## My bedroom, my world:

## Domestic space between modernity and tradition

24

### Franciney Carreiro de França and Frederico Rosa Borges de Holanda

Universidade de Brasília, Brazil

### **Abstract**

A group of 27 middle class houses, located in Brasilia, Brazil, has been analysed by means of Space Syntax categories. The investigation is determine whether it is possible to characterise a "middle class domestic code", by contrast with codes which have been studied elsewhere. Also, if such a code is related somehow to the so-called exacerbation of individuality as a dominant social value, and how this might be reflected in the house. Might the configuration of these houses constitute a "vernacular" way of constituting domestic space, as opposed to "erudite" modes of space organisation? "Vernacular", in this paper, is understood as a certain way of organising space that differs from the ways adopted by "professional knowledge". It does not mean that such code refers, exclusively, to people of lower income levels.

Comparison was made using data from recent research, involving the theory of Space Syntax and other methodologies, done in Brazil and abroad. It contributes to a "fine-tuning" of the presence of people in the various rooms of domestic space in time, and this in two senses: which spaces are used for longer or shorter periods of time, and which spaces are characterised by rather intense co-presence (sort of "family-rooms"), in contrast with others that are characterised by more individual usage. Some new ways of seeing the presence/absence of people in the various places within the house have been depicted, as well as some long lasting ways of using spaces that date back to colonial times.

## Introduction

This paper aims to study a middle class domestic code in the Federal District, Brazil. The sample is constituted by 27 individual houses located in the Pilot Plan (the originally designed point of the Brazilian Capital) and in some satellite cities, distributed according to Figure 1. We have chosen individual houses (not flats) because they express more clearly the preferences of inhabitants concerning the organisation of space, allowing more easily the revelation of eventual family idiosyncrasies, as well as a dominant code (if actually existing). Flats available in the housing market imply limited possibilities of adaptation to a desired configuration. This makes the search for the identification of a possible domestic space genotype all the more interesting.

#### Keywords

House configuration, house use, Brasilia, middle class domestic codes

francic@senado.com.br fredhol@unb.br 24.1



Figure 1: Map of Brasilia and its satellite cities, location of the houses of the sample

Data was collected among students of architecture of the three first semesters, in various schools in Brasilia. The choice was merely operational: the group was readily available and would, in principle, be more able to offer proper information on house plans and uses of spaces. Also, the first semesters were chosen in order to get statements less "informed" by professional ideologies.

24.2

Analysis was carried out at two levels: a) the way families live, concerning who does what, with whom, how often, and where, as well as the level of satisfaction with the spaces of their houses; b) the configuration of the house plans, using techniques of space syntax theory. Data on the first level was obtained by means of a questionnaire and some subsequent selected interviews in greater depth. Data on the second level was obtained from drawings that the students were asked to make.

#### 1. Method

## 1.1 Space use and occupation

Aiming at the identification of a life style as far as it is related to domestic space, we have started from Hanson's consideration: "Houses are sensitive to social relations only insofar as they construct and constrain interfaces between different kinds of inhabitant, and different categories of visitor." (1998: 77). In order to understand such interfaces, we have dealt with three aspects: a) relations between inhabitants; b) relations between inhabitants and visitors (the latter are understood as those who do not inhabit the house and are not servants); c) relations between inhabitants and servants.

By means of questionnaires, it was possible to identify which spaces were more (or less) used by inhabitants and by visitors, as well those which are inaccessible to the latter. Activities in each place of the house were characterised using a taxonomy proposed by Monteiro (1997: 20.3): 1) domestic tasks (cooking, washing dishes and clothes, ironing); 2) passive leisure (watching tv, reading, listening to music, playing on the computer, physical exercises)<sup>1</sup>; 3) interactive leisure (meeting friends, drinking, dating); 4) common family needs (having breakfast, lunch,

24.3

dinner); 5) private needs (brushing teeth, taking a bath, sleeping, resting, making love).

In complementary fashion, the questionnaire has also allowed the identification of where furniture and home utilities/appliances are in the house. Only some kinds of utilities have been included, in so far as they can indicate more explicitly changes in behaviour and in use of spaces. This was the case with television sets, sound equipments, computers and gymnastic appliances. There were also items on the level of satisfaction concerning the house and the neighbourhood.

Data on use/occupation of spaces were compared with historic bibliographic information on Brazilian houses, as in the works of Lemos (1989), Gomes (1998), Freyre (1952), DaMatta (1985) and Tramontano (1998), in an attempt to characterise eventual changes occurring through time.

## 1.2 Configurational analysis

A number of configurational variables have been used, taking as theoretical reference studies by Hanson (1998), Trigueiro et al. (2001), Monteiro (1997), Amorim (1999) and Holanda (1999), all dealing with space syntax methodology. The house is seen as a relational system constituted by its various spaces. The purpose is to identify whether such system facilitates or restricts personal relations between different categories of people, by means of its internal accessibilities, and the accessibility of the system as a whole to exterior space. The study has dealt with issues such as: a) the degree to which a space is topologically accessible to all others in the system, revealed by its measure of integration; b) whether or not there are alternative routes among different spaces, revealed by the measure of distributedness; c) whether or not the system is dominated by closed or open spaces, revealed by the degree of closure; d) whether systems invest more in circulation spaces or activity spaces, indicating the proliferation of mediator spaces or otherwise. These indicators will be presented in tables, and the configurational structure of the houses will be illustrated by justified graphs having as their root the exterior space<sup>2</sup>.

## 2. Results

## 2.1 Space use and occupation

Even when we discount the time for rest/sleep, the bedroom is cited as the space in which most time is spent by the members of the family (Table 1). It has 29.63% of citations, while the kitchen, which comes in second, has 18.52%.

| Rooms   | Number | %     | Rooms                   | Numbers | %     |
|---|--------|-------|-------------------------|---------|-------|
| Bedroom   | 8      | 29.63 | Living room             | 7       | 26.92 |
| Kitchen   | 5      | 29.63 | Veranda                 | 5       | 19.23 |
| Living room   | 4      | 14.81 | Dining room             | 4       | 15.38 |
| TV room   | 4      | 14.81 | Office/Library          | 3       | 11.54 |
| Office/library  | 2      | 7.41  | Kitchen                 | 2       | 7.69  |
| Pantry  | 1      | 3.7   | TV room                 | 2       | 7.69  |
| Living room/ TV room  | 1      | 3.7   | Balcony                 | 1       | 3.85  |
| Dining room   | 1      | 3.7   | Living room/dining room | 1       | 3.85  |
| Veranda   | 1      | 3.7   | Private living room     | 1       | 3.85  |
| Balcony   |        |       | Garage                  | 0       |       |
| Backyard  |        |       | Bedroom                 | 0       |       |
| Living room/dining room   |        |       | Basement                | 0       |       |
| Total   | 27     | 100   | Leisure area            | 0       |       |
| % of answers  |        | 100%  | Pantry                  | 0       |       |
| Source: Franciney Carreiro de França – Field research, Brasília |        |       | Total                   | 26      | 100   |
| •   | •      | ·     | % of answers            | 96.30%  |       |

Table 1: Spaces where the family spends MORE time

24.4

Table 2: Space where the family spends LESS time

Source: Francinev Carreiro de Franca - Field research, Brasília

The less used spaces are the living room, the veranda, the dining room and the office, in this order (Table 2). In turn, these spaces are precisely those most used to entertain guests, the living room being the most important one, with 59.26% of citations (Table 3). This preference was clearly stated: "family occasions happen in the kitchen; there is a table made only for us, with 5 places. When we receive guests we do this in the living room, where there is a larger table" (owner of house 19). This reveals a clear dichotomy between spaces for inhabitants and spaces for visitors (Figure 2).

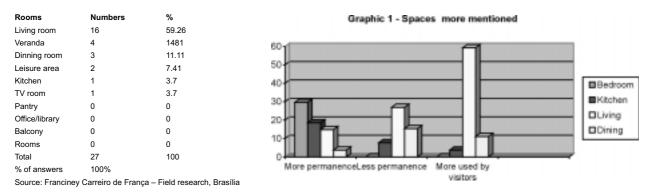


Table 3: Space MORE used for visitors

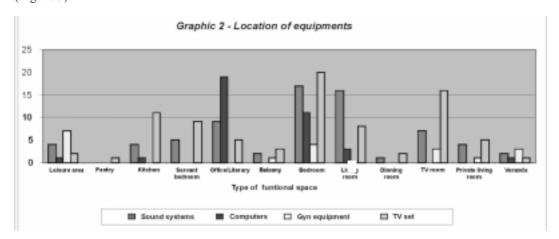
Figure 2: Spaces more often quoted

The strongly formal character of the living room reminds us of the "visitors' room" of 19th Century Brazilian houses: a space prepared and maintained exclusively to entertain guests (there was a family room, usually in the form of a veranda, towards the back of the house). This suggests that the idea of a single living room for family and guests, as commented by some authors, and as built in modern houses, has not in fact been widely implemented, at least as far as this sample is concerned<sup>3</sup>.

The TV room is the third space most intensely used by inhabitants (14.81%) and the fifth space in which to entertain visitors (3.70%). This suggests that the character of the tv room is that of a transition space between inhabitants' and visi-

tors' domains. But it also performs an important role in the relations among inhabitants: it is the borderline between spaces used collectively by inhabitants, and spaces where people stay alone.

The distribution of home appliances and equipment reveals inhabitants' preferences towards use and occupation of spaces: a) those for physical exercises are in the leisure areas, bedrooms, tv rooms, and verandas; b) stereos are in the bedrooms, living rooms, offices, and tv rooms; c) computers are in the offices, bedrooms, living rooms; d) televisions are in the bedrooms, tv rooms, and kitchens (Figure 3).



24.5

As touched upon before, kitchens replace old verandas as the spaces par excellence for social interaction of family members. Here people talk, eat together, amuse themselves. We are very far from the "laboratory-kitchen" proposed by the "existenzminimum" modern concept: this is not the place for "fast food", but a place for a long stay; its size averages 18.5m2, with a maximum of 36m2. We remember kitchens of colonial houses in the Centre-West region<sup>4</sup>, rather than those with the minimum dimensions of modern conceptions. They constitute a return to pre-modern patterns, or simply the rejection of modern standards.

This goes hand in hand with the presence, in the kitchens, of various home appliances. Besides the usual electric-electronic facilities of the last decades (microwaves, dish-washers, freezers), we have the ever present to set. The kitchen is the third space with the greatest occurrence of to sets in the house – greater than in the living room. This corresponds to the strong collective presence of family members, contradicting Lemos' (1978: 201) idea of middle class houses: "it is in the modest house that the to set and the stove inhabit the same room".

In bedrooms contemporaneousness shows itself with greatest force. This is one of the few spaces in which we can find tv sets, computers, sound systems, gym equipment: a space for a wide variety of activities. It is a place for rest, work/study,

Figure 3 : Location of equipment

leisure: "Leisure (tv, video) happens in the bedroom. The living room has everything, but it is more formal. (...) The bedroom is very pleasant, I feel free" (an interviewee). Some authors have got it wrong in suggesting that multifunctionality resulted from room surface shortage, justifying the superimposition of leisure and rest in the same place. Lemos wrote:



Figure 4: House 3

# 24.6



Figure 5: House 4

of the superimposition of functions or activities of the house. There was here a room for each occupation. The house of the rich has always been very large and that of the poor very small, with a small number of rooms, often constituted by one single compartment."

"the home of the rich and powerful man does not present in its rooms the hypothesis

(Lemos, 1989: 70)

Perhaps this was true in other times. In these spacious homes of Brasilia's middle class families (350m<sup>2</sup> average built area, Figures 4 and 5) rooms are often multifunctional complexes. Besides the appliances referred to above, they have an exclusive bathroom, thus offering conditions that make them the space of longest stay of family members. If this might result from economic restrictions in other cases/time, here it is an option which constitutes a lifestyle.

## 2.2. Configurational analysis

Configurational analysis confirms what patterns of use and occupation have indicated: houses are divided into inhabitants' and visitors' domains. It also reveals other important attributes of the sample, which bear upon the social relations developed herein.

Houses may be classified into: 1) those having spatial rings<sup>5</sup> which integrate social, service and leisure areas, but present a tree structure<sup>6</sup> in the private area; 2) those having a tree structure overall, segregating all areas. Note that the two systems have in common the segregated private area, always as a tree branch (Figure 6).

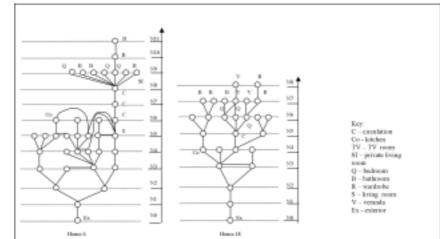


Figure 6: Graph 1 - Examples of different types of systems (houses 6 and 18)

The great majority of the sample (77%) belongs to the first group. Usually, there is only one access to the private area, by means of a circulation space. Sometimes there is a sequence of circulation spaces, further isolating this area in relation to the social area (house 1 - Figure 7).

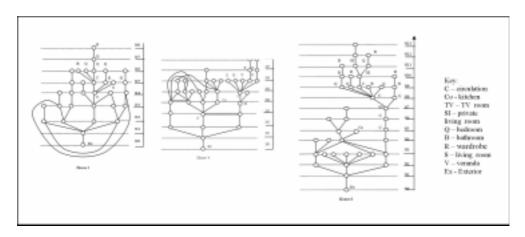


Figure 7: Graph 2 - Examples of different systems of the sample

(houses1, 4 and 8)

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In other cases, access is created only through a tv room, or a private living room (house 4 – Figure 7), which also work as circulation spaces with respect to the bedrooms, and are usually also restricted to the inhabitants. They are found in more than 50% of the sample. Also working as transition spaces between a ring system and a tree-like system, they strengthen the control of access to the most segregated parts of the house. Such control, as Amorim observed, "determines a clear identification of the areas" boundaries. Crossing the 'clear boundaries' without permission could be understood as a transgression of social codes of behaviour" (Amorim, 2001: 19.4). We might also read that tv room and private living reinforce the double character of these houses: they are informal as far as the permeability of the social/ service/leisure parts are concerned, and formal as far as the private area is a detached deep part of the system. In some cases, both strategies of insulation (circulation spaces plus tv room/private living room) are used (house 8 – Figure 7).

The average space/transition ratio among houses, which measures the relation between spaces for activities and spaces strictly aiming at circulating, is very high: 5.05. (For the sake of comparison, the highest ratio Hanson has found in a sample of London's architects houses was 1.50 (1998: 227)). Literature suggests that houses like these, at least according to this variable, are informal, in so far as categories of people are little insulated among themselves (Amorim, 1999). This may be misleading: we have commented on the formality of the living room, as well as the tree-structure of the private area. It thus seems that such formality is obtained by means of semantic differentiation (i.e. proliferation of rules) rather than syntactic structure. This reminds us of Recife eclectic houses studied by Amorim (1999), in which, by controlling doors, the house presents different permeability structures according to circumstances.<sup>7</sup>

Another configurational trait, however, denies this relationship with eclectic houses: the boundary/convex ratio, i.e. the percentage of convex spaces completely enclosed in relation to the total of convex spaces (Hanson, 1999). This sample presents a ratio of 0.40, which is very low. In simple words: there are not many doors separating rooms. The previous argument is thus reinforced in the sense that semantic rules prevail in presiding over the use of space, not transition spaces, nor boundaries.

The high integration level of the kitchen stresses its important family role: more than 78% of kitchens have higher integration values than the average integration of the houses. Bedrooms stress the process of individualisation of the intragroup relations. This is spatially emphasised by their depth in relation to the exterior, their low measure of integration and, as seen above, the infrastructure found here.

As to inhabitants/servants relations there are some interesting characteristics. Spaces of the service sector, constituted by service area (laundry, garage etc.) and also often by servants' bedroom and bathroom, are very segregated. According to Trigueiro, colonial houses in Recife also presented segregated servants' premises. On the other hand, servants' areas are, in some cases, as close to the exterior as space to receive guests, and, in other cases, as deep as the tv room/private living, or bedrooms. Both instances stress the sociomorphological distance between servants and family members. This characteristic was found only through configurational analyses since interviewees did not refer to any social differentiation.

Service areas and exterior spaces are both strongly segregated. The relative isolation of these two "worlds" further illustrates the formality or these houses: it makes visitors' access difficult and it establishes strong distinctions relating to servants.

These results reveal regularities in the sample that indicate the existence of a genotype (Figure 8 illustrates this, by showing integration measures of spaces that are common to all houses).

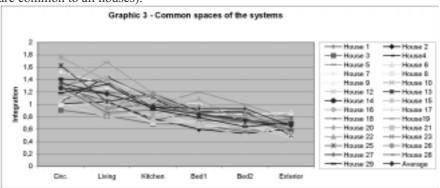


Figure 8: Graphic 3 – Common spaces of the systems

24.8

My bedroom, my world: Domestic space between modernity and tradition

#### 3. Conclusion

Use/occupation and configurational aspects of spaces of the houses illustrate how their configuration is related to the mode of life of inhabitants. Houses may be very different visually, but they are very similar from the point of view of spatial strategies which constitute lifestyles.

Peculiar characteristics have been depicted. Kitchens and bedrooms are the best indicators of such peculiarities. Concerning usage, the kitchen is closer to colonial than to modern houses, for it is the place of longest collective stay of the family. Configurationally, it is closer to modern houses, for it is no longer a segregated space, revealing its new status. Bedrooms constitute social isolation, confirmed by their spatial segregation, revealing their strictly private character.

Configurational characteristics of the sample express the separation between inhabitants' and visitors' domains. The domain of the inhabitants is dichotomised into places for individual usage (bedrooms) and places for collective usage (kitchen and tv room/private living). With the exception of the kitchen, access to all other spaces in this category is strongly controlled. The domain of the visitors (living room, dining room, veranda and leisure areas – e.g. swimming pool and surroundings) do not have their access strictly controlled.

The characteristics of these houses make them differ both from pre-modern (colonial or eclectic) and modern examples. They differ from modern houses because they invest little in circulation spaces. However, spatial fluidity depicted by the low degree of closure, the isolation of the private sector in relation to the exterior and the integration of the kitchen, bring them closer to the modern paradigm.

These attributes point to a clear genotype, which incorporates pre-modern, modern and post-modern traits. "Brasilia-middle-class-way-of-living" revealed by home use/occupation patterns and configurational characteristics, combines modern conceptions (the strengthening of individuality), historical legacies (the living room understood primarily as a visitors' space), and new choices (the kitchen as a space for family encounters). This suggests a new synthesis in contemporary domestic space.

#### Notes

- <sup>1</sup> "Passive leisure" means that activities, although possibly being carried out collectively, do not imply social interaction.
- <sup>2</sup> A justified graph is the representation of the permeability system of a building, in which spaces are represented by dots and permeabilities amongst them by lines. Such graphs may be construed from any space in the system. In this paper, the root space (the space from which the system is considered) is always the exterior.

- <sup>3</sup> For some authors, in the second half of the 20th Century, "with the American influence and the rationalisation of spaces, the single living room appears, absorbing part of the 'ancestral ritual of receiving'" (Veríssimo & Bittar, 1999, p. 58). But this seems to be only part of the story, particularly present in the modern proposals for domestic space, in the first half of the 20th Century. In the modern houses studied by Amorim, the almost totality presents only one living room, usually directly related with the dining room without intervening doors. (Amorim, 1999, Cap. II).
- <sup>4</sup> Kitchens are the centre in colonial or pre-modern houses typical in the Center-West region characterised by the presence of a large table for meals and meetings of the whole family.
- <sup>5</sup> A ring structure means that there are alternative roots among spaces of the system.
- <sup>6</sup> A tree-like system does not present rings. There is only one possible root between one space and all others in the system.
- <sup>7</sup> By opening/closing doors between bedrooms and living rooms, houses insulate visitors or allow free circulation of inhabitants (particular women) into the living room.

#### References

- Amorim, L., 1999, *The sectors' paradigm: a study of the spatial and functional nature of modernist housing in Northeast Brasil.* Tese de doutorado apresentada na Faculty of the Built Environ ment, The Bartlett School of Graduate Studies, University College London
- Augé, M., 1992, *Não-lugares: Introdução a uma antropologia da supermodernidade*, Papirus, Campinas DaMatta, R., 1985, *A casa e a rua: espaço, cidadania, mulher e morte no Brasil*, São Paulo, Editora Brasiliense
- França, F., 2001, Meu quarto, meu mundo configuração espacial e modo de vida em casas de Brasília.

  Dissertação de Mestrado, Faculdade de Arquitetura e Urbanismo, Universidade de Brasília, (mimeo)
- Freyre, G., 1952, Casa-Grande e Senzala: Formação da família sob o regime de economia patriarcal, 1º volume, 7º edição, Rio de Janeiro, Livraria José Olympio Editora
- Gomes, G., 1998, Engenho & Arquitetura tipologia dos edificios dos Antigos Engenhos de açucar de Pernambuco, Recife, Editora Fundação Gilberto Freyre
- Hanson, J., 1998, Decoding Home and House, Cambridge, Cambridge University Press
- Hillier, B., 1982, A lógica social do espaço hoje (mimeo),. Tradução e Notas: Frederico de Holanda
- Hillier, B. and Hanson, J., 1984, The social logic of space, Cambridge, Cambridge University Press
- Holanda, F. and Kohlsdorf, G., 1995, Arquitetura como situação relacional, Brasília. (mimeo)
- Holanda, F., 1999, "Sintaxe de uma Casa-Átrio Moderna", Cadernos Eletrônicos da Pós, Brasília, página da Rede Mundial www.unb.br/fau/pos\_graduacao
- Jameson, F., 1996, Pós-modernismo: a lógica cultural do capitalismo tardio. Ática, São Paulo
- Lemos, C., 1989, História da casa brasileira, São Paulo, Editora Contexto
- Lyotard, J., 1984, *The Post-modern condition: A report on Knowledge*, Minneapolis, University of Minnesota Press
- Monteiro, C. G., 1997, "Activity Analysis in houses of Recife, Brasil", *Proceedings of the First Interna tional Symposium on pace Syntax*, Volume II, London, pp. 20-13
- Tramontano, M., 1998, Novos modos de vida, novos espaços de morar uma reflexão sobre a habitação contemporânea. Tese de Doutoramento, Faculdade de Arquitetura e Urbanismo, Universidade de São Paulo, (mimeo)
- Trigueiro, E, Marques, S. E and Cunha, V., 2001, "The mystery of the social sector: Discussing old and emerging spatial structures in Brazilian contemporary homes", *Proceedings of the 3rd International Symposium on Space Syntax*, Atlanta, pp. 40.1