Reviews

Brazil Still Builds: Vilanova Artigas and Affonso Eduardo Reidy

AA Exhibition Gallery 2–26 June 1998

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Lucio Costa and Oscar Niemeyer with the landscape architect Roberto Burle Marx are by far the best-known first-generation members of the Brazilian modern movement. But others made significant contributions, as the AA revealed with an exhibition and accompanying lecture by Professor Nabil Bonduki on the work of Vilanova Artigas (1909–1964) and Affonso Eduardo Reidy (1915–1985) that took place in June.

They make an interesting pair: Reidy of Rio, the public architect, planner and professor, much involved with the well-known trio; Artigas of São Paulo, by contrast, spending his career in private practice but working also as professor and dean of the faculty of architecture at the University of São Paulo.

The two cities have been stereotyped. The Cariocas of Rio, despite the productivity of its architects, are seen from São Paulo as fun-loving and lazy, with too many diversions: the drama of the landscape, the beguiling life of the beach, the samba, volleyball, football – the city of carnival. Those who live in São Paulo, the 'Paulistas', are seen from Rio as earnest, serious and hard-working, more like the citizens of a North American city with its industry and financial institutions. São Paulo's population grew from 2,500 in 1900 to 7 million in the 1960s and 16 million in 1995. These very different cities have produced very different architects.

The Modern Movement was triggered earlier in Brazil than in most other parts of the world by Le Corbusier himself. Encouraged by his poet-friend Blaise Cendrarse, he went to Buenos Aires in 1929 to design a house for Victoria Ocampo, editor of the journal *Sur* – a design that was somewhat compromised in its execution by the local architect, Alejandro Bustillo. While in Buenos Aires Le Corbusier gave lectures on architectural composition and urbanism, published in 1930 as *Précisions*. He returned to Europe by way of Montevideo, São Paulo and Rio, where he gave lectures on urbanism. He also sketched development plans for each of the cities, three of them based on rigid, rectilinear geometries, and included them in *Précisions*.

Le Corbusier was quite overwhelmed by Rio. With its highly sculptured landscape, it could not be tamed into a grid, so it was sketched – from an aeroplane, he claims in *Précisions* – as a multi-storey 'autoroute' of a city snaking along the contours between the mountains and Guanabara Bay. It can be seen as a prototype for his intriguing Obus plans for Algiers of 1930 onwards, in which multi-storey, motorway-like decks were to support offices and *ad hoc* juxtapositions of houses, as described in his book *La Ville Radieuse* (1935).

Le Corbusier returned to Rio in 1936 – on the Hindenburg – but not to implement this pioneering scheme. He had received three propositions: that he lecture for two or three months at the school of architecture, and/or that he act as consultant for two quite different projects, a new university city and a new headquarters for the Ministry of Health and Education. At the time of Le Corbusier's first visit, Niemeyer was still at secondary school, Reidy was studying architecture, and Costa had recently entered practice. It was Costa who brought together a team to work on the Ministry, including those two, Carlos Leão, Jorge Moreira, Ernani Vasconcelos and George Machado Moreira, with Emilio Baumgart as engineer.

The Ministry was intended to symbolize a new Brazil: no longer agrarian and poor but industrialized and urbanized. The Minister of Education, Gustavo Capanema, insisted that the building express this *imagem moderna*, in vigorous opposition to those who wanted government buildings in Rio to be in that pared-down classicism of Mussolini's favourite architect, Piacentini.

Le Corbusier designed two long, low buildings – or rather one for each of two alternative sites – which were close to the sea to benefit from the breezes and highly glazed but with a *brise-soleil* of asbestos cement louvres between vertical concrete ribs. To contrast with the squareness and lightness of their rectilinear forms he proposed free-standing, solid walled and rather sculptural auditoriums. But, ignoring the realities, Le Corbusier had made both his designs for elongated sites, and neither was accepted. Costa and his group produced a design for the typical Rio block which had been allocated for the building.

For this tighter site, Costa shortened and heightened the overall form to make a tower, creating one of the great canonic buildings of the modern movement, with its curtain-walled offices (many years before Mies's) shaded from the northern sun by the *brise-soleil*. The tower was raised on nineteen-metre pilotis to facilitate air movement, with floor-to-ceiling sliding sash windows to allow through-breezes. A long exhibition hall runs under the raised tower, at right angles to it, with a roof garden by Burle Marx, terminated at its northern end by a Corbusier-like sculptural auditorium. A building designed so closely for climate and context is essentially located in that place; indeed, Sigfried Giedion, writing later of Reidy (1960), was to call this approach 'the new regionalism'.

The actual form of this building does constitute a kind of contextualism, but Capanema had more literal ideas. Rio is by the sea, and the great baroque churches there derive much of their scale and character from the blue-on-white Portuguese *azulejo* tiles that were used on external and internal walls. Candido Portinari, the twentiethcentury master of such tiles, was employed to design murals for the gallery wing. For the first time in the modern movement the concept emerged of the 'decorated shed'.

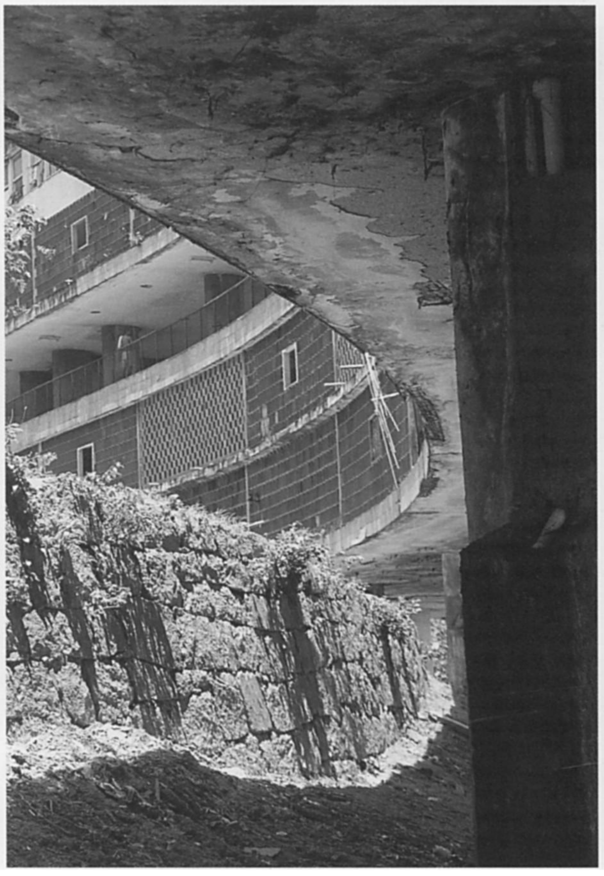
Reidy paid homage to Le Corbusier in several of his later projects, for example the latter's plan for Rio in his Pedregulho housing of 1947. The site has a fifty-metre change of level, and one of the blocks, Block A, snakes along the upper contour for 260 metres. The development consists of six decks, with different kinds of flats at the different levels, although by no means *ad hoc* in the manner of Le Corbusier's Obus plan. The entrance bridges are at the third level, with two storeys of single-person flats below and four above of duplexes with one to four bedrooms. Level three is fairly open, containing offices for administration and social workers, a day nursery with a kindergarten, and a playground with a shell-shaped reflector for children's theatre. External corridors to the north have solar shading of a more traditional kind: honeycomb screens of hexagonal ceramic tubes, a legacy of the Brazilian baroque.

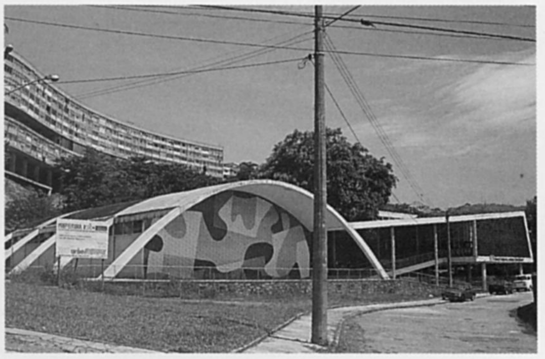
The wave form of Block A is thus 'contextual', determined by the contours of the site. It acts as a backdrop to the lower parts of the complex: one always knows exactly where one is in relation to its sinuous curves. The remainder of the overall plan as well as the buildings themselves are rectilinear. They include four blocks of flats – all composed of four storeys set on pilotis – with honeycomb screening, and a primary school on pilotis with a mural by Burle Marx, entered via a ramp protected from the sun by a roof set at an angle. The gymnasium is a low parabola in section, with a mural by Portinari at the public end, while the swimming pool has changing-rooms with rather smaller arches and another mural, somewhat resembling that for Niemeyer's church at Pampulha of

Affonso Eduardo Reidy

Pedregulho housing development,
Rio de Janeiro, 1947

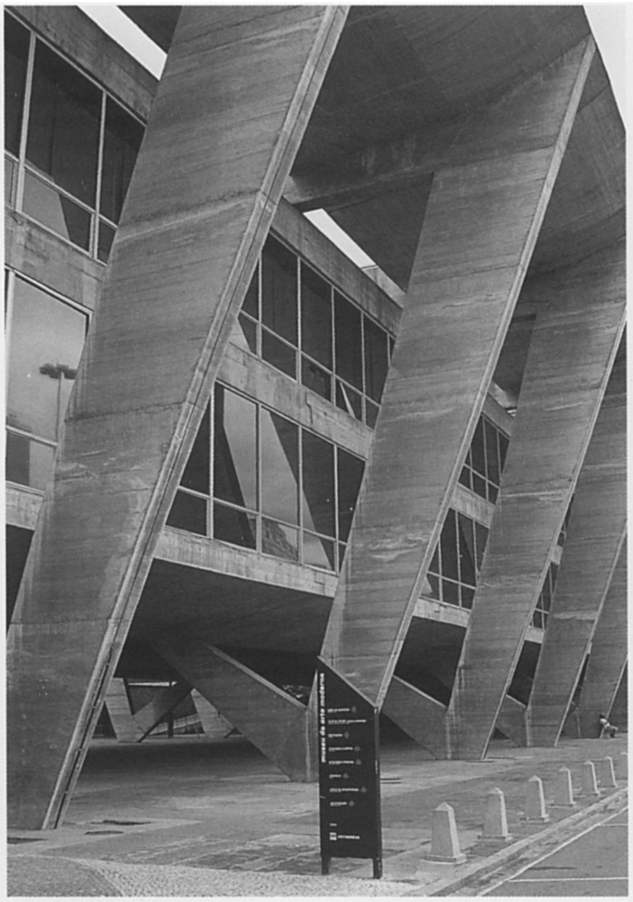
RUMI KUBOKAWA, 1998





Affonso Eduardo Reidy

Museum of Modern Art,
Rio de Janeiro, 1954



RUMI KUBOKAWA, 1998

1942. A health centre and a shopping centre complete the ingredients for everyday living. Ten years before Brasilia, Reidy had assembled the ingredients for everyday life that Costa was to include in the 'superquadras' of his plan for the new capital. Giedion suggested, indeed, that those superquadras were too small; perhaps, if Reidy had entered the competition for Brasília, his planning might have been better than Niemeyer's.

But as a public architect Reidy produced rather more than housing layouts. His work includes civic monuments such as an administration building for Rio (1938), the city transport offices with workshops (1939), a factory (1940) and a community theatre (1950). The best-known of these is Rio's Museum of Modern Art, founded in 1951 and housed temporarily in the Ministry of Education. Building work began in 1954 on a strip of land which, as Director of the Department of Urbanism (1944–8), Reidy had reclaimed from Guanabara Bay – partly by demolishing two of the hills that had stood in Le Corbusier's way – to form Flamengo Park, landscaped by Burle Marx.

Reidy's building is supported on pilotis, separating eleven bays of ten metres each. The pilotis splay upwards and outwards from 26 metres at ground level to 41.5 metres at the roof. (Le Corbusier was to use such a section, tapering downwards, in one of his very last projects, the Youth Centre at Firminy of 1960–5.) Reidy's ground floor is open to the park, thus forming a huge 'picture window', punctuated by pilotis, which frames spectacular views across Guanabara Bay.

As for the galleries themselves, Reidy makes ingenious use of the section: where his large pilotis emerge from the ground upward and outward, smaller ones branch inward to support the lower of the two gallery floors. This floor is a horizontal slab, open and uninterrupted, allowing a true Corbusian 'plan libre'. The larger pilotis are connected at roof level by deep beams from which the second floor is suspended on steel cables, varying from full width across the building, two parallel strips or a single strip along one side, creating lightwells accordingly. The roof too is highly flexible. Reidy's concrete sun-shades run the full length of the building, supported between pilotis and sloping upwards to the eaves from ten metres inside the section, with curving undersides. They shade the vertical glazed walls, much as Niemeyer's overhangs at Brasília shade the otherwise Miesian boxes of the Supreme Court, the President's Office, and other major buildings. The actual roof of Reidy's gallery is lower than these 'wings', which deflect cooling breezes over it, just as Le Corbusier's vaulted roof over his High Court at Chandigarh (1956) was to. The building section allows the roof to be changed at any one point to suit different exhibits in the galleries below: entirely flat to give side-lighting, divided into two with Soane-like shaded rooflights between them, and with light-scoops for particular, localized effects.

Vilanova Artigas's approach was very different, developed by designing hundreds of private houses. Initially he drew not so much on Le Corbusier as on Frank Lloyd Wright, whose skill in three-dimensional planning and use of materials and colour he admired. The flat roof, for Artigas, had become a Corbusian tyranny. Most Brazilian architects continued to build with traditional pitched roofs anyway, which they hid behind parapets. Artigas preferred to extend the eaves in the manner of Wright. By 1997 he had produced some six hundred designs, and more than a third of these were for individual houses.

A year or so after graduating from the São Paulo Politécnica, in 1938, he had gone back there to teach in the school of architecture. But he was surrounded by engineers who were not sympathetic to his belief that architecture students needed more of an artistic background, and became even less so when he began to develop a social conscience. As a consequence Artigas helped to found the Brazilian Institute of Architects; and like many Latin Americans, including Niemeyer, he wanted to declare himself anti-Fascist and therefore joined the Brazilian Communist Party. These political connections brought him quite a few commissions, such as trade union offices, and even a football club.

Artigas spent the year 1947 in the United States as a Guggenheim Scholar and met most of the Bauhaus survivors there. On his return to São Paulo some premises had been donated to the University of São Paulo in the hope that they might be used for a new school of architecture. Artigas's engineering colleagues at the Politécnica were by no means interested. This presented him with a chance to break away from them and set up a school more in line with his own ideas, which was to become the Faculty of Architecture and Urbanism at the University of São Paulo. The Governor of the State of São Paulo, Carvalho Pinto, much approved of Artigas's political views and invited him to design a number of buildings with rather greater social purpose than the private houses that had occupied so much of his time, such as law courts and schools. And after only three years, in 1961, when the intake to the new school was still only thirty students a year, the University invited him to design a whole new college of architecture and urbanism.

For Artigas, as Dean, this was a marvellous chance to embody his social, political and educational beliefs in a single building, which he described as the 'spatialization of democracy'. Above all, that meant openness, so the college is grouped around a central atrium, which Artigas saw as the most democratic of spatial configurations – there are no doors to be closed on the outside world. The detailed brief was based on his proposed curriculum reforms, in which the study of architecture would be joined by urbanism, visual communications and industrial design.

The College is huge: 70 by 42.5 metres and 16 metres high, with a board-marked concrete fascia, nine metres at its deepest, supported on rugged, geometrical columns. A gridded ceiling spans the full length and width of the building. The deep coffers are actually roof-lanterns – shallow concrete pyramids truncated by near-horizontal glazing about halfway up, admitting a calm and even light, highly appropriate for the upper floor of studios, the inter-departmental atelier below, and the atrium on to which they all open. The atrium is some 53 metres long and 17 metres wide, including considerable, if shallow, ramps across its northwestern end. Artigas rightly referred to the sheer 'generosity of space', and saw the whole interior as one 'continuous physical interconnection'. The atrium, with its ramps, encourages meetings, informal communication and a general conviviality.

As building was progressing in 1964, Pinto launched his military *coup*. Openness and freedom were no longer tolerated. Censorship ruled to such an extent that parts of the plan had to be changed: the military, for instance, were suspicious about what students might get up to in the darkroom, so it had to be moved next to the administration. In 1968, even though it wasn't quite complete, the College became a rallying point for student revolutionaries. The absence of doors clearly encouraged this, and a famous photograph shows more than a thousand students crammed into the atrium. Artigas himself advised restraint, urging them to abandon their weapons and thus, he believes, saving some lives.

When the building was opened in 1969 Artigas gained major awards: a UIA Prize for his design and the Jean Tschumi Prize for Education. But, as *persona non grata* to the President, Costa da Silva, who was ruling 'by decree' at the time, Artigas was imprisoned. Nor was he allowed to teach again in this building, the clearest embodiment of his beliefs, until 1980, very near the end of his career.

During the construction of the college, the ever-prolific Artigas was engaged in many other projects, including the Zezinho Magalhães Prado (1967), that is, low-cost housing for CECAP, the State Bank for People's Housing. The flats, at sixty-four square metres, with three bedrooms each, were by no means designed for the poorest citizens of São Paulo. In a typical *favela* – the Brazilian version of a shanty town – a whole family might live within sixteen square metres, but, as Artigas argued, 'additional dwellers' would almost always be attracted, indeed invited, to live in the flats he had designed. The watchword in planning had to be 'economy', which meant a low-rise configuration, efficient planning, minimum circulation and, perhaps, prefabricated construction – much of which was rather enlightened for the time, since most 'socially conscious' countries saw the future of mass housing in pre-cast concrete-slab tower blocks.

Artigas had a profound and sophisticated knowledge of planning philosophy. He regarded Belo Horizonte, the first fully planned city in Brazil (1897), as having been derived from French grid-based models: a 'geometric occupation of the ground' which was seen as a neutral background for human activity. But there had been an alternative tradition, based on the idea of the city as an informal aggregation with medieval Europe offering the best examples. Artigas characterizes these two approaches as Apollonian and Dionysian, respectively. For me, this distinction is fundamental too, but I draw on the alternative traditions of philosophy – rationalism and empiricism – to analyse them.

As far as active planners are concerned, whether they be practitioners or theorists, Artigas sees Apollonian tendencies in the work of those he calls the 'progressives', such as Proudhon, Fourier, Owen, even Le Corbusier, with their utopian search for perfection in city planning and the design of housing, contrasting these with those he calls the 'culturalists', who prefer richness and intricacy to clarity, and draw on Ruskin, Morris, even Frank Lloyd Wright. The latter ideas, claims Artigas, were introduced to Brazil by Barry Parker.

The ideal, in Artigas's view, would be to combine the two, but circumstances – especially economic – clearly forced him in the Apollonian, 'progressive' direction. In his CECAP scheme Artigas planned a total of eight neighbourhoods, and four of these were actually built. Each, like Pedregulho, has shops, a health centre, a community centre, schools, paved areas and parks. There were also to be a centre for technical education, a supermarket and a hospital. Artigas defined a 'neighbourhood' in this context as that which could be contained within a hundred-metre radius (one is reminded here of Leon Krier's 'Ten-Minute City').

As for the actual buildings, most of them consist of three-storey blocks of flats on pilotis. Each is some seventy metres long, containing two parallel wings with an open strip or 'gap' between them. Each of the two wings contains ten flats, and each flat has its own front door giving on to a bridge which crosses the gap and is reached by stairs. There are five bridges in all,

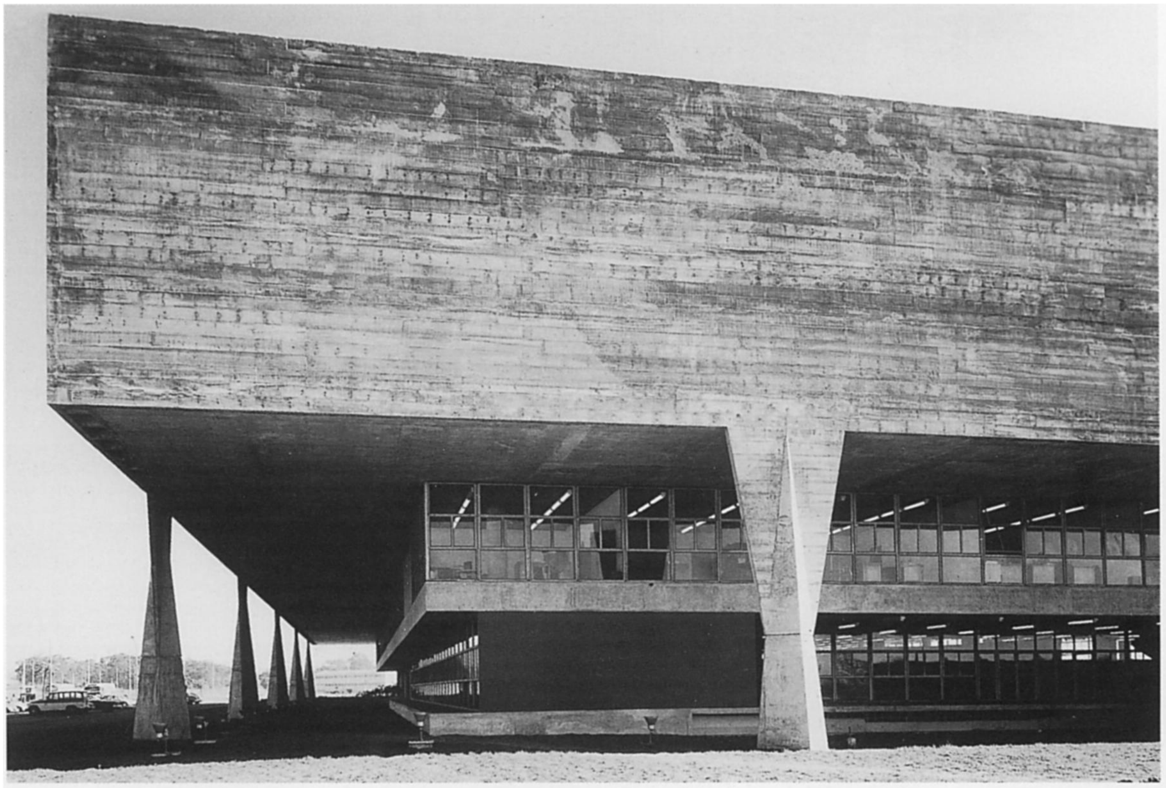
Vilanova Artigas and Carlos Cascaldi

College of Architecture and Urbanism, São Paulo University (FAUUSP), 1961

so they could be called IIIII-blocks. The door to each flat opens on to the main living space, with kitchens and bathrooms also facing the gap. The bedrooms face outward, on to spaces not much wider than the gap, so there is little 'soleil, espace, verdure' of the kind Le Corbusier thought essential to high-density housing. One can see, even in photographs, the way the blocks shade each other; there are few trees, just thin strips of 'verdure' between the blocks.

Yet it is difficult to conceive of a more efficient solution to CECAP's highly pragmatic brief. As for architectural character, one is reminded, a little, of Reidy's rectangular blocks at Pedrugelho, even more, perhaps of early Bofill, with his strong geometries, design for prefabrication, and colour-coding. But, like everyone else, including Bofill, Artigas was faced with the prohibitive costs of setting up the factories to produce pre-cast concrete panels, so he had to turn to traditional construction. Colour alleviates the monotony. The infill panels are painted blue, orange, green or brown, giving each flat an external identity.

It is easy now, with thirty years of hindsight, to deplore the apparent bleakness of such housing. However, it represented an advance on the concrete housing slabs which still blight so many cities – expensive to build, expensive to maintain, socially divisive, and well beyond the reach of those for whom they were intended. Self-build shanty housing, by contrast, costs the city very little, and the initial cost of each house has to be within the resources of those who do the building. Cities from Rio to Jakarta have set up schemes in which, rather than demolishing these labours of love, improvements are offered as required, the ground is rendered more stable, and proper services are provided, including public open spaces and other amenities.



JOSÉ MOSCARDI

Vilanova Artigas,
Fábio Penteado,
Paulo Mendes da Rocha

'Zezinho Magalhães Prado' –
CECAP housing complex,
Guarulhos, 1967

Whilst Artigas was well in advance of his generation, one wonders what he might have done now. Perhaps Le Corbusier had the answer after all, in his Rio-inspired Obus project: build multi-storey decks, properly serviced, and encourage architectural variety and even self-build. Even better, since we have the decks already, in the form of motorways, let's build on them. So many people, in so many cities, from Lagos to Caracas, find themselves stuck for half days at a time in the traffic, so they never get to their destinations. Vendors sell them papers to read and even food. As 'teleworking' means that increasingly fewer people *need* to travel to work, why not park houses rather than cars on those motorways, and build neighbourhood amenities – as Reidy and Artigas did – at ground level, perhaps at an even more ambitious scale: neighbourhood shopping malls, theatres, concert halls? It may be that the wheel is coming full circle.