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Are colonial sobrados
seen-one-seen-them-all buildings?

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ABSTRACT

Sobrados have been considered as “seen-one-seen-them-all” type buildings in the literature about domestic architecture in colonial Brazil (VAUTHIER, SMITH). A morphological study of the spatial structure of these buildings was developed as part of the analytical process upon which my PhD thesis (TRIGUEIRO, 1994) was based, whose purpose was to examine, from a diachronic perspective, the socio-cultural links embedded in the spatial layouts of colonial and eclectic homes, and especially in the way certain functional spaces are related to one another and to the exterior, in order to ascertain signs of change or continuity in domestic modes of life. Basic representation, quantification and analysis techniques, pertaining to Space Syntax Analysis (HILLIER and HANSON, 1984), were applied to the floor plans of houses often deemed in the literature as archetypes of upper class homes, since they present, among other architectural features, a set of spaces organized in a similar geometrical layout. The methodological procedures that were employed sought to confirm this premise through investigating whether a similar organization of spaces with like purposes would yield the same spatial structure, understood here as expressing and serving as a channel for sociocultural relations. The results indicated that the similar appearance of the built shells and room arrangements in the two houses that were studied harbored crucial differences in terms of how their spatial configuration reflected distinct social interface modes between residents, as well as between residents and outsiders. The aim of this study, therefore, is to demonstrate the occurrence of two configuration models built on similar layouts, as represented in their floor plans. Besides shedding light on a theme that has gained the status of a myth due to its continual reaffirmation over time, the findings presented here may also contribute to the study of homes and other building types by providing examples of simple space analysis procedures that enable one to see beyond the stylistic sphere of the arrangement of the parts and into the social soul within the spatial structuring of the whole.

Keywords: Brazilian dwelling; Colonial sobrados; Architectural morphology; Spatial configuration.

[...] *who's seen one Brazilian house has seen them all.* (VAUTHIER, 1981:37)

Presentation

This article synthesizes the findings from an analysis that supported my PhD thesis (TRIGUEIRO, 1994). They were originally introduced in an essay written in English (TRIGUEIRO, 1992), which I did not publish, and years later, in a paper presented at an event for promoting scientific knowledge (TRIGUEIRO, 1995), whose proceedings, to my knowledge, have not been published. However, some of these findings have been cited in studies on the relationships between habitations and ways of life by different authors (i.e. AMORIM, 2008: 304-305) who had access to the manuscripts or the PhD thesis.

I have considered publishing the article now, even after two decades, due to the growing interest in morphological approaches for investigating domestic space in Brazil, and since those old manuscripts are still in circulation, which I believe represent the first study of colonial dwellings where space syntax analysis procedures were used. It also seemed to be a particularly opportune time to present a study which discloses important aspects on how space is structured to serve sociocultural interests, using simple representation, quantification and analysis procedures, developed manually for the most part (only numerical values were calculated using an application), at a time when opportunities to use this methodology are expanding, due to the diversification of computer applications specifically designed for this purpose, which before were rare and difficult to find, but can now be downloaded for free on the Internet¹.

To enhance the teaching potential of the study, as well as help demystify the notion of “complicated” still associated with Space Syntax Analysis and in order to make the methodological procedures used easier to understand, I decided to reduce the number of cases examined in the previous articles (four in the manuscripts, 25 in the thesis), since the argument can be satisfactorily substantiated through both the cases presented here.

1. As is the case with JASS, created by Lena Bergsten et al, for cooperation between researchers from the HTH School of Architecture and NADA, an institution comprised of the Royal Institute of Technology, KTH and Stockholm University. The first applications, *Netbox* and *NewWave*, were created for the Macintosh system in the 1980s and 1990s, by Nick Dalton (Sheep) and researchers from University College London. Other applications, also available as freeware, which can reveal spatial properties in different scales, include *Depthmap*, created by Alastair Turner, from University College London and *Mindwalk* by Lucas Figueiredo from Brazil, currently a professor at the Federal University of Paraíba.

Introduction

The *sobrado*, a type of upper class residence from colonial Brazil which reflected a sociocultural order marked by the authority of the paterfamilias, was for a long time considered a “rigid form”, a “seen-one-seen-them-all type” (VAUTHIER, 1981: 37), not conducive, therefore, to spatial arrangement variations capable of creating different interface modes between residents – men, women, children, additional household members, servants – and between residents and visitors.

It was sought to confirm this premise by examining the spatial structure of two *sobrados*, one in Olinda, and the other in Recife, both of which have implementation forms, volumes, frameworks and floor plans which some authors have considered to be generators of this presumed “seen-one-seen-them-all” type. The underlying approach involved investigating whether apparently identical floor plans would yield similar spatial structures. The study, at the time, also sought to establish parameters for examining possible changes in modes of domestic behavior in the mid-nineteenth century (TRIGUEIRO, 1994). It endeavored, therefore, to decipher the logic underlying the spatial articulation of the cases studied and juxtapose it against the sociocultural aspects of colonial life in Recife, according to the literature.

Basic, easily-reproducible, spatial configuration analysis procedures were used as an analysis tool, specifically Space Syntax Analysis in this case (hereinafter referred to as SSA), pertaining to the Theory of the Social Logic of Space (HILLIER and HANSON, 1984). It is hoped, therefore, that this article will make it easier to understand and possibly use these procedures in similar studies, and thereby contribute to increasing the knowledge about Brazilian housing, as well as the basic tools used in SSA, a morphological approach that has unjustly been regarded as hermetic or as something that unnecessarily complicates the study of spatial structures.

This article will not seek to summarize the theoretical foundation of the Social Logic of Space, which has been covered extensively by its authors and other colleagues in numerous works (i.e., HILLIER and HANSON, 1984; HILLIER, HANSON and GRAHAM, 1987; HANSON, 1992 and 1998), as well as in anthologies on architectural morphology (STEADMAN, 1983). I do believe it is necessary, however, to explain certain concepts that are essential for understanding this study – the concepts of **spatial configuration** and **genotype**.

The term “configuration” is understood here not as format, composition or arrangement of a given set of spaces, but as “structure”, that is, as a whole resulting from parts that are interrelated and whose relationship one with the other cannot be changed, without changing the whole, since it is this system of relationships that determines the nature of the whole. One of the theoretical pillars of SSA is based on the premise that it is primarily “[...] through spatial

configuration that social relations and processes express themselves in space” (HILLIER, HANSON and GRAHAM, 1987: 364). In most buildings, different functions and activities tend to be located in spaces that are part of the whole with varying degrees of accessibility. When spaces that host certain functions are interrelated in a system according to an arrangement or order of value consistently found in other cases of a given sample, this is an indication that this morphic (and measurable) pattern reflects a sociocultural pattern – or genotype. The graphical or numerical expression resulting from the representation of the spatial configuration is, therefore, an expression of socio-spatial inequality. When this expression is manifested in a pattern that is consistent in a set of cases, it can be said that an **inequality genotype** was found. Genotype, therefore, refers to a set of spatial properties common to a group of buildings which characterizes them as a morphological type, a “family”.

Studies show that the standards according to which spaces are organized vary according to the specific needs of their users – among societies, among different groups, among different groups from the same society and over time. These approaches are generally based on the premise that “cultural ideas are objectively present in artifacts as much as they are subjectively present in minds” (HILLIER, HANSON and GRAHAM, 1987: 363-385). In domestic spaces, this premise can be reflected in the positioning of walls to separate activities (and people), or doors to unite them; spaces and rooms more or less accessible to all other spaces or rooms, or separate from them. Thus, the study of the schemes for coordinating walls and doors – and, therefore, topological accessibility (since it is relational) – deciphers the laws according to which contact between the different inhabitants of each unit, and between inhabitants, visitors and outsiders, is facilitated or rendered more difficult, thereby revealing aspects about social, domestic relationships, which are not always perceptible in conventional floor plans, sections and facades.

The purpose of this study, therefore, was to examine the occurrence of genotypic accessibility patterns among the main domestic functions in *sobrados* from Olinda and Recife, which have similar forms in terms of the relationship between the building and the lot, and between the lot and the block and the street; in terms of the volume of the built shells; in terms of the relationship between occupied and empty spaces and the construction elements for finishing the main facades; and in terms of the layout of the rooms in the floor plan. In short, we tried to verify whether a similar stylistic feature would have a similar spatial configuration.

According to Hanson (1992), spatial configuration occurs when the relationship between two adjoining spaces are affected by the inclusion of a third, or any number of additional spaces. The configuration in a given system of spaces can be represented by **access graphs**. Access graphs are matrices that graphically describe a system of interconnecting parts (user network of a provider, DNA structure, etc.), and in our case, the internal spaces of a building isolated from

external space. In access graphs, each space – or segment of space, or room, or environment – is represented by a point or node; and each access or means of connection between these spaces, and between interior and exterior, is represented by a line.

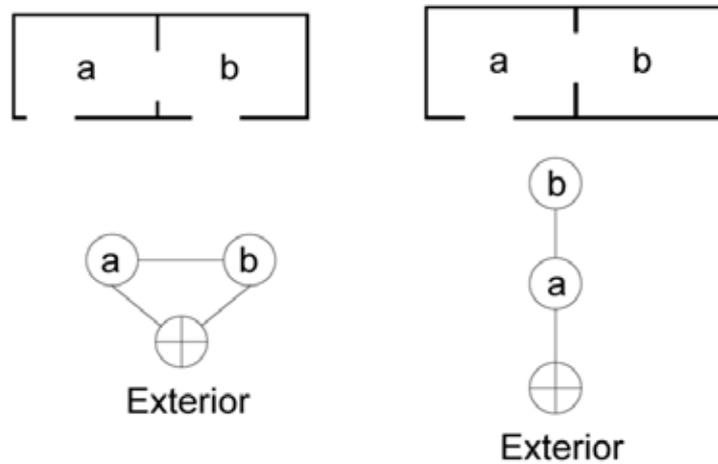
Figure 1 presents two different hypothetical spatial configurations that could correspond to two, almost identical, rudimentary buildings (with two rooms), where, in one of them, the two rooms open up to the exterior and, in the other, only one of them does, which is labeled as “a”. It can be seen, therefore, that while in the configuration on the left no space exerts control over the other – where you can move from one room to the other or leave the building from either room – on the right, the space labeled as “a” exerts controls over the access of “b” to the outside and vice versa.

These variations which express changes in the relationships of each space with the other components of the system being examined are reflected in the access graphs, and can be quantified in numerical values, calculated manually, or by programs designed for this purpose. Figure 1 also presents **connectivity values** and **topological accessibility values**, commonly referred to in SSA jargon as **integration values**. For example, in the spatial structure in which all the spaces are interlinked, each one connects to two others (the connectivity value, therefore, is 2 for all the spaces), and in the spatial structure in which space “a” mediates the access between the exterior and space “b”, only space “a” connects to two others, while the other two spaces have a connectivity value of 1. Integration values can then be calculated from the connectivity values (a graphical-numerical operation which is described in detail in the literature referred to – see, for example, HANSON, 1996: 28-29). In the symmetrically distributed structure in Figure 1, integration or accessibility value is zero, for all the components, whereas in the other, it is only zero for space “a”, the most accessible space, therefore, in relation to the others. Lower values indicate greater accessibility, or less relative asymmetry of the system (Real Relative Asymmetry - RRA), according to the calculation performed by the application used in this case (JASS). There are also applications which invert the scale to make higher numerical values coincide with higher integration or accessibility levels. The integration value of a given space in relation to all the others in the spatial system being studied is the most universally used SSA measurement and is the only one that was used in this study.

FIGURE 1

Access graphs (and respective numerical values) representing hypothetical spatial configurations that could be floor plan variations from the same rudimentary building.

Source: Author, based on schemes in Hanson, 1998



Node	Exterior	a	b	Node	Exterior	a	b
Connectivity	2	2	2	Connectivity	1	2	1
Integration	0	0	0	Integration	4.742	0	4.742

Sobrados

The cases studied here are among the most frequently mentioned in the historiography of Brazilian houses from the colonial period. The house located in Pátio de São Pedro (a square), in Olinda, which is believed to date back to the seventeenth century [2], and the *sobrado* in Recife [4], described by French engineer Louis Leger Vauthier, who lived in Recife from 1840 to 1846, are regarded as typical examples of the residences of wealthy families from colonial Brazilian society (VAUTHIER, 1981: 38-42)². The author comments about these buildings in letters to his architect friend Cesar Daly:

[...] what might these aligned buildings be that receive neither air nor light except from both ends? This rigid form, this one format, compact in width, not at all conducive, you understand, to a wide variety of internal arrangements. So, who's seen one Brazilian house, has seen them all.

A front room, a back room; adjoining each of these rooms, there are one or two small bedrooms that close with glass panel doors; between these two groups, a corridor [...] (VAUTHIER, 1981: 37)

2. The floor plan was reproduced from the drawings that illustrate Vauthier's text (1981: 38; 40).

FIGURE 2

House from Pátio de São Pedro, Olinda

The plan on the left, from top to bottom: servant's quarters, slave's quarters, store/shop

The plan on the right, from top to bottom: back room, kitchen, room, room, bedroom, master bedroom, front room, oratory, veranda/balcony

Source: Redrawn by the author from Smith (1981:118)



Robert Smith (1981: 121) corroborates this assumption when he refers to the “floor plan of the Pátio de São Pedro house as being an [...] archetype of Brazilian colonial architectural residences[...].” The author bases his hypothesis on the presence of a “[...] certain number of elements that would become an essential part of more recent residential architecture in colonial Brazil [...].” He notes two doors in the front, one leading to the entrance hall and the residence itself, the other giving access to what is believed to have been a store; two rooms supposedly occupied by slaves in the rear part of the ground floor, and five elements

[...] often found in other houses from various parts of Brazil. These are: a large front room with the oratory on the side [...] the porch that spans almost the entire width of the facade [...] a narrow hallway that goes to the back with doors on both sides leading to the rooms [...] small bedrooms with no air or light [...] the dining room with the kitchen on the right. (SMITH, 1981: 116-119)

Both cases examined here contain the five “defining” elements of the colonial house, plus two more doors on the ground floor, the store and the entrance hall, with its staircase; the house described by Vauthier must have belonged, “to someone with meager resources” (VAUTHIER, 1981: 43). However, as will be seen, two distinct models for structures will emerge within the geometric similarities identified by the arrangement of the spaces in the floor plans.

Figure 3 illustrates the representation, quantification and syntax analysis procedures developed in this study. **Planar graphs**, which are access graphs developed on one plane, were drawn on top of the floor plans. Each room was

represented by a point or node and its connections with other spaces by lines, as demonstrated in the representation of the hypothetical rudimentary building seen in Figure 2. The passages – hallways, entrance halls, landings, foots of stairs, etc. – were divided into **transition spaces** according to the bends and recesses, since these bends were often deliberate to protect certain corners of the house from being directly viewed from other areas; staircases were considered as one single space.

The planar graphs were then transformed into justified graphs, that is, access graphs, rooted in a certain node or component space of the spatial configuration. For each change of space a depth line (or topological step) is projected, such that spaces are considered topologically **shallower** or **deeper** depending on whether they are located closer or further away from the root.

In order to represent different access modes (for different groups of people), the graphs were justified from: (1) the **exterior**, considered here to be the space outside the limits of the surrounding walls – outside – connected to the internal spaces of the *sobrado* **by all the entrances**; (2) the **street**, connected to the interior of the *sobrado* **by the front door**. The justified graph for the external area simulates the perspective of access possibilities for a resident who would be able to enter the building using any door; the justified graph for the street simulates the perspective of a visitor.

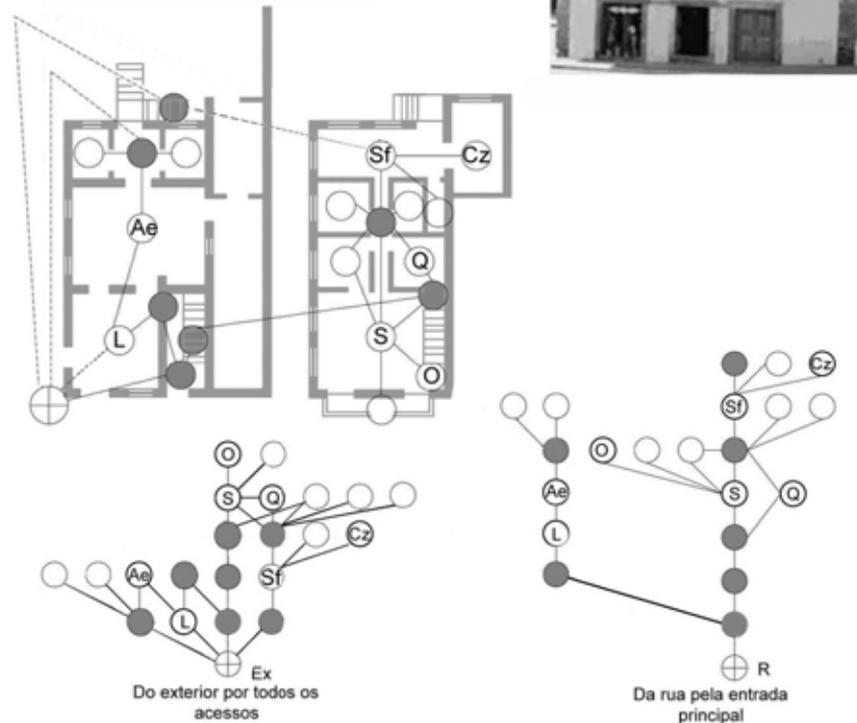
The graphs were quantified in numerical integration values (RRA) [4], using a scale ranging from greater integration (lower values) to greater segregation (higher values). As already explained, each case was studied twice, in accordance with procedures for representing configurations that can shape different relations in favor of encounters or avoidance. In the first, the relations between residents was explored, through studying the spatial structure within the building, connected to the exterior, or “outside”, via all the entrances; one single point represents all the spaces outside the built shell, which contains the building, regardless of the nature or location of these spaces – yard, side wall, side setback, public space, whether located at the front, in the back or on the sides of the building. In a second model, the relations between residents, and between residents and visitors, was explored, through examining the internal spatial structure, which is connected to the street (represented by a point) only through the main door.

It can be noted in Figure 3 that the same planar graph serves as the basis for two justified graphs that represent: (i) to the left of the observer, the spatial structure linked to the outside by all the entrances (three of them represented by dashed lines in the planar graph); and (ii) to the right, the access from the public area (street, avenue, square, etc) via the main entrance. In this model, the rooms located on the right hand side (of the observer) were not taken into consideration, because there is no consensus as to the nature of these rooms or if they would have existed at the time the *sobrado* was used as a residence.

In any case, their inclusion interferes little in the spatial configuration of the building (they are only connected to the outside) and do not change the accessibility scale, as confirmed in experimental procedures.

SOBRADO EM OLINDA

Fonte: SMITH, R. "Arquitetura civil no período colonial" IN *Arquitetura Civil I*, São Paulo, FAUUSP e MEC/SPHAN, 1975 (texto escolhido da revista do IPHAN)



CÔMODOS E FUNÇÕES

● Espaço de transição

L - Loja/armazém

S - Sala de frente

CZ - Cozinha

Ae - Aloj. escravos

Sf - Sala de fundos

Q - Quarto principal

O - Oratório

EX - Exterior

R - Rua

Regarding appearances and sociocultural links

Olinda: Pátio de São Pedro

When taking into account all the accesses to the exterior – assuming that this is how the internal arrangement of the house would be perceived by those entitled to enter it without any restrictions – the justified access graph shows

a shallow spatial structure, with all spaces accessible in up to a maximum of 5 position changes (or depth levels), with 10 of the 22 spaces that compose the structure at just one or two topological distance steps from the exterior. There are more circular than linear arrangements, that is, there are a variety of possible routes for getting to most of the spaces. It is possible, for example, to get to various rooms by more than one route – i.e., to the front/visitors' room (S) by the entrance hall, main staircase and upper landing or by the back staircase, back room (Sf) and central hall. It is also possible to go through the front bedrooms – the one on the right, believed to belong to the owner of the house, here designated as the master bedroom (Q), in this case, via the landing of the front staircase. There are only eight end spaces (which do not provide further access to any other space), while all the others are positioned in a circulation ring (or alternate route).

Both the back room and front/visitors' room have higher accessibility than the average integration value of the system (1.127 RRA), as do the master bedroom and exterior. The kitchen, however, is quite segregated as well as all the spaces that would have been occupied by slaves or servants. The accessibility scale is in the following descending order: back room (Sf), exterior (Ex), front/visitors' room (S), master bedroom (Q), kitchen (Cz) and slaves' quarters (Ae). Figure 4 presents this data.

The justified access graph starting at the street, via the main door, shows two branches that divide at the entrance hall: one interconnects the main living spaces of the family; the other, the service, storage and commercial spaces, as well as the slaves' quarters and two rooms that are believed to have been designated for employees, additional household members or male guests. Among the family spaces, the first room accessed is the front/visitors' room (S), which is deeper in the spatial structure, occupying level 4. This means that to reach the front room, from the street, the visitor would have to cross three internal spaces – the entrance hall, stairway and upper landing. The dwelling, strictly speaking, is built around a central column with alternating rooms (front and back rooms) and transition spaces. Two access rings are linked to that column, the first containing the landing, master bedroom (Q), front room (S) and hallway; the other, a small bedroom, hallway and front room (S), which is the only room of the complex to be part of both rings. The corridor, also positioned at the intersection of the rings, is the pivotal point for distributing six of the rooms representing living spaces. The back room and two of the small bedrooms are located at access level 6. The kitchen (Cz) and pantry are the last cells to be reached, at level 7. In the branch representing the ground floor, the spaces form a linear arrangement, without alternative access routes, in which there is the store or shop followed by the rooms supposedly used by slaves or servants.

In numerical terms [4], the complex is considerably more segregated (average integration value = 1.688 RRA) than that resulting from the configuration that ensues from the exterior, using all the entrances. The most accessible living

space topologically is the front room and room adjacent to the landing of the staircase, probably used as a master bedroom. The back room has an integration value close to the average of the system (1.488 RRA), and the street (R), kitchen (Cz) and the rooms presumably occupied by slaves or servants are situated in the more segregated range of the scale (1.733, 1.933 and 2.089 RRA, respectively).

Case study	Approximate era of construction	Accessibility of the spatial structure, considering all the entrances from the EXTERIOR			Accessibility of the spatial structure, considering only the main entrance from the STREET		
		Nº of spaces	Average integration values	Integration hierarchy between main rooms	Nº of spaces	Mean integration values	Integration hierarchy between main rooms
Sobrado in Olinda	17th Cent.	22	1,127	Sf>Ex>S>Q>Cz>Ae	22	1,688	S>Q>Sf>R>Cz>Ae
Sobrado in Recife	19th Cent.	22	1,537	S>Q>Ex>Sf>Cz>Ae	22	1,573	S>Q>Sf>Cz>R>Ae

FIGURE 4

Accessibility of the spatial structure and main rooms (order of integration values) using different possible entrances.

Source: Author, 2004

Home of “someone with meager resources” in Recife

Unlike the Olinda *sobrado*, in the Recife *sobrado* where, in the mid-nineteenth century, according to Vauthier, an owner “with meager resources” lived, there is little difference in spatial configuration between the structure which uses all the entrances and the one from the street, which only uses the main door. In the route designated for residents, or at least the more important ones, the graph drops to a depth level of just one, when compared to the likely route a visitor would take. The average integration values are practically identical (1.537 and 1.573 RRA, respectively) in the two structures – which implies that it is less restrictive for residents and more formal for visitors – and the reduced RRA values for ground floor spaces, compacted by the external access ring, is negligible, and does not result in any change to the scale of integration values according to functions (Figure 4).

FIGURE 5

Floor plans of the three stories of the *sobrado* in Recife (ground floor, first floor and attic) and justified access graphs to depict the accessible spatial structure via any of the entrances (Ex) and the main door (S).

Translation of the image's legend:

The graph on the left: from the exterior using all the accesses; the graph on the right: from the street by the main entrance.

Rooms and functions: transition space, L- store/shop, S- front room, Cz- kitchen, Ae- slave's quarters, Sf- back room, Q- master bedroom, O- oratory, Ex- exterior, R- street



At the top of the accessibility scale is the front room (S); the bedroom adjacent to it (Q) is more integrated than the back room; the street (R), kitchen (Cz) and slaves' quarters (Ae), located in the attic, are situated in the most segregated band of the scale; and the slaves' quarters (Ae), on the ground floor, is one of the most segregated areas of the complex, as seen in the previous example.

On the other hand, while in the Olinda *sobrado* the living and transition spaces alternate in the access sequences, in this one, all the points constituting the central column, which starts from the street, represent passage or service spaces, whereas the rooms used by the family are located in the independent rings. Therefore, one can get to the service area in the attic (which is a separate ring), without going through the rooms or any other living space on the main floor. A narrow passage concealed behind the stairs, between the rooms – the main one (Q) and secondary one – provides an alternative access route that is separate from the main passage, constituting a specific ring.

Apart from the formal characteristics considered to be defining elements of the colonial *sobrado*, present in the two cases studied, as well as some similarities also found in their spatial structures, certain morphological subtleties resulting from this brief analysis are also worthy of attention. These subtleties grew in importance during the morphological analysis which supported my PhD thesis, and which this study is part of, in that they highlighted the existence of two models representing distinct interface modes between residents, as well as between residents and visitors, whose traits continued to appear in the larger sample (50 cases), representing the set of Brazilian dwellings studied (TRIGUEIRO, 1994).

Final Considerations

Genotypic aspects emerged, which were common to both the spatial structures, especially when the main door served as the entry point. In each of the houses, the front room and one (or more than one) of the bedrooms have alternative access routes and constitute the most accessible rooms, whereas the back room, kitchen, street and especially the male slaves' quarters are segregated. In both cases, the spatial separation of the two units – the family and the slaves/servants/outside – takes place on two planes: one which is highly evident, by floor and circuit; and another which is less obvious, through the connection between rooms and circulation spaces in the sphere of the house itself. It is in regard to this last aspect that the case studies point to the existence of two structural models. In the Olinda *sobrado*, the front room must be traversed in order to gain access to the rest of the house, while the rear access functions, or could function, both as a service access or as an alternative route for residents, providing a kind of encounter or avoidance alternative. In the Recife *sobrado*, the integrating effect created by the dual entrance is restricted to the ground floor and ends at the first flight of stairs, from which there is one and only one route of travel. On the floors above the ground floor, the separation between the communities of residents – masters and servants – occurs through the displacement of the living spaces outside of the circulation circuit.

In colonial houses, the antagonism between public and private domains, the clear demarcation between areas of use of masters and slaves and the polarity between male and female spaces are themes that were explored by historians and chroniclers of the time. Gilberto Freyre notes an aversion toward the street, resulting from a patriarchal system, which, when transferred from the *casa-grande* ("big house") to the *sobrados*, had to fight for its survival in the urban environment. The fiercest struggle was with respect to women whom the patriarch sought to confine to the rooms and bedrooms (Freyre, 1981: 154). In the writings of Vauthier (1981: 39-41) one can detect the opposition between the front room – an essentially masculine space where "[...] the owner of the house receives us with all pomp and ceremony" and the back area, referred to by the author as a "gynaecium protected from profane eyes".

In the examples studied, the street is extremely segregated as are all spaces reserved for activities that would require the presence of outsider or servants – the store, the room for free workers or perhaps male guests, the kitchen, slaves' quarters. At the opposite pole, the front or visitors' room has a privileged level of accessibility or it represents the actual locus of integration of the complex – aspects which suggest that outsiders should be kept at a distance, unless deemed worthy to have access to the visitor's room, regarded as a focus of hospitality and male solidarity.

The back room is among the most segregated spaces, when the perspective of visitor access comes into play. However, when all the outside accesses are used, the back room becomes the most accessible room of the system in the first case examined. Smith noted the integrative character of the back staircase in the Olinda house, capable of connecting both worlds – the family and those from the outside – through the back room. This feature, confirmed by the inclusion of the rear staircase in the Olinda house, was not noted in the Recife *sobrado* where there was no concern in the configuration for a rear access.

Freyre points out that the *casa-grande* focused on protecting women and valuables, which the urban *sobrado*, according to this author, also sought to preserve, as much as possible. The logic behind the spatial organization of the cases studied appears to confirm this notion and corroborates Freyre's argument that the nineteenth century witnessed the apogee and decline of the patriarchal model in Brazil. The domestic pattern revealed in the letters by Vauthier seems to have been the last materialization of that model and of that era.

As stated earlier, the complete study, which generated the findings presented in this article, proceeded to examine more floor plans from colonial houses (another 23 cases) and eclectic houses (25 cases). The research reinforced the existence of the two models presented here, one of them – rigidly hierarchical, averse to the inclusion of alternative accesses – more common among urban *sobrados*, whereas with the other, the exterior serves as an integrative vehicle, capable of reducing and modifying the spatial hierarchy, more common in houses located outside the central districts of Recife, on the outskirts of the city and on mills and farms. Vestiges of this model remained (sometimes more intensely) in eclectic dwellings, where it was common to have a generous number of entrances. The more flexible spatial configuration model, found in homes before the mid-nineteenth century and in semi-urban homes from that era and beyond, seems more tied to less rigid modes of social interaction. This idea is reinforced by the accounts, especially from foreign visitors, who were often surprised by the loosened formality, in relation to customs, that they witnessed during their stays at small farms along the rivers, during the year-end festivities – which marked the summer season in nineteenth century Recife.

In addition to indicating the possible existence of genotypes detected during this analytical stage (and confirmed over the course of studying the complete sample), and substantiating some views regarding Brazilian dwellings and discrediting others, the findings of this study contributed toward strengthening the idea that spatial configuration analysis procedures, even very simple ones, can unlock sociocultural meanings not found in conventional descriptions, even the most consolidated ones.

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