

AN ARCHITECT'S HOUSE IN CURITIBA

A manifesto project by Manoel Coelho

Felipe Taroh Inoue Sanquetta

ABSTRACT: The study object of this paper is architect Manoel Coelho's (1940-2021) house in Curitiba, Brazil. The main objective is the historiographical documentation and descriptive analysis of the residence's architectural design. Projected by the architect and built in 1980-81, it is located on an urban plot in a residential neighborhood in Curitiba. It is characterized by the use of fair-face concrete and utilizing color as the main design element. This article begins with a description of the architect's biography and then of the project itself, firstly through an analysis of the existing bibliographic references and then through a descriptive analysis of the house. The result of the documentation is a reproduction of the original project through plans, sections, and elevations. In parallel, current photographs taken during a survey illustrate the description. Through all these materials, we can better understand the effectiveness of the project documentation methodology and the contribution of this survey to new research on related subjects and, of course, on the production of this architect and others, whose work is still little researched and published.

KEYWORDS: Manoel Coelho, architect's house, architecture in Curitiba, color in architecture

INTRODUCTION: This paper aims to historically document and develop a descriptive analysis of the architectural design of architect Manoel Coelho's residence in the city of Curitiba, Brazil. For the theoretical framework, the research is based mainly on three bibliographies written by two authors: the book *Arquitetura Moderna em Curitiba* by Alberto Xavier (1986) and *Espirais de Madeira* and also a volume that documents the 45 years of Coelho's production: *Manoel Coelho, Arquitetura & Design*, both by Irã Dudeque (2001 and 2013).

The first author presents in his publication the most representative works of architecture carried out in the 20th century in Curitiba, quoting Coelho's house. However, this catalog is limited to a brief description of the project and the presentation of simplified plans and two exterior photographs. The second author's 2001 book, resulting from his master's dissertation, presents some projects already mentioned in Xavier's 1986 publication, inserting Coelho's production in a clearer context of his contemporary peers and also stressing the importance of an "architect's house," complemented by a more comprehensive textual description of the project, but featuring few new graphic pieces. In 2013, Dudeque resumed his investigation, writing the text of a book that documents the architect's complete production over 45 years. One

of the outstanding projects is the architect's home. This publication gains importance for its pioneering role in documenting the work of an architect from Paraná and for its extensive cataloging of works. Featuring photographs and brief texts of each project, it fulfills the objective of presenting a synthesis of Manoel Coelho's work.

This paper sets out to complement the information already available about the project with a different perspective in relation to previous publications, presenting information about its conception, construction, and spatiality, which can further enhance the study of this architect and his architectural production.

ARCHITECT MANOEL COELHO (1940-2021)

Manoel Izidro Coelho was born in Florianópolis, Santa Catarina, in 1940. Early on, he moved to Curitiba and graduated as an architect in 1967, attending the first regular class of the Architecture and Urbanism Course at the UFPR, Federal University of Paraná, where he went on to become a professor and course coordinator. He also took part in coordinating the implementation of the Design School at UFPR in 1975.

During his period as a student, and more specifically in the Architecture Course, he established a direct relationship with the first professors who came from other states

(São Paulo, Rio de Janeiro, and Minas Gerais) to comprise the faculty, working with figures such as Luiz Forte Netto and José Maria Gandolfi, both from Mackenzie University in São Paulo. Not only did he play a fundamental educational role in helping form new generations of architects, but he also later designed the buildings in which the students were taught.

Coelho played an important role in the process of urban transformation of Curitiba, starting with his internship at IPPUC, the Institute for Research and Urban Planning of Curitiba, as a student, then as an architect on the technical team and later as a technical consultant, developing a series of projects for the city, such as urban furniture, urban equipment, and visual communication.

He was president of the IAB/PR, Institute of Architects of Brazil, Department of Paraná, in 1972-1973 and held the Municipal Secretariat of Urban Planning of Curitiba. Honored at the 5th São Paulo International Architecture Biennial with a Special Room, he received several awards, notably for his projects at the 3rd São Paulo International Architecture Biennial, Seal of Excellence at the 2nd Brazilian Design Biennial, and the Grand Prize for the Ensemble of Work at the XV Congress of Oscar Niemeyer Architects, in 1997.

Coelho worked with Jaime Lerner, both as a collaborator in his office and as Secretary of Urbanism in Lerner's second term as mayor of Curitiba (1979-1983). Also, since his student days, he participated and won prizes in a series of competitions, including 2nd place in the Euro-kursaal International Competition in San Sebastian (1965); 1st place in the Contest of the Department of Public Security, Brasília (1967), 5th place in the Banco do Brasil Contest in Caxias do Sul (1970), and 4th place in the competition for the headquarters of the BNDE in Brasília (1973).

Within his studio, he met public and private demands at different scales, from visual communication and buildings to urban projects. He developed some notable projects, such as the masterplan and the main buildings of the Pontifical Catholic University of Paraná in Curitiba (1973) and the Positivo University (1999). From 1975-1980, he coordinated the urban project of the city of Criciúma in Santa Catarina, developing a complete design of the civic center, public buildings, and urban visual communication.

Manoel Coelho passed away on March 4, 2021, a victim of cancer. He left a huge legacy in the field of architecture and design. Until his last days, he lived in the residence he had designed; this house was sold in 2021 and no longer belongs to his family.

HISTORIOGRAPHICAL ANALYSIS

MANOEL COELHO, ARQUITETURA & DESIGN BY IRÃ JOSÉ TABORDA DUDEQUE, 2013

This publication, which documents the 45-year career of Manoel Coelho, covers his professional activity, from his very first designs to a series of key urban projects by the architect.

One of the projects presented in the book is the *Casa do Arquiteto*, his Architect's House. Dudeque highlights the difference between this project and Coelho's public and institutional works. On an urban site with limited dimensions, the insertion of a building, in this case, a residence, can be conditioned to generate distinctions between front and back or the visible face and the hidden face. This is the opposite of what usually happens in public buildings, which are generally located on large plots of land and where there may be no distinction or hierarchy between facades.

Another contrast Coelho created is the relationship with traditional bourgeois architecture, in which the residences generally had a greater connection with the facade facing the street, in addition to the entire social and convivial area being located at the "front". In his residence, the architect makes a more neutral facade facing the street and opens it up to the back, where there is a beautiful private garden and the presence of two *araucárias*, pine trees from Paraná, that also helped shape the architecture.

The author adds that, for this project, Coelho carefully interrelated the architecture and the house's geographical location, from the moment that the house touches the property lines with both side walls, the front set-back, and the vegetation at the back, delimited the drawing itself.

ESPIRAIS DE MADEIRA BY IRÃ JOSÉ TABORDA DUDEQUE, 2001

Dudeque also investigates Manoel Coelho in his publication *Espirais de Madeira*, in which he documents a series of notable projects in Curitiba. Besides organizing the projects and events into periods, the book provides an opening for new discussions of themes that had not yet been evaluated. In the chapter *Visto, Revisto, Imprevisto* ("Seen, Revised, Unforeseen"), Dudeque cites two architects' houses as the residences that took the most effort to design in the architectural production in Curitiba. These are the house of architect Maria Nadir de Carvalho (1975) and the house of architect Manoel Coelho (1981). Relating to Coelho's project, the author argued that the architect shows total mastery in interrelating the levels and half-levels of the house, which are well distributed on the sloping land. Other than the bedrooms, bathrooms, and kitchen, the spaces in the house were all integrated without the need for confinement or separation. Another notable aspect of the house is the use of coloring¹:

ARQUITETURA MODERNA EM CURITIBA BY ALBERTO XAVIER, 1986

The construction details of this residence were painted in primary colors. In the dining room, the concrete plane that blocked the view of the stairs was painted yellow. In a unique reference to the architecture of Curitiba, this plane derived from the experiences of the plastic artist Hélio Oiticica, who translated, into space, the language of Piet Mondrian's painting. (Dudeque, 2001)

Dudeque also underscores the house's relationship with the street; the concrete plane framed by the site's vegetation, cut by a glass strip that features yellow fiberglass brise-soleils to control solar incidence and privacy. The back portion was the greatest attraction of the project, in which the residence opens on two levels, one private and the other social or more public.

The residence fits into the obligatory front set-back, with sloping walls on the boundaries and at the back reflecting the existing vegetation. About this relationship between the architecture and the terrain, Dudeque notes the following considerations²:

The pine trees also determined the total built area, as the main volume respected the regulatory set-back in the front and, at the back, advanced to the pines. The internal space was also defined by the vegetation. On the side of the lot, there were philodendron trees. In the design, this resulted in a zenithal opening that integrated this vegetation into the dining room. (Dudeque, 2001)

For the author, these design solutions, which he calls "projectual gymnastics" and which he claims ensured the preservation of both the internal and external vegetation, would have related the architect to the research of the *Paranista* Movement—making evident the architect's ecological interest.

In his book *Arquitetura Moderna em Curitiba*, published in 1986, Alberto Xavier documents more than a hundred iconic projects built in the city during the 20th century, ranging from public, institutional, housing, and also some private residences. The author includes architect Manoel Coelho's house in this group of architectural projects with modern lines, even though it dates to 1981.

The text presents the solution adopted by the architect, in which he exploits the land slope, creating four half-levels for the house, two of which touch the ground and two others that comprise the upper floors. These areas receive different parts of the program, integrated through an internal void and connected by a set of stairs. The roof slab is slanted, following the land slope, with a lateral cutout for the internal courtyard. On the other side is a *pergola* to generate a service circulation route, opening for ventilation and lighting of the bedroom toilet. In addition, Xavier mentions the design for the slab of the external terrace that opens to the back of the lot: it is generated by the circumference of the tree canopy of the *araucarias*³ that already existed there, a design that is also reflected in the pool shape that respects the tree's root zone.

DECOMPOSITIONAL ARCHITECTURAL ANALYSIS

Architect Manoel Coelho's residence is located on an urban and wooded site, with an approximate area of 700 m², on Gregorio de Matos Street, São Lourenço, Curitiba [FIGURE 01].

The neighborhood is characterized by individual residences and abundant vegetation. The site chosen by the architect features a natural tree pattern that determined the design of the 400 m² building. From the street, the majority of the trees on the lot may go unnoticed. The residence occupies the front part of the land, respecting the



01 Manoel Coelho's house, front facade. © Author, 2022.

established front set-back, and occupying the total width of the land of approximately 14 meters, touching the two side boundaries. At the back, the building is limited due to the existence of two *araucarias*, which, owing to their protection radius, preserve a good part of the 50 meters of depth of the land.

The site slopes approximately 6 meters downward from the street towards the back, so the architect established two levels where the house touches the ground. The first plateau comprises access to the house for pedestrians and vehicles in the form of a covered shelter that is used as a garage, as well as the dining room and the entire service program (comprising kitchen, laundry, and service area). From this level, the user can establish an understanding of the spatiality of the house by being able to look down to the second level area, which is half a level below and contains a social living room. Through this lower level, there is direct access to the back of the land, featuring space for the external dining area, a swimming pool, and a private garden [FIGURE 02].

Above the access floor of the house, there is a second, more intimate, social area, located between the architect's studio and a library. This level also offers access to the terrace that opens with a view of the massive vegetation at the back. On the highest level are the bedrooms, with windows facing the street, but with a series of privacy filters and solar incidence control, either through *brise-soleil* or



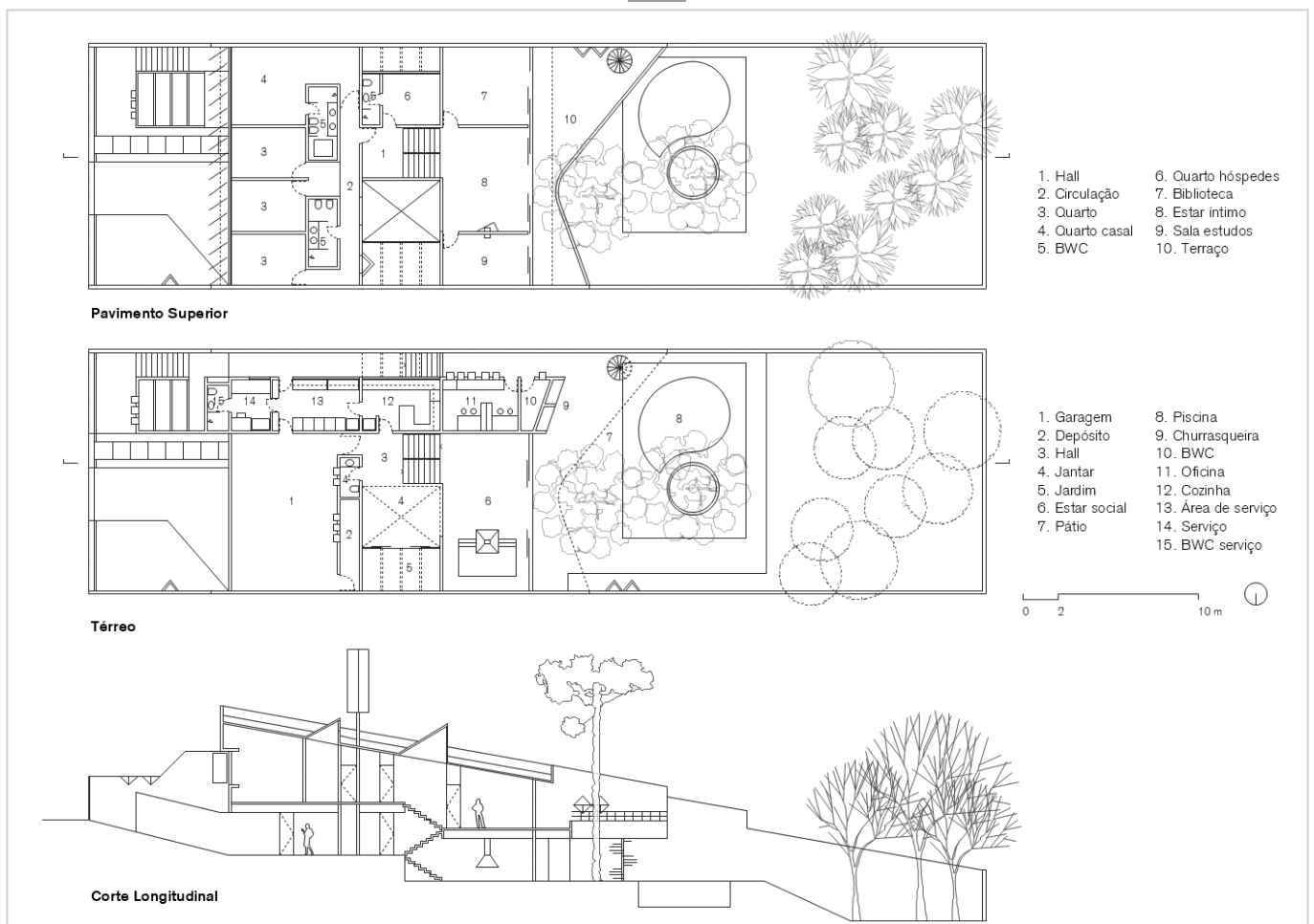
02 Back façade with terrace. © Author, 2022.

climbing vegetation. This is the best insulation for this type of environment in a city with low temperatures like Curitiba, which features the lowest temperatures among Brazil's large cities [FIGURE 03].

Regarding the spatial arrangement of the house, the longitudinal section offers an understanding of some of the relationships. Firstly, with the sloping roof slab following the slope of the land, there is a height difference that generates a unique spatial complexity, in addition to helping the building's greater height conform to the street. This slab, despite touching both side wall, has some cutouts that generate both a *pergola* space for service circulation to the south and an uncovered patio to the north, which, in addition to illuminating the interior of the house, preserves



03 Interior showing the central staircase. © Author, 2022.



04 Upper floor plan, ground floor plan, and longitudinal section. © Author, redrawn based on the original plans and section from the architect's collection, 2022.

a set of *philodendrons* that predated the house. This slab has some cutouts for the ventilation and lighting of the toilets and the vertical and horizontal circulation of the house [FIGURE 04].

Another spatially exploited resource is the internal void, through the slab between the upper and lower floors, generating a space with double height above the dining room [FIGURE 05]. The project, conceived in concrete, features distinctive aesthetics with its fair-faced surfaces on the front façade and in the structural elements such as slabs, beams, and internal stairs [FIGURE 06].

Another aspect is the use of this same materiality in fixed furniture, such as sofas and sideboards in the communal and public areas. A prominent element is the water tank on the roof, whose square volume is turned at a 45° angle to the main volume of the architecture.

Complementing the aesthetics of concrete, the architect made experimental use of chromaticity in this project by employing the basic colors red, blue, and yellow, whether in masonry, furniture, or metallic elements, and identifying and differentiating elements through the use of these colors. The house features a very direct and simple strategy in identifying the application of color; yellow appears in the painted walls in the social spaces of the house, in the barbecue pit volume, in the stairs connecting the external area with the private terrace, or in the kitchen and service area furniture. The circulation space of the

bedrooms is painted red, which differentiates it from the rest of the house, identifying that it is a different, more discreet, and private accommodation space. Blue appears more as a complement to the details of these elements, as in the painted steel fireplaces of the house: in the social living room, the fireplace has a pyramidal design, and in the intimate living room, a triangular prism shape [FIGURE 07]. The *brise-soleil* in fiberglass on the front facade is painted yellow. The wooden doors throughout the residence differ from the other color applications, as they are finished in green lacquer paint.

The residence belonged to the family until a few months after the architect's death in March 2021; they had lived there for 40 years. Maintaining its original characteristics, it received some minor interventions, such as glass guardrails on the stairs, mainly for the safety of the couple's grandchildren. The exuberant vegetation generates a very pleasant private garden that received sculptures by artists from Paraná, as well as in the treatment for the street, where it established a relationship of urban complementarity, both by the permeability of its boundary element and by the landscaped spaces on the public sidewalk.

The presence of the two *araucárias* on the site, the symbol tree of the State of Paraná, shaped both the rear extent of the site occupied by the residence as well as helping to shape the architecture: the shape of the pool, which refers to a water drop, is also the result of the



05 Interior view toward red-painted upper circulation space. © Author, 2022.

protection of the root zone of one of the trees [FIGURE 08]. And on the upper floor, on the terrace accessed from the intimate living room, its organic design also accompanies the space established by the protection radius of this species' tree canopy.

CONCLUSION

The project of Manoel Coelho's residence is not framed in any conjecture of a defined architectural language, such as that of Brutalism, for example. As it is an 'architect's house', where the architect was both author and client,



06 Interior void with double height space. © Author, 2022.

it could incorporate a range of experiments that would hardly be accepted by a conventional client.

It is a unique project, conceived by an architect who, alongside his vast academic and institutional experience, here was able to achieve an explicitly practical work that could very clearly materialize his ideas. Moreover, an influence can be noted from the various references that the architect may have gathered in his work. The use of fair-faced concrete not only as a structural element but as a key aesthetic feature of the space stems partly from his direct relationship as a collaborator of



07 Living room with a geometrical fireplace. © Author, 2022.



08 Garden with drop-shaped pool and one of the araucárias trees. © Author, 2022.

his architectural professors from São Paulo, formed in the *Escola Paulista* movement (Camargo, 2019), who used it as a recurring aesthetic characteristic. Through the use of color, not only in this project for his residence but also in his office project, the educational buildings mark the identity of the architect, who embarked on projects of design, visual communication, and the arts.

The interventions carried out by the architect himself demonstrated how architecture needs a person to exist and vice versa, as it also needs to be constantly revised. After the architect's death, the residence was sold and subsequently received some highly disruptive alterations to its original design. The original colors were changed to a neutral color palette, and thus, in addition to the fact that there are no criteria for the new application of colors, it is currently not possible to identify the triangular color design on the water tank, and on the side of the stairs. In addition, changes were made to the original window frames in the living rooms, bedrooms were changed, and a roof was installed where the house's patio is located.

This p has set out to document the project more extensively than previous sources, presenting a developed set of drawings of the original project and a photographic survey of the residence. To complement the study of Coelho's diverse work, future lines of investigation might extrapolate from the most recognized projects to include even private projects. It would probably also be fruitful to study other examples of the building type of the *Casa do arquiteto*, and not only in Brazil: this type seems to offer a great field of design freedom for its authors, being a propitious space for experimentation.

Finally, because the house served as the architect's residence, and even though it received some adaptations at his discretion, the essence of the original project did not completely disappear. The original features were partially maintained, although it was an elaborate project built more than 40 years ago. The residence still surprises us today with its spatial quality and construction system, making it one of Curitiba's most outstanding examples of 1980s residential architecture.

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Felipe Taroh Inoue Sanquetta is an architect from Brazil. PhD candidate in Architecture and Urbanism, Graduate Program at FAUUSP, Architecture and Urbanism College, University of São Paulo, Brazil. Holds a Master's Degree from the same institution. Assistant professor at Escola da Cidade, São Paulo, since 2023. Member of Docomomo and Casa da Arquitetura de Curitiba. Coordinator Architect at Studio Arthur Casas.

ENDNOTES

- 1 Dudeque 2013, p. 272. The authors of this article translated the quotations.
- 2 Idem, p. 273. The authors of this article translated the quotations.
- 3 Typical pine tree from the state of Paraná.