# REVIEW ARTICLE

# Latin American Architectural History: Reading Between the Lines, Opening Opportunities

by FELIPE HERNÁNDEZ

### EDITORIAL NOTE

This review article marks a departure for the journal — the start of an occasional series looking at areas often given inadequate attention in the pages of *Architectural History*. While the United Kingdom, Europe, United States and (at least some of) the countries of the former British empire are generally well covered in the journal, other parts of the world are not, and of these Latin America is perhaps the most conspicuous. This is partly for historical linguistic reasons (most research on Latin America is written in either Spanish or Portuguese) and partly because, when English-language publication is considered, the overwhelming influence of the US in this region means that the magnet of American publication is almost irresistible. This has meant that both *Architectural History* and the broader discipline as it exists in the UK have missed out on an important area of architectural-historical research and debate. To address this — to bring the architecture of Latin America to the attention of our readers and, conversely, to bring our journal to the attention of researchers in the region — the editorial board invited the Colombian-born architect Felipe Hernández, associate professor at Cambridge and member of the editorial board of *Architectural History*, to introduce the fascinating work of this continent and the wider issues it raises for the discipline.

In 1951, Carlos Martínez, the founder of the first journal of architecture in Colombia, *Revista PROA*, stated that it is not possible to speak about Colombian architecture before 1936, the year when the Colombian national university inaugurated its school of architecture. Until then, the most significant buildings in the country had been designed by foreign architects, or by Colombians trained abroad. Therefore, in Martínez's view, a truly Colombian architecture could only be achieved when architects were both Colombian and trained in the country.

It is not possible to extrapolate this argument to the whole of Latin America.<sup>2</sup> On the one hand, despite a common colonial history, each nation in the continent navigated the perilous waters of international relations in different ways after independence and during the long and convoluted processes of nation-building. In other words, how each nation in Latin America saw itself in relation to the rest of the world varied greatly. In some countries, the fact that buildings were designed by foreign architects

may not (necessarily) have reflected a lack of the nationalism that Martínez demanded. On the other hand, the very concept of Latin America poses enormous challenges for anyone attempting to establish what exactly Latin American architecture really is, what buildings represent it, or who should be credited for its creation. Thus, what we cover under the umbrella term 'Latin American architecture' is a loose collection of buildings that share a narrow range of formal and technical characteristics — indeed, a body of work produced largely between 1920 and 1960, as many historians agree.<sup>3</sup>

Martínez's provocation nonetheless introduces an interesting set of questions about the creation of schools of architecture in the various countries of Latin America. While some of these questions may be concerned with the construction of 'identity' (that is, the search for a Brazilian, Chilean or Colombian architecture), they also strive to reveal the apparent homogeneity of the sample that represents the continent in architectural history. My view is that the focus on questions about identity has proved much less productive than other investigations. Indeed, the excessive focus on identity since the 1960s diverted attention from key issues in Latin American scholarship, and politics, which played a fundamental role in the consolidation of a body of representative work. A quick glance at the dates when the most influential schools of architecture were founded begins to etch the contours of a stylistic choice, namely modern architecture.

Unsurprisingly, one of the first schools of architecture in Latin America was created in Buenos Aires in 1901. It is unsurprising because, as Barry Bergdoll pointed out, around 1900 'Argentina's soaring gross domestic product evidenced the fastest growth of any country in the world'. 4 Soon after, in 1910, the Universidad Nacional Autónoma de México (UNAM) and the Universidad Nacional de Ingeniería de Lima (Peru) opened their own schools. The inauguration of the school of the Universidad Nacional de Colombia in 1936 was followed by that of the Universidad Central de Venezuela in 1941, and a few years later by the two most prestigious architecture schools in Brazil, FAU (in Rio) and PAUSP (in São Paulo), which were opened in 1945 and 1948 respectively. Each of these schools opened in specific and very different socio-political circumstances, which makes generalisation across the continent difficult. The point to note is that their establishment coincided with the apex of the international expansion of modern architecture. The period covers the European avant-garde, the establishment of the Bauhaus, the publication of the Athens Charter and the reconstruction of European cities after the second world war. As a consequence, schools of architecture throughout Latin America were heavily influenced by modern architecture, in a period also characterised by relative affluence, technocratic optimism and the interventionist policies of the United States.

In his recent book *Constructing Latin America: Architecture, Politics, and Race at the Museum of Modern Art* (2022), Patricio del Real explores the complex inter-American politics of the 1930–50 period, developing the argument that Latin American architecture was a North American construct.<sup>5</sup> Del Real places New York's Museum of Modern Art (MoMA) at the centre of this creation, and connects to it a network of prestigious educational institutions including Harvard, MIT and Cornell. All these institutions, in the political context of the second world war and the cold war, colluded in the creation of the homogenous sample that has represented Latin America architecture ever since. The sample was consolidated between 1943 and 1955, coinciding with two prominent

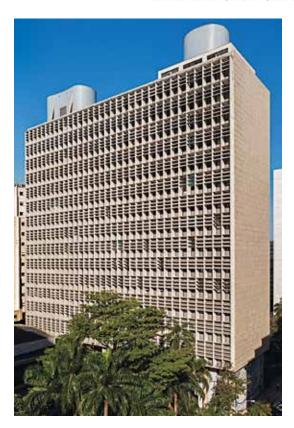


Fig. 1. Palácio Gustavo Capanema (formerly the Ministry of Education and Health), Rio de Janeiro, Brazil, 1936–43, Lucio Costa (lead architect), Carlos Leão, Jorge Machado Moreira, Oscar Niemeyer, Affonso Eduardo Reidy and Ernani Vasconcellos, with Le Corbusier as design consultant; landscape design by Roberto Burle Marx and murals by Cândido Portinari; photograph of 2007 by Leonardo Finotti

exhibitions held at MoMA in those years: *Brazil Builds* in the former year and *Latin American Architecture since 1945* in the latter. Each exhibition produced a publication with texts by influential architects and critics such as Philip Goodwin (1943) and Henry-Russell Hitchcock (1955).<sup>6</sup> (A third exhibition, *Latin America in Construction 1955–1980*, which followed in 2015, is discussed below.)

These writers acknowledged the architectural merit of the buildings, and the talent of the architects, while simultaneously passing judgement on the level of achievement. Goodwin's was mostly a celebratory account of Brazilian architecture, praising the architects' approach to modern style and construction. Indeed, Goodwin suggested that Brazilian architects were more inventive than the North Americans, and had explored the potential of new construction materials to a greater extent in response to both function and climate. His main criticisms, at the end of the book, were not of the buildings but of the poor transport infrastructure, lack of housing and inadequate architectural education. Given that he started the book indicating that the American Institute of Architects (AIA) and MoMA were 'anxious to have a closer relationship with Brazil, a country which was soon to be our ally', his critique could be read as an invitation to establish institutional links to resolve those deficits, and for the US to maintain a presence in Brazil.

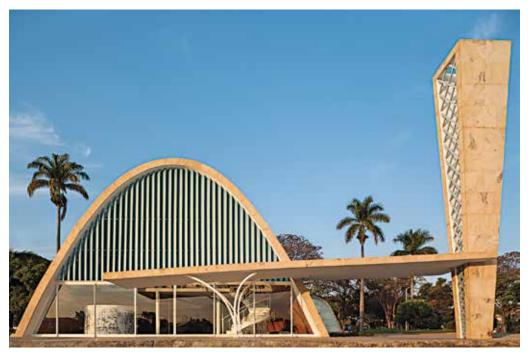


Fig. 2. São Francisco de Assis church, Lake Pampulha ensemble, Belo Horizonte, Brazil, 1941, Oscar Niemeyer with Joaquim Cardozo (engineer); landscape design by Roberto Burle Marx and murals by Cândido Portinari; photograph of 2007 by Leonardo Finotti

Hitchcock in 1955 dealt not just with Brazil, but included samples from the rest of Latin America. Even though he emphasised from the start that Latin America was a heterogeneous entity difficult to consider as a totality, the buildings included in the book have a stylistic commonality: they correspond to the aesthetic principles of the International Style, about which he had curated an exhibition with Philip Johnson 23 years earlier.9 Unlike Goodwin, Hitchcock was ambivalent in his assessment of modern buildings: he created connections between buildings in Latin America and others in Europe and US, praising and criticising simultaneously so that Euro-American architecture remained superior. For example, he celebrated the application of CIAM (Congrès Internationaux d'Architecture Moderne) housing ideas and modern construction techniques in buildings such as the Conjunto Urbano Presidente Alemán (1947-49) in Mexico, designed by Mario Pani and Salvador Ortega with engineer Bernardo Quintana, and the Unidad 23 de Enero (1955) in Caracas, Venezuela, designed by Carlos Raul Villanueva with Guido Bermúdez, Carlos Brando, José Manuel Mijares and José Hoffman; but he criticised the quality of construction in such a way that the European and North American precedents emerged as superior to the Latin American iterations.

This ambiguity characterises the inscription of Latin American architecture in the history of modern architecture. There is a tension between the building — the architect's work — and the interpretation of the architectural historian. To put it differently, there is

a gap between the buildings that form the representative sample of modern architecture and the methods of historicisation that are used to constitute the sample. Goodwin's opportunism and Hitchcock's ambivalence open up a vast area of historical enquiry where the univocality of architectural history becomes questionable. To differing degrees, the ambivalence persisted in the work of subsequent interpreters, from the diplomatic articulation of Kenneth Frampton's critical regionalism (presented as a creative practice resulting from interactions between different sites, even though historical hierarchies were not dismantled) to the direct accusations of plagiarism and superficiality made by William Curtis in 2000.<sup>10</sup>

Particularly revealing of the contradictory terms in which Euro-American academia addressed Latin American architecture in the years following the MoMA exhibitions was Leonardo Benevolo's *History of Modern Architecture*, published in Italian in 1960 and in English in 1971. In this enormously influential but now largely forgotten work, the judgement of Latin American modernism was at odds with MoMA's museographic celebration. Benevolo made reference to Brazil — along with India and Japan — only in the last chapter, where he found room for non-European and non-North American architecture. Here he quoted the accusations of social irresponsibility and formalism that the Swiss architect Max Bill had directed at Brazilian architecture in São Paulo during the 1953 biennale — although he went on to disagree with the charge of formalism, arguing that the Brazilians had, in fact, 'powerfully transformed' the international repertoire of modern architecture and introduced 'a new concept of the urban scene'.<sup>12</sup>

Max Bill's address, however, reveals a much more complex politics than architectural historians have recognised. In his intervention at the São Paulo biennale, he said:

I saw some shocking things, modern architecture sunk to the depth, a riot of anti-social waste, lacking any sense of responsibility towards either the business occupant or [its] customers [...] Here is utter anarchy in a building, jungle growth in the worse sense [...] Immediately you enter the building site you are struck by an awesome muddle of constructional systems. Thick pilotis, thin pilotis, pilotis of whimsical shapes lacking any structural rhyme or reason, disposed all over the place; also walls entirely of reinforced concrete pointlessly confused with the columns, cutting up and destroying all form and purpose. It is the most gigantic disorder I have ever seen on a job. One is baffled to account for such barbarism.<sup>13</sup>

More than simply an accusation of formalism, which Benevolo tried to repel, the tirade exposes Bill's presumed position of authority and his colonising mindset, calling out the barbarous, antisocial and irresponsible architects in the jungle, whose lack of sense had sunk modern architecture to the greatest depth. The horror! The horror! (In the reverberating words of Joseph Conrad.)

In their 2014 book *Modern Architecture in Latin America*, Luis Carranza and Fernando Lara diplomatically explained that this kind of judgement underscores the difficulties faced by Europeans in understanding the grand architectural gestures of architects from a country considered to be peripheral to 'world architecture', where the Brazilians struggled to find 'their niche in the complex scenario of influences and counterinfluences'.<sup>14</sup> In other words, the sample that has come to form the canon of modern Latin American

architecture crystallised in a contested political situation. It was allowed to emerge only in relation to Europe and North America, the architects of which have claimed modern architecture for themselves - a claim that the historians ratified.

In considering the remarkable buildings that compose this body of work, an obvious starting point is the Ministry of Education and Health, known today as the Palácio Gustavo Capanema, in Rio de Janeiro, Brazil, built between 1939 and 1942 (Fig. 1). The authorship of the building has been variously described. For Valerie Fraser, it was the product of a collaboration between the Brazilian architect Lucio Costa and Le Corbusier, who was invited by Costa to advise the team. <sup>15</sup> Henrique Mindlin saw the ministry building as an appropriation and application of Le Corbusier's ideas. <sup>16</sup> For William Curtis, it was a 'devaluation' of modern architecture, lacking meaning. <sup>17</sup> Clearly authorship is contested and, although the stylistic connections with Le Corbusier are undeniable, he had not built a project of this size at this stage (it was not until after the second world war that his first commission of a comparable size, the Unité d'Habitation in Marseille, was built). <sup>18</sup>

The ministry stands in the centre of Rio, where Morro do Castelo once stood. The *morro*, or hill, was flattened between 1920 and 1922 to make room for new developments along the edge of Guanabaro Bay. The built project was the fourth iteration of a series of sketches for two different sites, which according to the Brazilian architect Carlos Comas had little or no input from Le Corbusier. It consists of a fourteen-storey slab block elevated on pilotis. The north façade, exposed to the sun, has movable *brise soleil* to minimise the incidence of light and heat, while the southern façade is made entirely of glass. A low-volume structure containing the auditorium and a gallery intersects with the office building on the east side, creating a continuous public space at ground level. Thus, beyond form and technical detail, the ministry emerges as an outstanding case study to review carefully the terms in which Latin American modern architecture was inscribed in twentieth-century history, depending on the position of the historian.

The Lake Pampulha ensemble in Belo Horizonte, Brazil, is another remarkable example of this period. Completed in 1941, it was designed by Oscar Niemeyer after the success of his Brazilian pavilion at the 1939 New York world's fair in Flushing Meadows brought him international recognition. The ensemble comprises four relatively smallscale pavilion-like buildings: a casino, a ballroom, the Golf Yacht Club and the São Francisco de Assis church (Fig. 2). The sinuous and spatially dynamic buildings are scattered around an artificial lake that was created in 1936 for flood control and to improve water supply for the city. Inevitably, the lake had an impact on land values, prompting an ambitious real-estate development led by Juscelino Kubitschek, who was governor of the state of Belo Horizonte. Thus the Lake Pampulha ensemble by Niemeyer in collaboration with the engineer Joaquim Cardozo, and also with the landscape designer Burle Marx and the artist and muralist Cândido Portinari, supported the expansion of the city, serving as landmarks of the new development. If the ministry is an example of Brazil's modernising political agenda, Pampulha underlines the role of modern architecture in the private sector: different vectors of development that often intertwine in Latin America.

The provision of modernising infrastructure often included sports facilities, of which there are numerous remarkable examples across the continent. Among them is the



Fig. 3. Estadio de Beisebol 11 de Noviembre, Cartagena de Indias, Colombia, 1947, Álvaro Ortega, Gabriel Solano, Jorge Gaitán Cortez, Edgar Burbano and Guillermo González Zuleta, photograph of 2014 by Leonardo Finotti

Estadio de Beisbol 11 de Noviembre in Cartagena de Indias, Colombia (Fig. 3). Built in only six months in 1947 to the design of the architects Edgar Burbano, Jorge Gaitán Cortés, Álvaro Ortega and Gabriel Solano with the engineer Guillermo González Zuleta, this elegant stadium caught the attention of international commentators for the audacity of the concrete structure in cantilever. In 1949, the *Architectural Review* included images of the stadium celebrating the 'boldness' of its structure and the clear modern influences.<sup>20</sup> This followed an article in the *Architectural Record* the previous year which applauded the 'audacious cantilever' and highlighted where the architects had received their education, namely Harvard and Yale.<sup>21</sup> It appears that, for the international commentators (North American and British, in this case), Latin American architecture could only emerge in relation to themselves.

These buildings — the ministry in Rio, Lake Pampulha and the baseball stadium — along with the two residential complexes in Mexico and Caracas discussed earlier, were featured in the exhibitions of Latin American architecture at MoMA, *Brazil Builds* and *Latin American Architecture since 1945*. Along with a number of other buildings included in both exhibitions, they reveal an affinity with MoMA's architectural preferences and with its growing collection of modern architecture drawings and models from around the world. Thus, as del Real put it, MoMA helped to construct an architectural identity for Latin

America while simultaneously constructing its own identity as a museum committed to modern art, architecture and design. On the other hand, MoMA's unquestionable institutional authority not simply established a homogenous architectural image of Latin America, but through that image helped to define the terms of its modernisation. From the end of the 1940s onwards, most infrastructural interventions throughout Latin America — large social housing schemes, government buildings, schools and universities, and so on — were built according to modernist principles.

### QUESTIONING THE DOMINANT HISTORY

For students of architecture at the Latin American schools in the period 1920-60, modern architecture was the only choice. These young Latin American architects did not have to confront the crumbling pedagogical methods of the Beaux-Arts, and embarked instead on an enthusiastic exploration of the plastic capacities of the new materials at their disposal, in the best spirit of the avant-garde. However, financial constraints in many southern countries prevented the technological research and development that would have enabled them to embrace industrial prefabrication on the scale of nineteenth-century North America or post-1945 Europe. Instead, Latin American architects focused on cast in-situ techniques taking advantage of the one thing they had plenty of: cheap labour. As such, charges of formalism levelled by historians and critics such as Benevolo, Hitchcock and Curtis, or practitioners such as Le Corbusier and Bill, are irrelevant.<sup>22</sup> They reveal, rather, the rivalries prevailing among architects, who saw themselves as conquerors of new frontiers in architectural design, taste and technology, as well as the alignments of historians writing from a great geographical and cultural distance. The history that these historians were trying to build was different from that which their Latin American colleagues would try to construct a few years later, as we will see.

It is also important to remember, as del Real pointed out, that 'the production of a "Latin American" modern architecture has rarely (if ever) been the ambition of the region's architects'.23 Instead it has been a preoccupation of architectural historians who project that idea on to architectural historiography in spite of the difficulties it presents. The Argentinian architect and critic Marina Waisman, for example, acknowledged the existence of racial, cultural, economic and climatic differences across Latin America (a tangible reality that makes continental homogenisation challenging, to say the least), yet she asserted that 'this complex assembly forms a real unity' based on a shared colonial history, 'a common destiny' and a 'common role within the modern world system' all intangible and vague commonalities that, in her view, 'shaped Latin America into a recognisable entity and justify the present efforts to build a continental identity in the field of architecture'.24 Waisman's determinism confirms del Real's position, which in turn reveals the existence of a gap between architecture and the construction of its history. There are important issues to which historians have paid little attention, issues that could open up new areas of research beyond the ending of the world's fascination with Latin American modern architecture after 1960 (to adopt Fraser's chronological proposition) and the impact of modern architecture on Latin American societies.<sup>25</sup> Indeed, the fetishisation of the modernist project, which remains central in architectural education in many Latin American countries, has obscured many issues relating to modern architecture and modernity more generally.<sup>26</sup> Among such issues is the way in which modern architecture accentuated systems of exploitation based on the ethno-racial origin of the workers, who, as previously mentioned, were not a precious commodity because they were excessively available. In other words, despite a glorification of the idea of 'the worker' as the pillar of modern society during the first half of the twentieth century, the worker was, in fact, deleted from the historicisation of modern architecture.

In her detailed study of Felix Candela's oeuvre in Mexico, Maria González examines the aestheticisation of the construction process through photographs that show the complexity of the formwork and the elegant intricacy of the reinforcing steel bars, along with the presence of anonymous builders often with their backs turned to the camera, or hidden behind the typical Mexican wide straw hats. While their labour is shown, and can indeed be comprehended as essential for the realisation of the building, they are portrayed as instruments devoid of individuality.<sup>27</sup> As González pointed out, the majority of workers were rural-to-urban migrants from select regions in Mexico, and therefore not urban residents — and certainly not white. Not only were these workers anonymised in the images, but, according to González, Candela never mentioned them in his lectures or texts. Moreover, their labour was strenuous, and carried out at great peril, with accidents on construction sites a regular occurrence. In other words, Candela's claim that he could build his elegant concrete shells at fifty cents per square foot was possible only because he was underpaying the workers and had little regard for their safety.<sup>28</sup>

Candela's small practice, Cubiertas Ala (which he ran with his brother and sister and two architect friends), started to decline after 1959, when the Mexican government introduced the compulsory registration of the workers and established social security payments. These conditions of employment added administrative costs to the practice and led to the recognition of workers' qualifications, which in turn led to an increase in their wages. While in the late 1950s a labourer received 9.6 pesos per day, by 1964 the minimum wage rose to 21.50 pesos, and in 1973 reached 41.43 pesos.<sup>29</sup> The steady rise in wages, plus additional contributions per employee, added to the building costs, making Candela's shells no longer competitive in the market. He left Mexico and took up an academic position in the US. That Candela was Spanish, never received an architecture degree, and therefore was not registered as a practising architect in Mexico, is irrelevant. Without undermining the architectural merit of Candela's work, and his significant contribution to architecture in Mexico, González demonstrated how modern architecture was complicit in the perpetuation of colonial principles.

In a similar vein, Victoria Sánchez has revealed the extent of corruption in the dissemination of modern architecture in Colombia.<sup>30</sup> Sánchez focused on the conception of the Instituto de Credito Territorial (ICT), an organisation created by the Colombian government in 1939, initially to improve the quality and hygiene of rural housing. Three years later, the ICT established an urban housing department to provide housing solutions for a growing working population composed mainly of rural-to-urban migrants. The ICT was thus one of the pivotal institutions in the dissemination of modern architectural ideas in Colombia. It helped to cement — literally and metaphorically

 the careers of many Colombian modernist architects while also leaving a legacy of remarkable housing schemes. Indeed, in the early years of the ICT, there was great experimentation with different construction techniques, including a few trials with prefabrication. However, as Sánchez showed, the board of directors of the ICT, the architects who designed the projects and the material suppliers were largely the same individuals. Hernando Posada Cuellar was general manager of the ICT between 1947 and 1950, and Gabriel Serrano Camargo was appointed by the president of Colombia to join the board of directors in 1951. Serrano was partner in Cuellar Serrano Gomez, one of the most prominent architectural firms at the time, which designed several housing schemes for the ICT and for the Central Mortgage Bank (BCH), as well as many private schemes for affluent clients. Posada offered to provide concrete blocks for the construction of ICT buildings, and received loans from the institution to set up a production plant for such blocks. He was also general manager of the brick supplier Macon, which demanded advance payment for provision of materials. Serrano was partner of the manufacturer Prefabricaciones, which 'requested in 1954 advancement in money for the delivery of prefabricated elements, such as beams, lintels, floor slabs and stairs for the housing development in Quiroga, Bogotá'.31

In this way, the white-mestizo socio-economic elite of Colombia's capital, male architects educated at elite institutions either in Colombia or abroad, retained their position through corrupt practices while at the same time attempting to shape the city and the way less privileged inhabitants lived in it.<sup>32</sup> Admittedly, the housing schemes designed by Serrano helped to resolve many problems caused by overcrowding and substandard living conditions on the outskirts of Bogotá in the mid-twentieth century. However, it is also clear that the design, construction and financing of modern housing in Colombia helped to accentuate the abyss between the affluent and the poor. Sánchez's critique does not take anything away from the value of the buildings, which remain important precedents in the history of Colombian modern architecture. It does, nonetheless, introduce a new perspective on the existence of 'internal colonialism', the term coined by the Mexican sociologist González Casanova.<sup>33</sup> To put it differently, modern mass housing for low-income urban dwellers in Colombia helped to solidify structural differences that have still not been overcome today.

Corruption in the provision of low-income housing for Colombian workers leads to the question of the way in which modern architecture served to homogenise people according to parameters created in Europe and North America. Such parameters, however, are not products of modern architecture, nor are they products of modernity, but rather they represent a continuation of colonial techniques deployed to control the population. The quest to accommodate 'the worker' in the mass housing schemes known as *unidades vecinales*, or neighbourhood units, demonstrates this clearly. Architectural historians throughout Latin America have made great efforts to trace the origin of the concept — which is often linked to the US housing reformer and planner Clarence Perry — finding solace in the term's association with Le Corbusier and use by Josep Lluís Sert in reference to the eradication of slums in Latin America in his text 'The Neighbourhood Unit: A Human Measure in City Planning' (*c.* 1953).<sup>34</sup>

There has been an unproductive fixation with classifying formal influences and organising taxonomies to connect *unidades vecinales* throughout the continent, seeing



Fig. 4. Unidad Vecinal San Felipe, Lima, Peru, 1962–69, Enrique Ciriani, Mario Bernuy, Jacques Crousse, Oswaldo Núñez, Luis Vásquez and Nikita Smirnoff, photograph of 2023 by Felipe Hernández

them as a development of earlier ideas in Europe and North America.<sup>35</sup> The effort, as many historians (in Latin America and elsewhere) have put it, is to find a place for Latin American architecture in the singular history of modern architecture that evolved centrifugally from Europe. The epistemological origin of this nineteenth-century model of historicisation is hardly ever challenged, namely the European ambition to classify human cultures according to all sorts of factors including climate, location, race, scale, and so on. Inevitably, 'the worker', for whom unidades vecinales were designed, has remained in the blind spot of architectural history. That is because, in the attempt to find architectural merit in the work of twentieth-century Latin American architects, historians overlook the absorption of a heterogeneous population into a system that intends to render them 'modern urban residents' as well as 'workers'. Scholars in multiple disciplines have cast doubt on the existence of a homogeneous working class in 1940s-60s Latin America, or at least on the idea that it formed in the same way as it did in nineteenth-century Europe and North America.36 Hence, in the absence of a proletariat, the unidad vecinal can be seen as a mechanism to bring within a capitalist economy those rural-to-urban migrants hitherto living on its margins.

The way in which architects, planners and politicians described and promoted the construction of *unidades vecinales* in Latin America is revealing. In his 1945 article



Fig. 5 and Fig. 6 (facing page). Conjunto Residencial Prefeito Mendes de Moraes (Pedregulho housing complex), Rio de Janeiro, Brazil, 1946–51, Affonso Eduardo Reidy, photographs of 2010 and 2015 by Leonardo Finotti

'Que es una unidad vecinal?' in *El Arquitecto Peruano*, the Peruvian architect Fernando Belaunde Terry — who was also president of Peru (1963–68 and 1980–85) and from this office endorsed the construction of many housing schemes — set out his vision.

A neighbourhood unit is a miniature city where all the problems of habitation, education, health, housing, recreation and commerce are fully resolved for a previously determined number of inhabitants [...] Its inhabitants are no longer the slaves of the big city but its servants. [Its inhabitants] will have a homely and independent life, only the fathers need to leave for work while the mothers and their children stay safely at home. [...] In short, a neighbourhood unit is a settlement for free and healthy human beings. The cradle for the new generations that will build a better Peru.<sup>37</sup>

In Terry's view, the *unidad vecinal* is an emancipatory housing typology that liberates the slaves of the big city, converting them into servants — which may be seen as a step forward, but did not grant their liberation from many socio-economic burdens such as ethno-racial discrimination, economic exploitation and even socio-spatial stereo-typification based on the fact that they lived in *unidades vecinales*. Moreover, this miniature city provides for a 'homely life', a euphemism for a stable married couple with children according to basic principles of (Catholic) morality. In addition to housing, the



unidad vecinal will provide education, health, recreation and commerce. With all these facilities on site, only one member of the nuclear family has to leave the site: the father, who is the breadwinner. The mother stays at home to make sure that the children are healthy and comfortable. The Residencial San Felipe (also known as Unidad Vecinal San Felipe) in Lima is a good example as it contains all the facilities described: housing of different sorts, commerce and recreation (Fig. 4).

Thus, under the discourses of emancipation and progress there is a homogenising intent. The (male) worker and the (female) carer, with their specific tasks, are simultaneously constructed. Rather than simply a formalist exercise, intended to produce the most environmentally appropriate, most functional or most eye-catching result, the unidad vecinal emerges as a mechanism of statecraft designed to turn ethnoracially and culturally different societies into coherent manageable wholes. Little attention is paid to the reality that, in entering the unidad vecinal, (rural-to-urban) workers were turned into debtors and taxpayers who also had to buy services from the state (electricity, water, and so on). It transpires that the unidad vecinal was conceived from within and to support capitalism. Once the nuclear families become servants of the big city, they become part of a much larger design: an all-encompassing biopolitical apparatus that determines what men and women of a certain class do, where they can live, how they should move through the city — and all this while allocating them a place in the economic stratification of the nation. Once again, this does not diminish the architectural value of the splendid housing complexes designed by numerous architects throughout the Americas between 1920 and 1970, such as the Pampulha

complex in Rio, but it opens up a huge and largely unexplored area of enquiry into the way in which neighbourhood units served as a mechanism of social control (Figs 5 and 6).<sup>38</sup>

### HISTORICISING MODERN LATIN AMERICAN ARCHITECTURE

The quest to find a place for Latin America in the history of modern architecture, which has preoccupied historians such as Benevolo, Curtis and Frampton, is the legacy of a period of soul-searching in the 1960s-80s which eventually found its academic home in the Seminarios de Arquitectura Latinoamericana (SAL), established in 1985 in Buenos Aires. The seminar was a consequence of the sense of exclusion felt by Latin American practising architects and scholars when the organisers of the first Bienal de Arquitectura de Buenos Aires gave centre stage to renowned European and North American figures and allocated smaller venues at unattractive times to regional speakers.<sup>39</sup> In that sense, the origin of the SAL is linked to a reaction against conditions of coloniality manifested in the preferential treatment given to foreign architects. However, SAL discussions did not intend to contest the epistemological structures that underpin Euro-North American claims for the ownership of modern architecture. Instead, SAL participants focused on demonstrating that Latin American architects had earned a place in the history of modern architecture: they wanted to see themselves as part of it. Resorting to theories such as critical regionalism - conceived initially to study the peripheries of Europe (Greece, Italy, Spain and countries of the eastern bloc) — Latin American architects attempted to make sense of their own practices in relation to modern architecture. However, that they only found it possible to express their work as an appropriation of modern themes - Otra arquitectura latinoamericana (Other Latin American architecture), 'modernidad apropiada' (appropriated modernity), Latin American modern, peripheral modern, critical regionalist, and so on — invited descriptions of their work as derivative, as Ramon Gutiérrez admitted at the end of his extensive account of the history of Iberian-American architecture.40

From the original interest in debates about identity, regionalism and universalism, the SAL evolved to engaging with questions about cultural diversity, while also articulating a critique of capitalism and the impact of neoliberalism across Latin America.<sup>41</sup> In its forty years of sustained scholarship, the SAL has produced a foundational set of texts for studying the architecture of the continent from within, enabling an entire generation of architects and scholars to engage seriously with modern architecture — the only fully Latin American architectural tradition, if we were to follow Martínez's provocation. The work of writers such as Waisman, Ruth Verde Zein, Silvia Arango, Cristian Fernandez Cox and Gutiérrez comes readily to mind. Their contribution to architectural scholarship marked a shift in the continent's approach to its own architecture. The SAL also gave visibility to an outstanding body of architectural work that includes Luis Barragán (Mexico - Pritzker Prize 1980), Juvenal Baracco (Peru), Eladio Dieste (Uruguay), Paulo Mendes da Rocha (Brazil — Pritzker Prize 2006 and RIBA Royal Gold Medal 2017), Rogelio Salmona (Colombia) and Clorindo Testa (Argentina), to mention only a few (Fig. 7). This group of renowned architects was seen to represent a more nuanced relationship with modern architecture. Their treatment of colour, materiality,



Fig. 7. Museo Brasileño de Escultura, São Paulo, Brazil, 1986–95, Paulo Mendes da Rocha, photograph of 2007 by Leonardo Finotti

technique, topography and environment was linked to local conditions, cultural traditions and building practices that abandoned the abstract universalism of 'modern architecture', whatever the historians might claim.

The SAL thus unquestionably opened new horizons of theory, historical research and even practice. However, SAL discussions continue to revolve around modernity even if the meaning of modernity has acquired a greater degree of complexity and the modern canon. In so doing, the SAL approach to history sustains a hierarchy that isolates architecture from the complex socio-political contexts in which it is produced. Such a schism can be perceived in the way architectural historians assess popular appropriations of paradigmatic buildings. One example is Rogelio Salmona (1929-2007), one of Colombia's most remarkable architects. Perceived by many as the epitome of a truly Colombian modern architecture, Salmona is best known for his Torres del Parque, built from 1965 to 1970 (Fig. 8). Indeed, in 2022 there was an attempt to nominate his entire oeuvre for inclusion in the list of World Heritage. Much earlier, however, in a celebratory monographic volume about Salmona's work, the Colombian architectural historian German Téllez condemned the way in which residents of La Palestina (one of Salmona's early housing schemes) transformed their houses, affecting the exterior appearance and disrupting the organisation of the plan. Téllez went on to suggest that a strict set of police rules should be drafted to protect architecture from 'uncultivated people'. 42 Revealingly, Téllez's comment has not been challenged, despite



Fig. 8. Residencias El Parque (Las Torres del Parque), Bogotá, Colombia, 1963–70, Rogelio Salmona, photograph of 2014 by Leonardo Finotti

the epistemological hierarchies it reveals. Moreover, it prevents any engagement with issues beyond form. That is why the task of historicising modern Latin American architecture must exceed its current margins: it has to overcome its focus on midtwentieth-century production, and exceed the limitations of merely formal analysis.

The twenty-first century opens an entirely new area of historical research and requires different methodological approaches. The formal analysis of individual buildings remains pertinent, but seems inappropriate due to the scale and heterogeneity of Latin American cities. Indeed, practising architects throughout the continent are today much less concerned about representing, or contributing to, government agendas and the construction of national identities than before (if they ever were, to paraphrase del Real). Of great importance to the study of more recent architecture is the retreat of the state from the provision of housing, which had a significant impact on the scale of built projects and the way in which cities grew since the 1970s. Socio-political and economic instability has also led to a reduction in infrastructural investment. The provision of housing and construction of large infrastructural projects shifted from governmentsponsored to different forms of private and international investment. In the process, since the mid-1960s, the principles of modern architecture so enthusiastically adopted by architects and governments alike, and endorsed by international organisations such as MoMA, which sanctioned the success of Latin American architects, ceased to be seen as the solution to the problems of urbanisation, or as the path to development. Indeed, it may be argued that the degree of development achieved in the first sixty years of the twentieth century rendered modern architecture no longer tenable. The regulation of labour, the privatisation of housing (and other public services such as health, education and transport) and the global standardisation of architectural practice made modern architecture no longer financially viable. In this sense, development can be seen to have caused the demise of modern architecture in Latin America, which, in turn, revealed the failure of both.

# THE DISSOLUTION OF STYLISTIC CERTAINTIES

Today, the homogeneity of the twentieth-century sample that continues to represent Latin American architecture begins to dissolve. It does not mean that architects in that region are no longer creative. Nor does it mean that the quality of buildings has diminished, nor even that their ambition to address social problems has vanished. Latin American architects continue to produce extraordinary architecture, but the conditions of practice and dissemination have changed significantly in the past seventy years. These changes have enabled prominent architects to engage in ambitious urban plans for entire cities, experiment with materials and technologies, and pursue exciting formal explorations in different contexts. Thus contemporary forms of practice, which exceed the narrow limits of modernism, emerge also as an enormous body of research work in Latin American architecture.

Early twenty-first-century urban interventions in cities including Rio de Janeiro (Brazil) and Medellín (Colombia) have demonstrated innovative and effective methods to articulate fragmented cities, addressing the realities of poverty, segregation and violence. Programmes such as the Favela Bairro in Rio de Janeiro, led by Jorge Jauregui,



Fig. 9. UVA de la Imaginación, Medellín, Colombia, 2016–17, Colectivo 720, photograph of 2018 by Colectivo 720

or the Urbanismo Social in Medellín, led by Jorge Perez and Alejandro Echeverri, under the auspices of progressive municipal administrations, rebutted both the modernist masterplan and the strategies of urban regeneration practices prevalent at the turn of the twenty-first century everywhere in the world. Instead these programmes opted for the insertion of modest facilities such as libraries, parks and schools, as well as nurseries and launderettes, articulated by multi-modal transport systems that permit greater mobility for people on the poorer distant peripheries. The UVA de la Imaginación (Unidad de Vida Articulada) by Colectivo 720, a young practice based in Cali, Colombia, is a fitting example: it converts a disused water tank into a community support and recreational facility on the peripheral hills of Medellín as part of a programme led by the local public utility company (Fig. 9). These programmes, though suspended by subsequent municipal administrations in both countries, revealed the importance of critical postures that question the unfiltered application of academic theories — such as masterplanning or solutions based on purely economic calculations. Not only is it necessary to create adequate methods of analysis to study this kind of urban programmes, but the creation of such analytical methods in the field of architecture will enable their improvement and continuity.

Thinking about complex urban and economic conditions in cities throughout Latin America has led several teams of architects to think about ways to tackle housing deficits while enabling the inevitable gradual transformations that occur when urban land is

released in speculative real-estate markets. One case is ELEMENTAL Chile, a practice led by Alejandro Aravena (Pritzker Prize 2016), which came to prominence in 2004 with the completion of Quinta Monroy, an 'incremental housing' project in Iquique, Chile. Working with a very small budget, the architects could only afford to build empty but sturdy concrete block boxes capable of withstanding earthquakes as well as future expansion. Each box gave protection from the elements and contained only basic functions, a bathroom and a kitchen. Residents would then partition the house according to their own needs and individual economic capacity, giving them an opportunity to expand the house on to the voids left between the boxes. Although this idea can be traced to previous experiments in the early twentieth century, including the renowned PREVI development in Chile, that ELEMENTAL focused on the particular circumstances of a site in Chile led to outstanding results, architecturally, socially and economically.<sup>43</sup> While the approach has been criticised for depending on traditional property markets and realestate fluctuations — which ultimately perpetuate structural poverty — the concept of incremental housing opened a broad area of exploration in the context of neighbourhood upgrading, urban improvement and poverty alleviation worldwide.

In addition to large-scale urban interventions and the creative reconceptualisation of incremental housing, there are outstanding explorations with alternative materials. The Colombian architect Simón Veléz studied bamboo construction for over thirty years, exploring the structural capacities of this material and developing construction techniques to build stunning structures with impressive cantilevers. The historicisation of this material experimentation exceeds the limitations of comparative analysis because it engages questions about the dichotomy between rural and urban. In countries such as Colombia, for example, bamboo is linked to rural traditions and is therefore not considered urban, or indeed modern. Hence historicising bamboo — and other natural and non-industrial construction materials — demands careful analysis of the environmental and socio-economic realities of the country, presenting a challenge to narrow views on what is considered modern, and even relevant, in architecture.

Formal experimentation remains a central aspect in the work of many Latin American architects. The Chilean architect José Cruz Ovalle developed a fascinating methodology for dealing with the challenging topographic conditions that exist in different parts of the country. The two campuses that he designed for the Adolfo Ibáñez University are particularly noteworthy. The campus completed in 2000 in Peñaleon, Santiago, on the side of the Andes, adapts graciously to the contour lines while creating views of both the mountains and the city below. The campus in Valparaiso of 2011, although more contained, also negotiates tactfully with the terrain while generating extraordinary views of the Pacific Ocean (Fig. 10). Both campuses are made up of sinuous volumes that create intermediate terraces at various levels, and each terrace has a different condition in terms of scale as well as its relationship with the context. Interior spaces are also dynamic (Fig. 11). Ample hallways articulate circulations at different levels which enable people to move fluently through spaces of different scales and in continuous contact with the exterior. Natural light is cleverly managed to produce different sensations in parts of the buildings according to need. Cruz's formal explorations are worth studying in connection with the specific contexts where they exist, beyond the myriad possible connections that can be created with precedents elsewhere.



Other architects across Latin America have produced remarkable work at different scales and using different materials. The list of the most established practitioners includes Angelo Bucci (Brazil); Cecilia Puga (Chile); Tatiana Bilbao, Isaac Broid, Mauricio Rocha, Gabriela Carrillo and Alfonso Garduño (Mexico); Solano Benítez and Javier Corvalan (Paraguay); and Sandra Barclay and Alexia León (Peru).<sup>44</sup> Their work, along with that of other architects across the continent too numerous to mention, challenges facile classification and escapes the stylistic unity constructed by earlier historiography (see, for example, Fig. 12). These architects work with different materials, explore numerous construction techniques and adapt to a multiplicity of contexts (urban and natural as well as socio-economic), while showing sensitivity to both place and people. In other words, the history of Latin American architecture continues in the twenty-first century, and there is a wealth of material to study and register historically in the past two decades.

Globalisation has also created opportunities for European and North American architects to build in Latin America. Foster and Partners completed their first project in Buenos Aires in 2012, the Faena Aleph Residences, as part of the regeneration of the old port of Puerto Madero. This nine-storey apartment building does justice to Foster's tradition of judicious detailing and environmental awareness, providing ample apartments open to the street but protected by sliding *brise soleil*. In 2015, the Irish practice Grafton Architects — the two (female) founding partners of which, Yvonne



Fig. 10 (facing page) and Fig. 11. Universidad Adolfo Ibáñez, Valparaiso, Chile, 2017–19, José Cruz Ovalle with Ana Turell and Hernan Cruz in collaboration with Alberto Gonzáles-Capitel, photograph of 2018 by Leonardo Finotti

Farrell and Shelley McNamara, received the Pritzker Prize in 2020 - completed the UTEC Campus in Lima, Peru (Fig. 13). The concrete structure, described by the architects as a 'man-made' cliff, creates a series of intimate and comfortable spaces despite its harsh and imposing mass. RSHP, the practice founded by Richard Rogers, continues to build Colombia's tallest building, Torres Atrio, in central Bogotá. One of the main aims of this regeneration project, according to RSHP, is the creation of 'effective knowledge sharing between the international and Colombian firms'. Indeed, RSHP says that it is working closely with the local architectural practice El Equipo de Mazzanti to 'ensure that skills are transferred locally'.<sup>45</sup> The challenge for architectural historians is how to study these buildings without reinforcing academic hierarchies that situate knowledge production in Europe and North America, or presenting them as examples to follow. These three projects, architecturally outstanding as they are, cannot be taken to represent the continent's architecture, nor can they be seen as proof that the 'best' buildings are produced by foreign architects, as some historians have maintained. Rather, they are the result of ever-changing global networks of professional practice and capital investment that need to be studied through different methodologies in order to assert their multi-faceted impact. As we can see, Latin America continues to be a fertile ground for architectural production of single buildings, but it also has some of the largest cities and most interesting urban conditions in the world. These conditions provide material for fascinating research in architectural and urban history.



Fig. 12. Esmeraldina House, Asunción, Paraguay, 2000–01, Solano Benítez y Gloria Cabral, front elevation, photograph of 2009 by Leonardo Finotti

In 2015, MoMA put on another exhibition, Latin America in Construction 1955–1980, which offered an ample and very useful review of architecture in the region since Hitchcock's 1955 show. It was a commendable curatorial effort that brought together a range of impressive examples, helping to document another portion of the twentieth century in the history of modern architecture. The exhibited buildings, however, remain within the confines of the museum's aesthetic interest: the exhibition expands the twentieth-century sample, but maintains its homogeneity. It did not engage fully with critical areas of current research in Latin American architectural history, such as race and gender, and hence missed the opportunity to expand the margins of architectural historiography in Latin America. In the case of gender, for example, there is an increasing number of women in practice, many of whom are recognised internationally — Tatiana Bilbao, Cecilia Puga and Ana Elvira Velez, to name a few. However, the conditions for practice remain difficult for most women, especially when they are from ethnic minorities or less affluent socio-economic backgrounds. 46 Similarly, not very many practising architects with Indigenous or Afro-descendant ancestry are recognised, either nationally or internationally. Architectural practice throughout Latin America — in fact, throughout the west — remains predominantly white (or whitemestizo), represented by affluent male architects with the economic means to study at prestigious institutions and set up a practice.



Fig. 13. UTEC Campus, Lima, Peru, 2011–15, Grafton Architects, photograph of 2023 by Felipe Hernández

# CONCLUSION

Overall, then, there is a need to unsettle the scholarly importance of the modernist legacy in Latin American architecture. If unravelled, the study of modern architecture could help to build an understanding of racial difference and socio-spatial injustice throughout the continent. A critical approach to architecture and urbanism in the twentieth century would certainly shed light on design challenges we need to address today and could lead to the development of newer and more appropriate pedagogical methods to teach architecture, in Latin America and the world. It is also important to engage the past seventy years of architectural production, and to analyse the conditions of architectural practice today. To be sure, examining the conditions of contemporary architecture will most certainly reveal the presence of coloniality, that is, the persistence of colonial principles today. These are evident in the absence of ethnic minority architects and the difficulties women still have to succeed in the profession. They are also evident in the narrow range of subjects taught at architectural schools and the reluctance of studio tutors to tackle difficult subjects such as segregation, inequality, conflict and racism.

Architectural history could play a central role in the transformation of architectural pedagogies in the Americas, as well as in the development of a broader range of more inclusive practices, if historians engage critically a broader range of subjects. *Architectural History* has long been committed to enhancing the field and to more inclusive agendas

such as race, gender and decoloniality. This article has sought to stimulate interest in a broad range of subjects relating to Latin American architecture and to suggest the richness of both the work and the issues that it raises. Latin American architectural history remains an open project that extends far beyond the reinforced concrete walls designed by our (white, male) modernist ancestors who, perhaps, learnt their trade from Le Corbusier.

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### NOTES

- See Jorge Arango y Carlos Martínez, La arquitectura en Colombia: Arquitectura colonial 1538–1810, Arquitectura contemporánea en cinco años 1946–1951 (Bogotá: Ediciones PROA, 1951). In the article, Martínez highlights 1945 because at that time there already was a group of Colombian architects educated at Universidad Nacional nine years after the creation of the school of architecture in 1936. See also Hugo Mondragón, 'Arquitectura, modernización económica y nacionalismo. Una visión a partir de dos revistas de arquitectura latinoamericana de posguerra: Arquitectura y Construcción (Chile) y PROA (Colombia)', Bitácora Urbano Territorial, 18, no. 1 (2011), pp. 55–74 (p. 63).
- 2 In this article, the term 'Latin America' is used broadly to refer to Central and South America, also encompassing the Caribbean (although that is not referred to explicitly). While the concept of the 'Americas' is more appropriate in contemporary academic discourse, not least because it dismantles the hierarchies inherent in regional separations, 'Latin America' is used here to address a body of architectural work that has hitherto been identified as being somewhat unified.
- 3 See Valerie Fraser, Building the New World: Studies in the Modern Architecture of Latin America 1930–1960 (London: Verso, 2001). Also Carlos Brillembourg, Latin American Architecture, 1929–1960: Contemporary Reflections (New York: Monacelli Press, 2004).
- 4 Barry Bergdoll, 'Learning from Latin America: Public Space, Housing and Landscape', in *Latin America in Construction* 1955–1980, ed. by Carlos Comas, Jorge Francisco Liernur and Patricio del Real, exhibition catalogue, Museum of Modern Art (New York, 2015), p. 17.

- 5 Patricio del Real, *Latin America: Architecture, Politics, and Race at the Museum of Modern Art* (New Haven: Yale University Press, 2022), pp. 1–19. See also discussion of the role of US government departments and private companies during the second world war in Felipe Hernández, 'Architectural Latin American Modernism: Twentieth-Century Politics, Historiography and the Academic Debate', in *The Modernist World*, ed. by Alana Lindgren and Stephen Ross (London: Routledge, 2015), pp. 383–91.
- 6 See Philip L. Goodwin, Brazil Builds: Architecture New and Old, 1652–1942 (New York: Museum of Modern Art, 1943) and Henry-Russell Hitchcock, Latin American Architecture since 1945 (New York: Museum of Modern Art, 1955).
- 7 Goodwin, Brazil Builds, p. 96.
- 8 Goodwin, Brazil Builds, p. 7.
- 9 Henry-Russell Hitchcock and Philip Johnson, *The International Style: Architecture since* 1922 (New York: Norton, 1922).
- 10 Kenneth Frampton, 'Towards a Critical Regionalism: Six Points for an Architecture of Resistance', in *The Anti-Aesthetic: Essays on Post-Modern Culture*, ed. by Hal Foster (New York: New Press, 1983), pp. 17–34. William Curtis, *Modern Architecture since* 1900 (London: Phaidon, 2000), pp. 491, 503, 567.
- 11 Leonardo Benevolo, History of Modern Architecture. Volume II: The Modern Movement (Cambridge, MA: MIT Press, 1977), pp. 748–64.
- 12 Benevolo, History of Modern Architecture, p. 755.
- 13 See Luis Carranza and Fernando Lara, Modern Architecture in Latin America: Art, Technology, and Utopia (Austin, TX: University of Texas Press, 2014), p. 180.
- 14 Carranza and Lara, Modern Architecture in Latin America.
- 15 In her study of Roberto Burle Marx's landscape design for the Ministry of Education and Health building, Valerie Fraser concentrates on the 'fruitful tensions' between Brazilian architects and their European counterparts, deploying the notion of 'cannibalism', coined by the Brazilian artist and social commentator Oswald de Andrade, to address the irreverent dialogue initiated by Brazilian artists and architects with European ideas and practices. See Valerie Fraser, 'Cannibalising Le Corbusier: The MES Gardens of Roberto Burle Marx', Journal of the Society of Architectural Historians, 59, no. 2 (2000), pp. 180–93.
- 16 Henrique E. Mindlin, Modern Architecture in Brazil (London: Architectural Press, 1956), pp. 196–99.
- 17 William Curtis, who is much less ambiguous than Benevolo, argues that all architecture produced outside western Europe, the United States and the Soviet Union after the 1950s is a 'transformation, deviation and devaluation of modern architecture': Curtis, *Modern Architecture since 1900*, p. 491. He also argues that the use of 'inventive structural techniques' by architects such as Carlos Raul Villanueva, Amancio Williams and Clorindo Testa 'resulted in mere exhibitionism', concluding that 1940s and 1950s architecture in the 'less developed countries' lacked 'the poetry and depth of meaning of the masterworks of the modern movement' (pp. 503, 567).
- 18 Le Corbusier had already completed the Pavillon Suisse (1930–31), the Immeuble Clarté (1931–32) and the Cité de Refuge (1929–33), but none matched the scale of the ministry in Rio.
- 19 Morro do Castelo was considered an eyesore and social embarrassment because of the residents (mainly racial minorities) who inhabited it and the buildings they had constructed. Fabiola López Durán sees the demolition of the *morro* as social cleansing (the removal of undesirable non-white minorities) at a time of rapid modernisation, and argues that modern architecture and urbanism in Brazil, as in Argentina and Mexico, served to support racial whitening programmes under the auspices of progress and modernisation. See Fabiola López Durán, *Eugenics in the Garden: Transatlantic Architecture and the Crafting of Modernity* (Austin, TX: Texas University Press, 2018), pp. 57–70.
- 20 Claude Vincent, 'Baseball Stadium in Cartagena', Architectural Review, 105, no. 629 (1949), p. 251.
- 21 See Giaime Botti and Jorge Francisco Liernur, 'De la excelencia al olvido: Sobre la emergencia y la desaparición de dos décadas de arquitectura en Colombia', in *Dearq*, 29 (2021), pp. 20–27. See also Felipe Hernández, 'Coloniality in Colombian Criticism', *Architectural Review*, 247, no. 1473 (2020), pp. 20–25.
- 22 For Le Corbusier's scathing criticism of Brazilians, see Maximiano Atria, ed., *Le Corbusier y el Sur de America* (Santiago: Editorial Universitaria, 2018), p. 76.
- 23 Patricio del Real and Helen Gyger, eds, Latin American Modern Architectures: Ambiguous Territories (London: Routledge, 2013), p. 2.
- 24 Marina Waisman, introduction to *Latin American Architecture: Six Voices*, ed. by Malcolm Quantrill (College Station, TX: Texas A&M University Press, 2000), p. 4.
- 25 Fraser, Building the New World, p. 245. According to Fraser, the inauguration of Brasilia in 1960 marked the end of the 'love affair' with Latin American architecture.

- 26 See Felipe Hernández, 'Modern Fetish, Southern Thoughts', Dearq, 29 (2021), pp. 40–53.
- 27 Maria González Pendáz, 'Fifty Cents a Foot, 14,500 Buckets: Concrete Numbers and the Illusory Shells of Mexican Economy', *Grey Room*, 71 (2018), pp. 14–39.
- 28 The safety of the builders and the safety of the users of his buildings: Candela did not make structural calculations for any of his concrete shells.
- 29 González Pendáz, 'Fifty Cents a Foot', p. 32.
- 30 See Victoria Sánchez, Colombia's History of Modern Architecture Revisited through the Housing Agency Instituto de Crédito Territorial: 1939–1965 (unpublished doctoral thesis, University of Texas at Austin School of Architecture, 2018).
- 31 Sánchez, Colombia's History of Modern Architecture, p. 25, n. 53.
- 32 'White-mestizo' refers to white Colombians, as opposed to white Europeans, as such a socio-economically and politically dominant social group.
- 33 Pablo Gonzalez Casanova, Internal Colonialism and National Development (Mexico: National University, 1965).
- 34 Josep Lluís Sert, 'The Neighbourhood Unit: A Human Measure in City Planning', in *The Writings of Josep Lluís Sert*, ed. by Eric Mumford (New Haven: Yale University Press, 2015), pp. 11–32. While Le Corbusier did not refer directly to the 'neighbourhood unit', his concepts of the 'sector', employed in his formulation of the 'radiant city', and the 'unité' are linked to the notion of the neighbourhood unit as later articulated by Sert. See Le Corbusier, *The Radiant City* (1933; London: Faber & Faber, 1967) and Le Corbusier, *The Athens Charter* (1943; New York: Grossman, 1973).
- 35 See, for example, Ana Montoya's commendable effort to register and classify several hundred neighbourhood units throughout Latin America in a document that has become a reference point for research on *unidades vecinales*: Ana P. Montoya Pino, *Las Unidades Vecinales en América Latina* 1930–1970: *Política, bienestar y vivienda como proyecto moderno* (unpublished doctoral dissertation, Universidad Nacional de Colombia, 2014), available at <repositorio.unal.edu.co/handle/unal/75630> [accessed 23 September 2023].
- 36 See, for example, Gino Germani, El Concepto de la Marginalidad (Buenos Aires: Nueva Vision, 1973); Gonzalez Casanova, Internal Colonialism and National Development; Anibal Quijano, 'Colonialidad del poder y clasificación social', Journal of World Systems Research, 6, no. 2 (2000), pp. 342–86; María Eugenia Romero Ibarra, 'La clase obrera en la estructura de américa Latina, 1950–1980', Investigación Económica, 47, no. 185 (1988), pp. 199–219.
- 37 Belaunde Terry, 'Que es una unidad vecinal?', El Arquitercto Peruano, 98 (1945), [n.p.].
- 38 See Penélope Plaza, 'De Bentham a Le Corbusier: Vigilancia y disciplina en la vivienda social moderna latinoamericana. El Complejo habitacional Pedregulho, Río de Janeiro, Brasil (1947–1958)', Atenea, 504 (2011), pp. 111–30.
- 39 The organising institutions were the Sociedad Central de Arquitectos de Argentina, the Centro de Arte y Comunicación and *Revista Summa*.
- 40 Enrique Browne, *Otra arquitectura latinoamericana* (Mexico: Gustavo Gili, 1988); Cristián Fernández Cox, *Arquitectura y modernidad apropiada* (Santiago de Chile: Taller de America, 1990); Ramon Gutiérrez, *Arquitectura y Urbanismo en Iberoamerica* (Madrid: Catedra, 1984), p. 713.
- 41 See María José Azevedo Marcondes, 'Introducción: Debates latinoamericanos en arquitectura y urbanismo (1985-2010)', in *Seminarios de arquitectura latinoamericana (SAL). Haciendo Camono al andar*, ed. by Ramon Gutiérrez (Buenos Aires: Centro de Documentación de Arte y Arquitectura, 2011), pp. 11–18.
- 42 German Téllez, Rogelio Salmona: Arquitectura y poética del sur (Bogotá: Escala Editores, 1991), p. 127.
- 43 See Felipe Hernández, Beyond Modernist Masters: Contemporary Architecture in Latin America (Basel, Boston and Berlin: Birkhäuser, 2010), pp. 59–61.
- 44 See Barbara Hoidn, *Latitudes Volume 1* (Austin, TX: Texas University Press, 2012); Kevin Alter and Fernando Lara, *Latitudes Volume 2* (Austin, TX: Texas University Press, 2014); Mercedes Daguerre, *Latin American Houses* (London: Phaidon, 2012); Hernández, *Beyond Modernist Masters*.
- 45 See <rshp.com/projects/office/atrio> [accessed 23 September 2023].
- 46 Although interest in female practices has increased throughout Latin America, there are only a few publications dedicated to this subject that calls out for architectural research. See the themed issues on women in architecture produced by the Colombian architectural journal *Dearq*: 'Mujeres en la Arquitectura Volume 1', *Dearq*, 20 (July 2017), and 'Mujeres en la Arquitectura Volume 2', *Dearq*, 23 (July 2018). Also the collection *Miradas Plurales y Diversas: La Mujer en la arquitectura en América Latina durante el siglo XX* (Quito: Colegio de Arquitectos del Ecuador, 2022), an intriguing albeit non-academic volume on women architects, and Felipe Hernández, 'Lyda Caldas and Women Architects in Colombia: The Landscape of Universidad del Valle in Meléndez', *Journal of Architecture*, 28, no. 3 (2023), pp. 383–401.