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THE MODERN MOVEMENT OF HOUSING STRATEGIES IN LATIN AMERICA

A. Pérez-Duarte Fernández
Faculty of Engineering and Architecture
Universidade FUMEC, Belo Horizonte
Brazil

ABSTRACT

Within the main strategies of the Modern Movement, a thing that insistently appears is the so-called 'planning in section': housing rooms enclosed in vertically-displaced story buildings. Resorting to Wells Coates' words, the traditional flat apartment has evolved into other models, with distinct single-story not flat solutions. Such strategy brought multiple advantages, from higher space efficiency, by reducing the collective flow of people, to the minimization of noise level transmission from between adjacent rooms. The most classic model is likely that of Unité d'Habitation de Marseille (1947), by Le Corbusier, but before and after that, several models were built, a lot of them in America and Latin America, boasting geometries even more intricate and complex. It is not hard to find models that, when observing their section, denote high complexity. Inside, the rooms often appear displaced in multiple levels, with variations of one height, one-and-a-half height, double height ceiling, of several duplex, triplex floors, etc. Sometimes, words lack to name the large number of types of apartments that may be hidden behind such homogeneous image. This seems to have a certain parallelism to what is happening today. If, throughout the Modern Movement, the façades were built as perfect prisms, now it seems that there is some insistency in getting away from this concept by exposing diversity. The current façades often like to show the abundance of 'random compositions' or 'enriching heterogeneity' in a system in which the internal complexity plays an important role as indicator of plurality. Multiplicity and complexity proudly boast themselves and are also composition resources.

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Introduction

Throughout the Modern Movement large collective housing complexes were developed, which, from their exterior, are presented as continuous and homogeneous façade blocks. The 'open box' of modern architecture – as Hitchcock said – was identified as the image of modern housing. It is easy to find countless examples of compositions of perfect prisms covered by a continuous skin of a curtain wall.

But also, it is not hard to find models that, when observing their section, denote high complexity. Inside, the rooms often appear displaced in multiple levels, with variations of one height, one-and-a-half height, double height ceiling, of several duplex, triplex floors, etc. Sometimes, words lack to name the large number of types of apartments that may be hidden behind such homogeneous image.

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It is important to mention that some of the recent examples of impact on the architectural culture in which continuous 'enriching' strategies are appreciated: buildings Sanchinarro (Madrid, 2004) and Silo (Amsterdam, 2002) by MVRDV, or the residential tower by Neutelings y Riedijk (Amsterdam, 1999), with 68 apartments of 20 different layouts, in an ostentation of combinations. Both models have one, two, or three-story dwellings, exposed on the façade with different materials and/or colours.

It is worth mentioning that, for many times, the proposals that today seem to show themselves as the latest innovation, resemble the architecture of the models back in the beginning of the Modern Movement. According to Ignacio Paricio (1998, p.105), 'it is disheartening to find that for many times the ideas that seem to be extremely radical today were present not in the manifestos, but rather in the exemplary architecture back in the twenties to sixties'.

Background

In classic historiography, the first models of intercalated-levels apartments are regularly presented within the Soviet looking for creating the 'social condensers'. Frampton points out that back in 1927, within the contest disseminated by magazine SA (Sovremannaya Arjitektura), several proposals appeared 'giving symbolic and operating importance to an internal corridor with access to both sides, a volume formed by alternating duplex dwellings passing over and under' [Frampton, 2000]. The projects included devices to encourage a community life, such as the reduction or extinction of individual kitchens, thus favouring the use of a single collective kitchen. Such planning consisted of an intercalation of corridors with two-level rooms, in a way that, in section, one could only see only one corridor at every three floors of apartments – a solution further adopted by Le Corbusier from the blocks of Ville Radieuse (1932) to the more known Unité de Marseille.

Two works made with similar systems can be highlighted: the block of Narkomfin (Moçou, 1929), by Mosei Ginsburg, and building at No.8 of Blvd./Gogol (1930) by Lisagor et al.

Wells Coates, a Canadian Architect, inspired partially in said Soviet experiments, designed one of the first and most sophisticated intercalate-level apartment buildings, the Palace Gate (London, 1937-1939). Its innovation was the introduction of collective passageways at every three floors. The arrangement went against the traditional idea of an apartment: 'the contemporary technique of the collective housing planning has reflected strict defined shapes, all of which denoting a common ideal; every apartment [flat] has all its rooms on a single floor, that is, in only one 'level" [it is 'flat']' (Cantacuzino, p. 66).

Once limited to the bi-dimensionality of the floor plan, now what appears is what Wells Coates calls 'planning in section' where the organizational geometry controls the space in all three axes, allowing one to explore new tridimensional potentialities. The technique was named '3-2 system' because at every three floors there were two apartments. Among other advantages, Coates affirmed as essential a rational planning and economic use of material resources:

- A type of access that is less wide than the traditional open galleries in each level. The collective surfaces are reduced, besides that the elevator should stop only at every third floor.
- The living room unit in the apartment with higher ceiling – one and a half height.
- Flexibility to introduce variations to the number of bedrooms and bathrooms per apartment, since the layout allowed to modify the number of rooms of the apartments without major changes to the access or the building structure' (Architectural Review, 1937).

The building could diversify the offer by coupling apartments with one, two, three, and even four bedrooms.

After the Palace Gate has been concluded in 1939, this fact was immediately published in 'Architectural Record' (November1939) and in one of the first numbers of magazine 'Arquitectura/México', thus creating a noticeable impact on its publisher, Mario Pani.

Coates does not make explicit other important fact on the Palace Gate, but which can be seen in the Mexican magazine: a network of collective passageways effectively segregated different dwellers. A system of parallel and hierarchized passageways appears: a corridor closed for owners and an open gallery for service personnel. The owners, in turn, used a front elevator and directly access the corridor. The service personnel come from the upper service elevator that opens up on the small trapezoidal block, and they have to go up or down half level in order to enter the kitchen. In the case of the end apartments of the block, the service personnel has to walk across the service gallery – which is open – and go down or up half level by the fire stairs, located in the ends of the block.

Four years later and inspired by the Palace Gate, the first intercalate-level building was built in the City of Mexico; a project by Mario Pani, who calls such distribution the same name given by Coates: the '«3-2» system'.

In the building at Rua Balsas (City of Mexico, 1943-44), the cells organize in a similar layout – with intercalate levels and passageway segregation – however in a single tower. The building was mentioned in a publication of magazine 'Arquitectura/México' that indeed mentioned the Palace Gate article, previously published in the same magazine. The advantages pointed out in 'Arquitectura/México' were similar to those seen by Coates:

- An 'economic use of the internal space' by providing a higher living room, allowing the other rooms to be lower.
- A 'less wide access', as 'in most apartment buildings the access corridors [...] take up an important space'; on the contrary, the '«3-2 system» only appears at every three floors' (Arquitectura/México, 1939).

The passageways were also segregated as service and social, but in a different way. While the owners used the elevator, the service personnel regularly used the collective stairs, to which a toilet is incorporated at every third floor. Thus, the service personnel do not need to use the toiled inside the apartment, which is reserved only to the owners.

Throughout the forties and fifties, the architecture scene still came out with several projects of apartments with intercalate levels layouts, variations to the 3-2 system,

which in the USA were dubbed skip-floor and skip stop – this last model can better reduce and compact space by eliminating the ceiling height of the 3-2 system rooms.

Among the last models, you can find the Helix Apartments, a complex helicoid model developed by I.M. Pei, who considered the traditional model of apartment 'out of date'. The aim was to create a 'completely flexible' building that could have apartments of 1 to 12 bedrooms, joining or separating circle sectors, always displaced half the ceiling height over the juxtaposed unit. The result is a completely mutable model, with multiple configurations and layouts, responding positively to the 'considerations that change in a family [...] if the apartment has two bedrooms and a baby is born', more surface can be easily aggregated, 'if the apartment has 12 bedrooms and the business is not going well, the surface can be divided in two, and they can adjust to the circumstances' (Architectural Forum, January 1950). Once the way to the 'planning in section' is open, the possibilities multiply, putting the rational organization to the ultimate test. The artful touches can be seen; a virtuosity of the tri-dimensional distribution of the apartment. Within this effort line, there are efficiency strategies intended mainly to the diversification in the offer of typologies of apartments through a flexible coupling: allowing to easily attach or detach juxtaposed or superimposed modules. In addition, the efforts are intended not only to the bi-dimensional reduction in surfaces, but also the tri-dimensional reduction, thus minimizing the volume (refer to Architectural Forum, 1952).

Conclusion

In the late fifties, we see the first apartment building in Mexico to be divided according to the 'horizontal property or property per floor', which had existed 'for some time then in Europe and in other countries in this continent', however not applied in Mexico yet due to the traditional preference for single-family houses: 'there was not a [proper cultural] environment [...] people thought that living in a rented apartment represented a temporary state, and owning it was believed to be a definitive occupation' (Arquitectura/México, 1956).

The last mechanisms developed for apartment buildings are so represented in the building in Avenida Reforma (City of Mexico, 1956), the first one to apply the 'Condominium Law' (1955) promoted by the same Architect, Mario Pani.

The interior of the building is organized under a displaced, fragmented layered configuration, which simply consists in placing one part of the building half level over the other, as Max Cetto describes, 'an artful exploitation of the level offset' (Cetto, 1961, p.156). The laminar block is divided lengthwise, detaching one part half level from the other – actually, this is a variation resembling the skip stop model – bringing a great variety of apartment configurations and, at the same time, conveniently diversifying the real estate offer.

On the upper section, where the views are more favourable, there is a penthouse and, in the lower section - the 'intermediate plan' –, a large program apartment, with wide open areas.

The intermediate levels are regularly taken by smaller-surface apartments, with five different layouts. In particular, in the intermediate apartments, at the ends of the laminar block, the intimacy is effectively solved as if you were in an individual single-family house. Firstly, you come to a reception room, the 'additional room', from which you can go up or down half floor to the public area, and finally get to the bedrooms floor, which is half floor up or down. One can notice a careful hierarchization of privacy, in a vertical gradient.

The inclusion of the 'additional room' to the access is a very peculiar fact; it is an autonomous room and, in addition, a peripheral to the rest of the apartment. This also constitutes a filter that keeps the private living room from the collective passageways of the building. Next to this room, there is also a small bathroom, which gives the utmost independence. A stranger is kept, and so to speak, isolated in the 'additional room' and, if one deems convenient, can be further admitted to enter the living room, half floor up or down, without such person being able to directly access the other areas of the apartment. The structure seems proper to meet the needs of an autonomous professional's office.

In addition, in case a guest has to be lodged, the 'additional room' may become a satellite bedroom without interfering with the family space: it provides independent access and a certain degree of autonomy since the guest has an exclusive bathroom. For the other members of the family, there is an escape route through the service door, without having to pass through the 'additional room' of such guest.

If before, in the traditional culture, the layout of an apartment was usually made in a single plan – presenting the problem of controlling indiscreet looks, which often required the use of sliding curtains – the introduction of displacements on the floors allows the typology of the apartment to recover certain degrees of privacy, which are present in an individual single-family house.

The respect to the intimate area can be compared to the rigorousness of the 'Raumplan' by Adolf Loos, who 'even when designed the double-height rooms, did not exceeded the layer of the living room, and never established a connection among the living room and bedroom floors – unlike the traditional hall of the English country houses and the double-height buildings of Le Corbusier' (Beek, 1995, p.35). Thus, in Adolf Loos' model, the interior connections were maximized in a compact organization. By using the half-level resource, the looks could be controlled.

Similarly, in the building at Av. Reforma, the bedrooms are displaced, as regards the public area, half level up or down (in the large program apartment and in the

penthouse, there is an interposition space, a 'boudoir'). This is a new intimacy system – from the Anglo Saxon Puritanism – unlike that one observed in the 19th-century enfilade rooms. The modern intimate space is survival capsule, systematically joining bedroom to bathroom. In all apartments, the bedrooms have an exclusive connection to a bathroom, as if both the rooms were an unbreakable symbiosis.

In the public plan, one can also observe a careful layout of intimacy made in the horizontal direction. Between the kitchen and the dining room (the 'comedor') and the rest of the apartment, there is a room for informal lunch, – similar to a pantry, buy outside the kitchen (the 'desayunador') –; a place that, in the traditional planning, was usually reserved for an office, serving as interposition between domestic employees and owners. This is an antechamber that regulates the access between the service part and the rest of the apartment, thus creating a social segregation.

On the other hand, the adoption of the ideals of the modern space can be seen. The fusion of the living room and dining room ('comedor') is consolidated in a continuum. It is also an interpenetrated space with the exterior presenting the transparency of the curtain wall that assures a view over the urban landscape – from one side of the building one can see the 'Ángel de la Independencia', a symbol of City of México –. The city is present inside the apartment in a continuity solution. The intermediation between interior and exterior in the intimate areas is, on the other hand, carefully protected by a parapet.

Thus, the exterior aspect notoriously keeps from the traditional iconography of housing. It was a cold body devoid of symbolic allusions, having no front or back. It does not have a hierarchization of main/secondary façades. Actually, the treatment is identical to the posterior tower of the complex, intended only for offices. The 'open box' of the International Architecture was completely adopted, and the collective housing had been 'internationalized'.

The homogeneity of the glazed prism dissipates, and the attention is turned to the interior, where a complex maze of different segregated ways appears. Two social elevators and one service elevator; each one connected to its correspondent corridor, intertwined in a tri-dimensional mesh perfectly calculated to prevent undesirable crossings from happening. In twelve floors there are only four collective passageways, which are wide galleries perforating the façade in the form of horizontal tears, 'as if they were the bridges of a boat' – as said by Pani (Garay Arellano, 2000). In a different floor and on the opposite side, there is the service passageways allowing connection to all kitchens, as well as to the area for drying clothes located on the upper section of the building, forming a hidden network. The apartment is served discretely and effectively.

The move of materials proper to domestic tasks – garbage, clothes, food – are controlled and almost unnoticeable. The supply to the apartment is made simple: it

has a direct connection from the garage underground level to the kitchens through the service elevator. The waste disposal is made through a shaft 'ex professo', located in the kitchen, which takes the garbage to the underground level where it is stored and picked up later. The route for clothes is shorter because of the direct connection to the laundry area, next to the kitchen, and the drying area on the terrace, on the upper part. The operating part of the building was then controlled.

The right to stay alone within the gregarious life of an apartment building was, on the other hand, assured by limiting the range of such experience: reduction in noises, segregation of passageways between the different dwellers, control of indiscreet looks. Efforts regarding the same modern intimacy system can be seen since the first records of apartments of the 20th century, such as the release of the subordinated bedrooms, thus constituting and architecture allowing for an autonomous personal life.

The segregation efforts, the taxonomic classification of the human bodies seen previously in the Palace Gate, now find an effective solution as system that segregates different social groups: service personnel and owners have a vertical and horizontal passageway system of their own, with elevators, stairs, and open galleries or hidden corridors.

The popularization of the vertical condominium during the first half of the 20th century established the modern apartment from the operating point of view. The effectiveness and privacy in architecture, converted into a sale product, were also given the proper legislation – the property per floor –, thus creating a commercial product: a deep and solid support for the modern apartment, which is necessary in the current society – the consumption society.

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