senac, 2009.

Fuad-Luke, Alastair.

Design Activism: Beautiful Strangeness for a Sustainable World. London/Sterling, VA: Earthscan/ Routledge, 2009.

Lye, Eric K. C.

Manuel Vicente. Caressing Trivia. Hong Kong: MCCM Creations, 2006.

Said, Edward.

Orientalism: Western Conceptions of the Orient. London: Penguin Books, 1996.

Segal, Rafi; Els Verbakel.

Cities of Dispersal. ‘Architectural Design’, vol. 78. London: John Wiley, 2008.

Tostões, Ana, Jorge Figueira, Rui Leão.

A Reading Room for the Portuguese School of Macau. Macao: [s.n.], 2013.

Song Jia.

Streets and Squares. Shenzhen, China: Artpower International, 2013.

Vicente, Manuel.

Arquitetura Falada: O Exercício da Palavra. Casal de Cambra / Porto: Caleidoscópio / Atalho, 2012.

Virilio, Paul.

Lost Dimension. New York: Semiotext(e) 2012.