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# SIZA AND WRIGHT: TWO MUSEUMS AND THE VISITOR

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## ABSTRACT

The article presents a comparative study of two celebrated buildings – the Iberê Camargo Foundation (ICF), in Porto Alegre, designed by Portuguese architect Álvaro Siza, and the Guggenheim Museum, in New York, designed by the American architect Frank Lloyd Wright. The motivation for this work lies in the opportunity the recent construction of the ICF museum in Porto Alegre came to offer – in view of the honors and distinctions it has received from local and international architectural critique – for a discussion on the theme of quality, or performance, in architecture. The comparison with the Guggenheim Museum comes from a broadly observed formal, functional and iconic similarity observed between the two buildings. The article has an eminently empirical nature. The methodology applied in the analyses has antecedents in the architectural promenade, in the Corbusean’s sense of the concept, and is concerned with the quality of the walk, taking into account the way these buildings are understood by the visitor – their legibility – and the way they accommodate the bodies in space – their functionality. The article eventually shows that, despite their conspicuous formal and iconic similarities, the spatial performance observed in the two buildings has been radically distinct, especially in respect of the way they deal with spatial integration and spatial segregation from the standpoint of the visitor.

## KEYWORDS

Iberê Camargo Foundation. Guggenheim Museum. Spatial Quality.

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## SIZA E WRIGHT: DOIS MUSEUS E O VISITANTE

### RESUMO

O artigo apresenta um estudo comparativo sobre dois edifícios – o museu da Fundação Iberê Camargo (FIC), em Porto Alegre, e o museu Guggenheim, em Nova York – analisados desde o ponto de vista da sua *qualidade espacial* ou seja, do modo de acolhimento e acomodação do visitante. A motivação deste trabalho está na oportunidade que o edifício do museu da FIC vem oferecendo desde sua implantação em Porto Alegre – em virtude das honrarias e distinções das quais ele foi alvo pela crítica de arquitetura, local e internacional – para uma discussão sobre o tema da qualidade na arquitetura. Já o museu Guggenheim foi selecionado para compor esse estudo por ser um edifício análogo, tanto do ponto de vista formal quanto funcional, ao Museu da FIC, e também, por seu caráter icônico, consagrado como paradigma no cenário arquitetônico mundial. O artigo tem uma natureza eminentemente empírica. A metodologia utilizada tem antecedentes no *passeio arquitetônico*, no sentido corbusiano do conceito, na qualidade desse passeio, tendo em conta o modo como as edificações são entendidas pelo observador em movimento – a legibilidade – e o modo como as edificações acomodam o corpo – a funcionalidade/comodidade.

### PALAVRAS-CHAVE

Fundação Iberê Camargo. Museu Guggenheim. Qualidade espacial.

## INTRODUCTION

The concern of this article with the Iberê Camargo Foundation Museum – to be called ICF Museum from here onwards – as an object of study was initially motivated by the acclaim this building has received in recent years from architectural critique, winning different awards, that made it a reference within international architectural production, such as the Golden Lion at Venice Biennale and the Mies Crown Hall Americas Prize (MCHAP) at the Illinois Institute of Technology in Chicago (COMAS, 2006). The interest in the museum also comes from the cultural context in which it is embedded. As the only building in the city with international representation, the ICF museum was intended to complete a longstanding gap in the artistic scenario of Porto Alegre for a high standard exhibition space. Architectural and cultural importance added to the thematic attachment to the work of a renowned local artist reinforces its role as an urban icon (KIEFER et al., 2008). Nevertheless, nine years after its inauguration, such condition of initial distinction is verified today with difficulty in view of the contradictions and ambiguities that came to be observed in this building from different points of view, as we will see in what follows. In its turn, the Guggenheim Museum in New York has its prominence in the history of architecture emphasized for being the last work of Frank Lloyd Wright and also his only building in New York. According to Siry, Wright's Museum would be among the most influential buildings of the Twentieth century (in BALLON et al., 2009). Same as the ICF museum, the Guggenheim is a controversial building. The debate over the positioning of the major part of its exhibition spaces along the inclined floor of its ramps is perpetual.

The use in this article of the comparative analysis as a method of study, having the Guggenheim Museum of New York as a parameter, seeks, on the one hand, the production of knowledge and methodological evolution, by means of recording the lessons coming from the descriptive confrontation of two exceptional buildings functionally analogous and, on the other hand, goes in line with the view of several authors that point out a clear connection between Siza's building and the NY Guggenheim Museum (CABRAL, 2009; COMAS, 2006; ROSSO, 2008; SERAPIÃO, 2008). In fact, these two buildings have a set of characteristics in common that make their comparison an instructive intellectual exercise. Regarding *form*, both the Guggenheim Museum and the ICF museum have a main volume that stands out in the composition; solid volumes, closed to the outside, with horizontal bands that correspond to the ramps and inner walkways. Major similarities, however, with respect to the totality of the form are, on the one hand in their *dimensions* and *scale* and, on the other hand, in the horizontality that both buildings offer at the ground level, emphasizing the recognition of human scale. In section the two buildings start from the same concept, that is the arrangement of exhibitions around a large central free space – a void – surrounded by ramps and walkways, which expands vertically. Regarding *internal space*, the two buildings also have similar configurations: free central atrium, ramp circulations around this void and walkways that, in different ways, connect visitors with the totality of internal space.

With respect of the spatial distribution of the *program* both buildings have in common generous access spaces which organizes the visitor flows towards their main spaces and towards the shops and café at their ground floors. The upper levels, in both cases, are made up of ramps and walkways, an aspect where the differences between the spatial configurations of the two buildings, as we shall see it later, are dramatic, yet in both buildings the indicated route of visitation consists in going up to the last floor by elevator, making the visitation in a downward progression with the ramps, as it happens at Guggenheim, or by means of the tubular walkways as it happens at ICF museum.

The set of similarities, coincidences and interests reported above seems to offer a justification for a deepening in the knowledge about these two buildings, by means of a comparative analysis, having the spatial performance of each building in its different situations taken as a conceptual parameter.

### THE SPATIAL PERFORMANCE AS A PARAMETER

*Spatial performance*, in the theoretical and methodological context given in this study, is understood as the way – either more appropriate or less appropriate – buildings welcome or, if one wishes, accommodates people, their inhabitants or users. It is assumed here that apart from its formal dimension and symbolic meaning, architecture could be understood by its spatial distribution. The proper arrangement of the parts would be accountable for either the success or the failure of the whole. *Spatial performance*, so understood, would be the essence of architectural quality (AGUIAR, 2016). In the case of the museums object of this study it is sought to verify throughout the procedure of analysis, the way the visitor is received by the building and guided through its spaces. It will be considered as parameters of spatial performance, the *legibility* of the building, that is, how the building, in its different situations is understood, or read, by the visitor – in this case the moving observer/researcher - and, moreover, the building's *functionality*, or *convenience*, verifiable in the either more comfortable or less comfortable way the building accommodates people in its spaces.

Situations endowed with *legibility* would be those capable of offering the visitor a perception of *continuity* of the path ahead, situations where the line of sight and the line of movement coincide and the observer has the vision directed towards its destination, without route deviations. Legibility would be, therefore, an eminently visual condition. The study of legibility as a parameter of performance in architecture has been the focus of attention of a line of authors that begins with Schmarsow (1994 [1893]), passes through Le Corbusier (2006 [1937]), Lynch (1995 [1960]), Hillier (1983), among others. More recently Key et al (2008) have provided a description of legibility based upon concepts of *visual field* and *spatial continuity*. Hence the legibility of a building or urban situation would depend, by definition, of its spatial arrangement. Although, in this article, legibility is considered as fundamental,

we understand that it can often be problematized in a different and intended way by architects and their works.

*Functionality*, in its hand, would be verified in the haptic or tactile dimension of spatial perception and would be evidenced in the spatial (in)utility, (dis)comfort and (un)convenience. It would be in the spatial perception that comes from the other senses, and would be verified in dimensional discomforts, thermal or auditory discomforts and so on (VITRÚVIO, 2007).

## THE WALK AS A METHOD OF STUDY

The use of the walk as a method of study is not new in the discipline and had been already used in the École de Beaux-Arts where the march, *la marche*, would have been used in a customary way in the assessment of projects (MARTINEZ, 1998). Yet it was during the modern movement, with Le Corbusier, that the architectural walk – the so-called *Promenade Architecturale* – merges as a method of description, making the moving observer the protagonist of architecture (AGUIAR, 2015).

The use of the walk as a method of study, places the totality of the observer's senses in direct contact with the spaces of the object of study by means of a previously planned path(s) taking into account the descriptive demands of the theme. The observer walks guided by the plan, by the path there shown, where will be indicated the camera positions that will describe each situation. The photographic record of the path's progression visualized by the moving observer shows the path as a *sequence of situations*. This procedure extends in detail the procedure given in Cullen that draws on the concepts of *existing vision* and *emerging vision* in the description of the optical dimension of the walk (CULLEN, 1961). The position, the point of view of the camera, will be located at the connection between the different axial lines that make the pathway or, in other words, in the connections between longest lines of sight in which the path was disaggregated. Each situation – each part of the path – will have one or more corresponding images depending on the descriptive convenience of each situation. The optic is the guide. The descriptions of the haptic follow and overlap on it.

For the spatial definition of each *situation* to be studied, the procedure takes into account the work of Key et al (2008) that specify the conditions of *viewfield* and *enclosure*. Viewfield is thus defined as the visible area from the viewpoint of an observer positioned within the field, represented as a polygon. Enclosure is described as how much a particular situation (*location*) is defined, or delimited, by built elements. The larger the viewfield's amplitude the smaller the degree of enclosure tends to be. The concept of enclosure is similar, if not coincidental, with the concept of convexity (HILLIER et al, 1983). This category is at the basis of the Method of the Observer when dealing with the breakdown of the object of study into *sequences of spatial situations*.

During the walk, the assessment of the legibility of the object of study will be based upon the *perception of continuity* (LYNCH, 1995). Cullen suggests that such perception would be set up when a physical element creates a viewfield that indicates the possibility of moving forward. Key et al. (2008) describe this condition of continuity through a Boolean value that indicates whether two mutually visible locations, P1 and P2, share the same physical element within the viewfield.<sup>1</sup> This description seems to confer some precision and objectivity to the concept. The overlap of two features, the mutual visibility and the attachment to one same viewfield, will allow for the identification, and even calculation, of the spatial relations set up between the two points and between the element and the points. The diagrams will show as dashed lines the movement-inducing lines that offset from the path to be followed.

<sup>1</sup> Boolean, in computer science, is a binary data type by definition: having two mutually exclusive values such as 0 or 1, false or true, on or off, and so on.

## EMPIRIA AND DISCUSSIONS

The *walks* carried through the Guggenheim museum in NY and the ICF museum in Porto Alegre, to be presented in what follows, compare five typical spatial situations that both buildings have in common. These spatial situations are: the approach pathways, the access halls, the atria, the access to the exhibitions and the exhibition spaces themselves. A sixth situation, atypical and only found in the ICF museum – the tubular walkways – complete the set of analyzes. Each of these situations will be studied, in a comparative way by means of a set of descriptions that includes images of each spatial sequence under scrutiny, diagrams describing this same spatial sequence in plan and a written report. This is one way, among many possible, to understand and to analyze spatial performance in architecture.

### The approach pathways

The first aspect perceived by the moving observer on the approaching pathways of the two museums is the radical difference in their urban insertion, the two buildings compared. While the Guggenheim is positioned in a central area of New York, immersed in a consolidated urban fabric, facing Central Park, the ICF museum was built in a poorly connected location, a place difficult to be seen, rather isolated, at the edge of a freeway.

Arriving at the Guggenheim Museum, the visitor does not notice immediately the presence of the building, something unusual for a building that, as we will see, is so distinct from the context. In fact the visitor already positioned close to the building, will see just one more regular block of the Fifth Avenue, with its gardened sidewalks along the classic sequence of New York brick buildings. Although, as the visitor comes closer, the museum building emerges

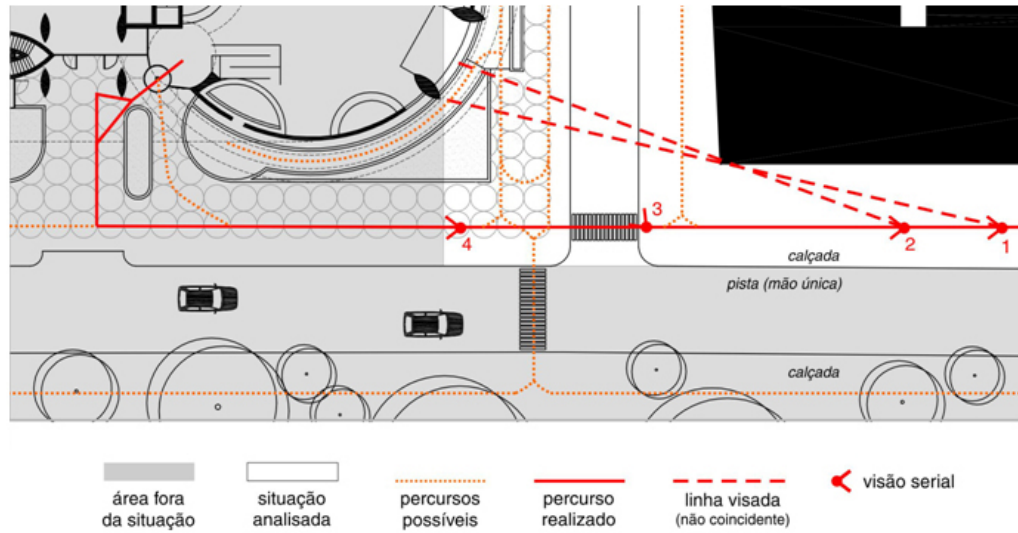
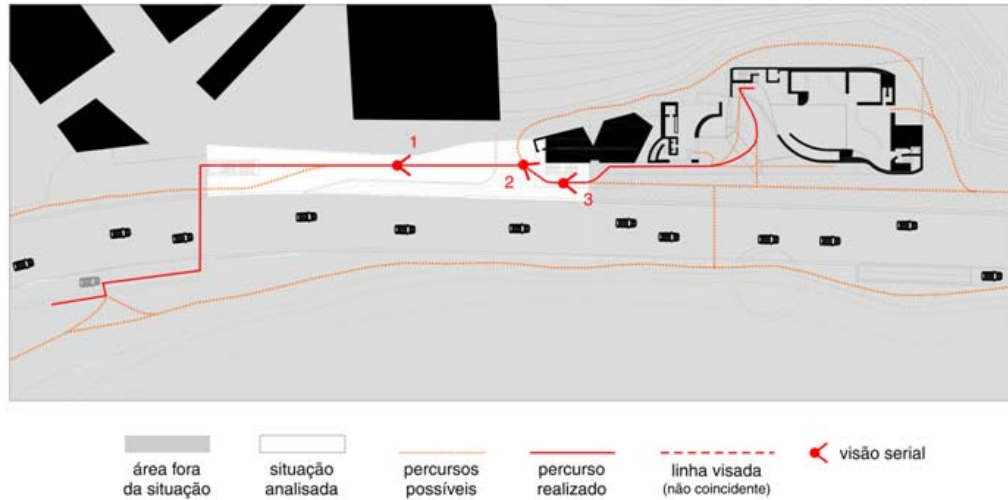


Fig. 1: The approach pathways – Guggenheim. Source: The authors (2015).

surprisingly, initially as a cylindrical slice, hard to be seen, positioned in the same alignment followed by the other buildings yet elevated from the sidewalk (Fig. 1 – 1), to progressively show itself as an exceptional architectural form (Fig. 1 – 2). From the corner, we now see the ground floor of the museum surrounded by low walls (Fig. 1 – 3, 4). In the middle of a dense urban scene dominated by buildings along the sidewalk, the presence of these low walls brings about a rather surprising effect, as they perform as seats for visitors, a gesture of welcome coming from the building, stimulating the appropriation of the immediate surroundings of the museum as a public space.

In a different way the approach pathway towards the ICF museum shows itself, initially, as a moment of surprise and perplexity as the visitor, coming either on foot or emerging from the parking lot, faces the white, monumental form of an excavated rock (Fig. 2 – 1). The set is spectacular and enigmatic. In a second moment, the approach pathway becomes difficult and even uncomfortable to the visitor. The pedestrian is rare here and the aridity of the path ahead is manifest, on the one hand in the noise coming from the fast and intense traffic and, on the





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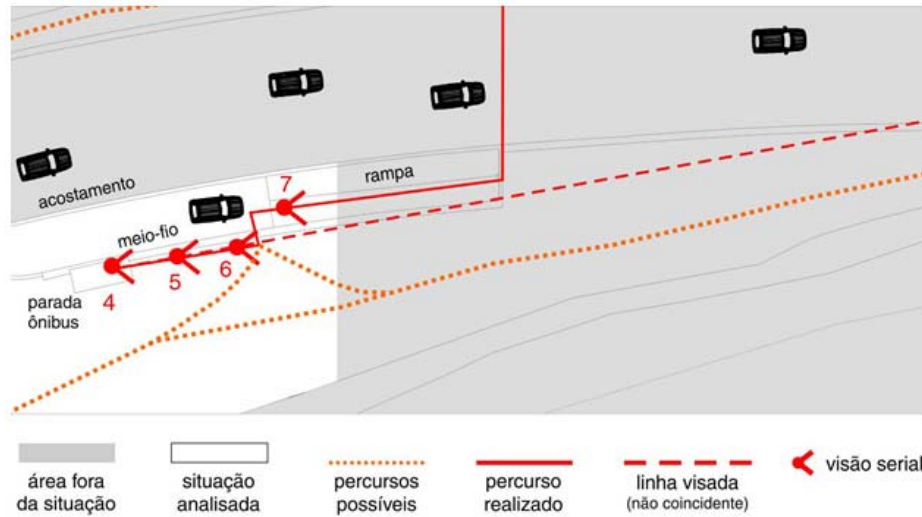
Fig. 2: The Approach Pathways – ICF. Source: The authors; Google Street View (2015).

other hand, in the eccentric solution given in the sidewalk brought by the museum (Fig. 2 – 2). Unlike the Guggenheim, that takes advantage of the sidewalk in its connection with the city fabric, the ICF museum, on top of its rather segregated location, isolates itself even more from its immediate vicinity, by surrounding itself on all sides, with a sort of gravel ostensibly hostile to the walk, yet producing, in parallel an explicit atmosphere of monument (Fig. 2 – 3).

Those arriving at the museum by car will use the final part of the approach path described above, coming either by stairs or elevator from the parking lot positioned at the basement, so having naturally the occasional annoyances coming from the elements during their displacement at the open space.

Yet, those arriving by public transport will have a rather peculiar spatial experience, punctuated by annoyances of different kinds. Getting off from the bus the visitor will see the museum building around 200 meters away. He immediately realizes that the isolation of the place is crowded with cars at high speed. From here, although an effort is made to put the museum building into focus, the visual field is in its most part taken by the presence of a residential





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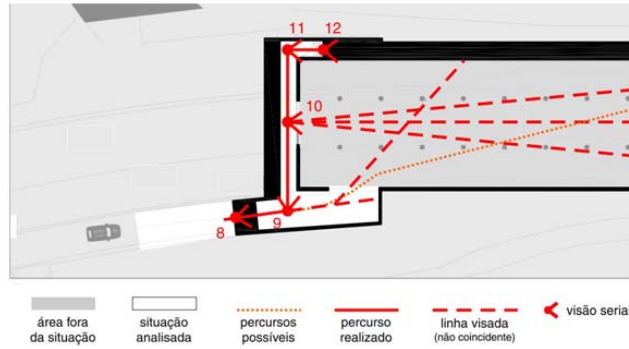
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Fig. 3: The approach pathways – ICF.  
Source: The authors (2015).

building, also white, larger in size if compared with the museum, in the neo-Mediterranean style typical of the 1970's (Fig. 3 – 4). The museum, seen from here, rests in the background, half hidden by the lighting fixture, as the last building in this rather unexpected architectural sequence (Fig. 3 – 5).

In view of the lack of pavement in the sidewalk, the visitor starts walking towards the museum by the road side. Straight ahead, he sees a sign guiding the pedestrian towards the underground parking (Fig. 3 – 6), when a ramp, parallel to the highway, appears in front as the only possible access to the museum, from where he is (Fig. 3 – 7). The other possibility would be the crossing of the highway in a rather risky move.

With no other alternative, the visitor goes down the ramp as the museum disappears from his visual field (Fig. 4 – 8). He is now followed by a car that also arrives. The non-motorized visitor feels uncomfortable with the weird situation where he finds himself. At the end of the ramp he faces an inconvenient intersection of pedestrian and vehicular pathways. The diagram and images below describe the problematic legibility of this situation. The visitor tends to move forward, despite the parking barrier in front of him, for the line of sight diagonally ahead, that shows the possibility of walking through the parking lot, is dominant within the visual field, while the way on the left – the actual path for crossing the highway in safety – tends to remain unnoticed (Fig. 4 – 9).



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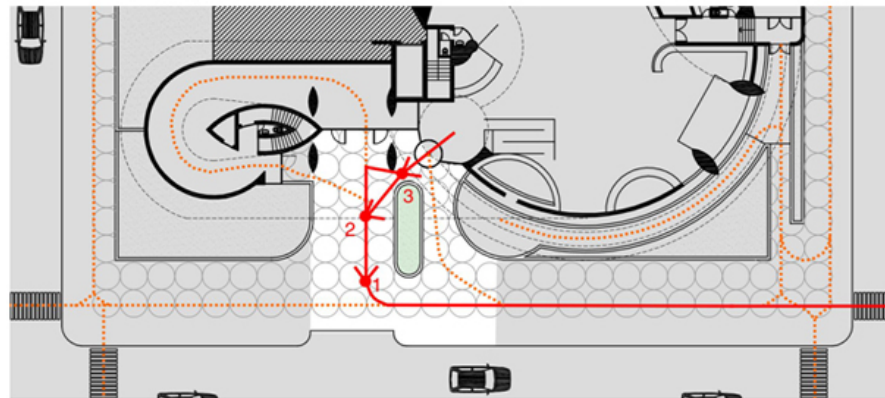
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Fig. 4: The approach pathways – ICF.  
Source: The authors (2015).

At this point the approach to the museum has become progressively unusual. The visitor faces here, in this subterranean stretch, a dramatic change in the conditions, from the exterior to the interior, from clarity to darkness, from a view initially focused in the extraordinary form of the museum to the unexpected diving in the cavernous space where he is now. The sensation is of confinement (Fig. 4 – 10). Curiously, in the midst of such a strange situation, the sensibility of the architect is revealed in a large window that offers the visitor a peculiar view of the underground parking lot in perspective (Fig. 4 – 11). The sight is surprising. The space is organized by means of a colonnade of precise spacing and proportions that supports the highway. Yet this is just a parking lot, the visitor realizes that the space he sees from that window claims, independently from the museum it functionally serves, the status of a work of art, that is manifest in the ostensive superfluous it carries, as it can be seen in the aseptic gloss of the coatings that mirror the rigorous axiality of the lighting fixtures. Curiously, this unusual view seems to make the feeling of discomfort attenuated, at least for those involved with a more intellectual appreciation of architecture. Still in the underpass the visitor notices a light, at the end of the tunnel that will guide him back to the open space upstairs and, eventually, to the museum building (Fig. 4 – 12).



área fora da situação  
 situação analisada  
 percursos possíveis  
 percurso realizado  
 linha visada (não coincidente)  
 visão serial



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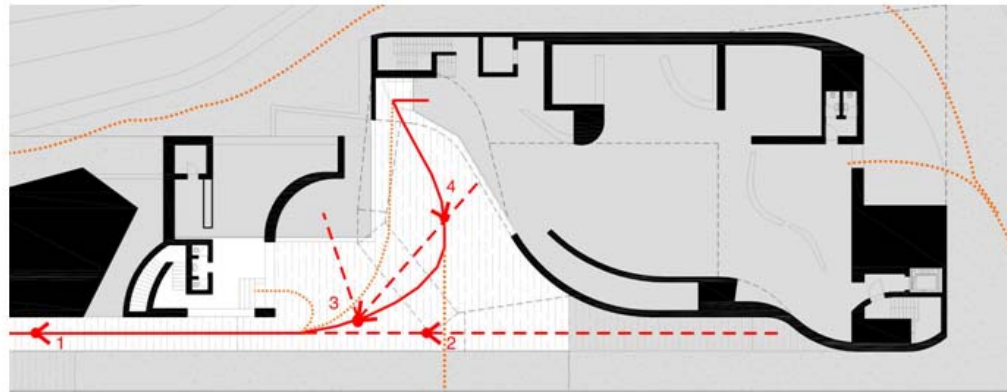
Fig. 5: The access halls – Guggenheim. Source: The authors (2015).

### The access halls

Arriving at the access hall of the Guggenheim Museum, the visitor has a large glass surface right in front, which seems to work as an invitation to enter the building. Weirdly what seems to be the main access to the museum is actually the entrance to a souvenir shop (Fig. 5 – 1). The misreading of the situation will only be clarified when the revolving entrance door of the museum - that is partially hidden by a robust wrightian column - is noticed. The diagram and the images below describe the difficult legibility of that situation.

The diagram shows that the route to the right, towards the main access revolving door, is partially hidden thanks to a narrowing in the passage – due to the proximity of a flowerbed wall to the column just ahead – which ends up by confusing the perception and hindering the access pathway from the visual field of the visitor (Fig. 5 – 2, 3). The analysis of the situation says that the visual indications coming from the spatial configuration of the ground floor - which should provide an adequate reading and understanding of the spatial sequence of access to the museum - provoke disorientation.

In a different way the arrival at the access hall of the ICF museum takes place in a much less conventional way, by means of an elevated sidewalk positioned adjacent to the building, five meters away from the highway and half meter



área fora da situação  
 situação analisada  
 percursos possíveis  
 percurso realizado  
 linha visada (não coincidente)  
 visão serial



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Fig. 6: The access halls – ICF. Source: The authors (2015).

above the gravel bed that, in what concerns the urban scale, will constitute the actual sidewalk of the museum building (Fig. 6 – 1). From the elevated walk the visitor sees, just ahead, the unusual way this pathway is going to finish, as obstructed by the descent of one of the tubular walkways; a spatial move that eventually creates a generous cavern (Fig. 6 – 2). In a less generous way, the visitor leaving the museum and heading south towards Barra Shopping will have only the gravel bed of the sidewalk as an option. From the standpoint of urbanity – as something minimally evidenced by a usable sidewalk – and from the spatial performance of this public space, the access to the museum sets up an end of line.

In any case, the visual contact of the visitor with the access hall, in the ICF museum, occurs in a progressive way, revealing a stripped space, almost arid, delimited by white forms and half-covered by one of the tubular walkways, endowing the situation with a strange cavernous monumentality. Diagonally to the elevated sidewalk, the visitor has now before him a large glazed surface with the name of the museum, so suggesting that the main entrance to the museum would be there (Fig. 6 – 3). Yet this is not the case. By coming closer the visitor will realize that what he sees is a window, a fixed glass panel, while the actual access to the museum will be positioned more to the left, much less evident, almost hidden, carrying a rather precarious legibility (Fig. 6 – 4).

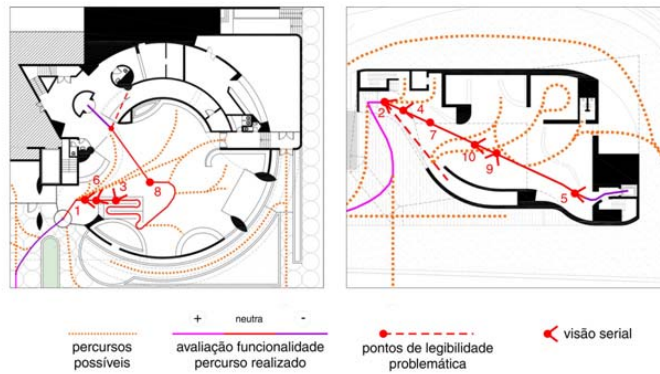
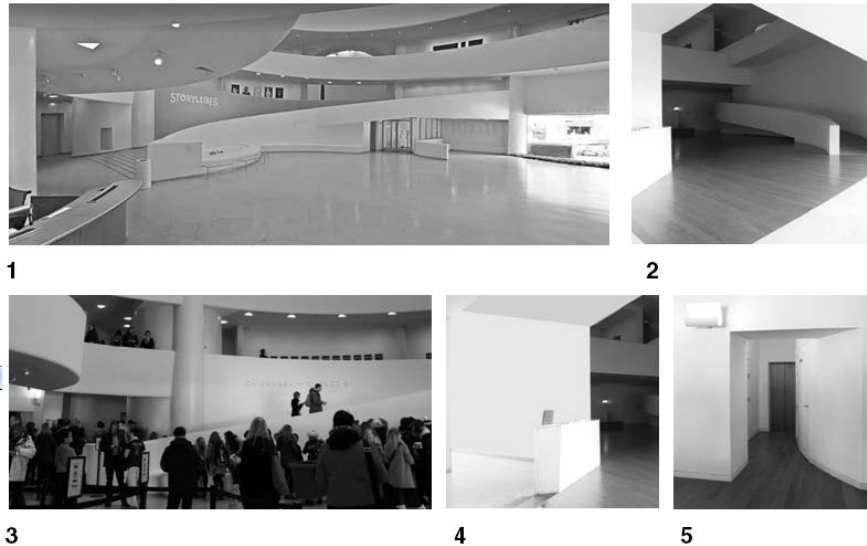


Fig. 7: The atria – Guggenheim and ICF. Source: The authors; Google Interior View (2015, + 2016).



### The atria

Both in the Guggenheim and in the ICF museum, the visitor, after the entrance, is confronted with a large central space at the ground floor, both with monumental height and a visual field that offers different pathways to be followed as options of route. The diagrams below show in plan that, in both cases, the ramps positioned on the sides seem to invite the visitor to start the walk from there (Fig. 7 – 1, 2). It is curious that although both buildings clearly offer the ramps to the visitors, the orientation received at reception suggests the visitation to start at the elevators that will carry the visitor up to the last floors, in order to use a descending route of visitation.

Still, in both museums, the elevators are shy and positioned off to the natural path. In the case of the Guggenheim, the view of the elevators is not immediate from the access point, nor has a clear visualization from the center of the space, where, approximately, the visitor will be after disengaging from the internal access circuit (Fig. 7 – 3). This happens for the elevator is positioned in the background, although visible from the center of the space. In a different way at the ICF museum, the two elevators are absolutely hidden. In the image below, the visitor has a lift rather close to him, however positioned partially hidden by the information desk shown in the image (Fig. 7 – 4). A second elevator will be found at the end of the visual field shown dark in the





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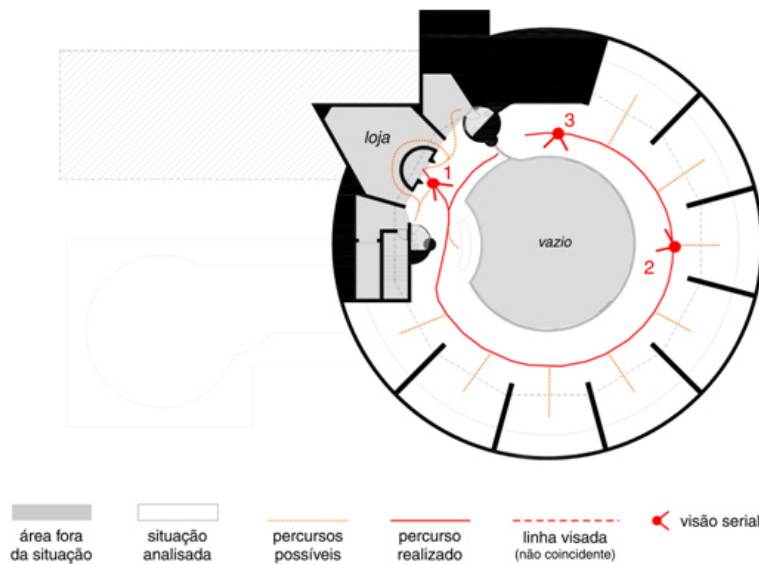


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Fig. 8: The atria – Guggenheim and ICF. Source: The authors (2015).

same image, and positioned more hidden than the first (Fig. 7 – 5). As it turns out, since both situations have a rather problematic legibility, the acceptance of the recommended visitation pathway will require some discipline of the visitor.

Yet in respect of the visualization of the monumental spatiality of the atria, the Guggenheim – in the circular verticality of its central space – displays, explicitly, its *modus operandi*, that is materialized by means of the monumental ramp in spiral that will contain both promenade and expositions (Fig. 8 – 6). The legibility of the situation is manifest in the dialogue between form and function. From this same point of view, the ICF museum offers the visitor a large vertical space with the approximate shape of a cylinder section that has on the walls with straight angles the exhibition spaces and, along the curved wall, the ramps that will connect different exhibition floors (Fig. 8 – 7). Unlike the Guggenheim, which offers the visitor a clear spatiality, the scenery offered here to the visitor of the ICF museum is a complex whole, where the route must be unveiled at each step. Finally, comparing the crowning solutions, the atria of the two buildings have an evident qualitative difference. While in the Guggenheim, the visualization of the great zenith offers the visitor, in addition to its striking design, natural light (Fig. 8 – 8), in the ICF museum we have, in parallel to the neutrality of a grid ceiling, artificial light (Fig. 8 – 9,10).



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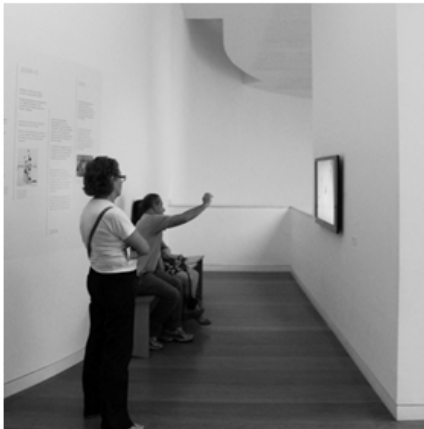
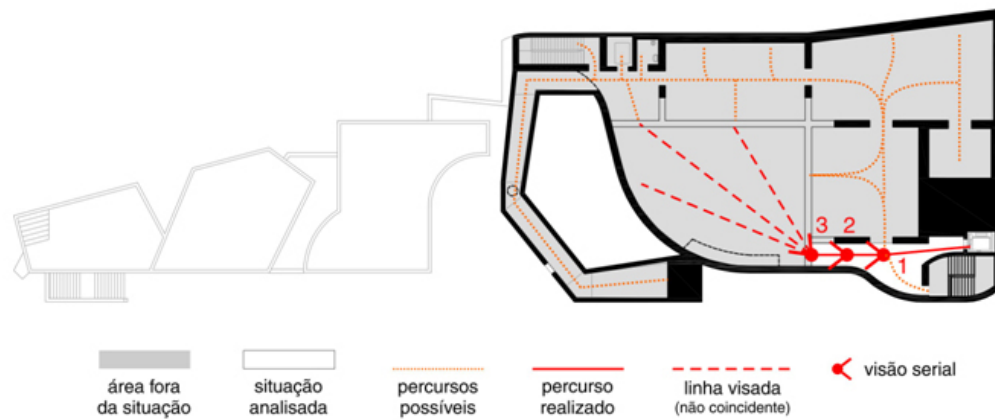
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Fig. 9: The access to the exhibitions – Guggenheim. Source: The authors; Google Interior View (2015, 2016).

### The access to the exhibitions

Leaving the elevator at the Guggenheim Museum's last floor – following the recommended route – the visitor faces the spectacular view of the zenith crowning the great void (Fig. 9 – 1). Starting the visitation, the visitor realizes that he is not actually on the top floor of the building and that in order to reach the beginning of the exhibitions he *still* must ascend the ramp in his right (Fig. 9 – 2) that, surrounding the void will end up as a route with no exit, so becoming a balcony (Fig. 9 – 3). The situation is ambiguous. Yet it has legibility, it places the visitor in a precarious functionality, both for the experience of the pathway ahead that will be passed twice, as for the unavoidable upward condition that goes in the opposition to what was previously announced as a descent route of visitation.





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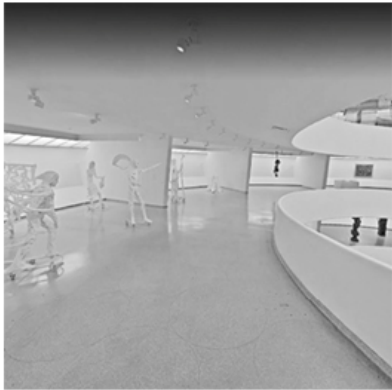
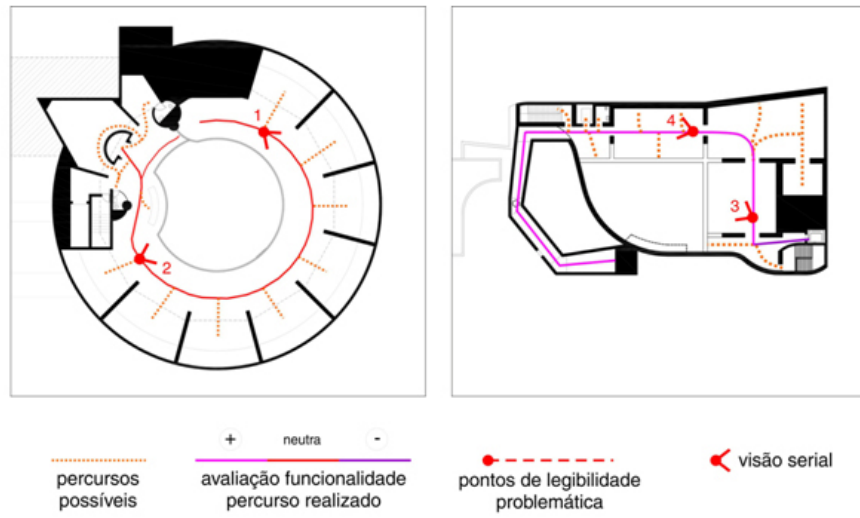
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Fig. 10: The access to the exhibitions – ICF. Source: The authors (2015).

In a different way, at the ICF museum, the visitor, after leaving the elevator at the last floor – also following the recommended route of visitation – is directed through a narrow transition hall to another space, an elongated vestibule, from where he will visualize, at the background, the curved wall of the central space, partially illuminated by a beam of light coming from above. Different from the situation observed in the Guggenheim, where, leaving the elevator at the last floor, both the ramps and the monumental space with its zenith are immediately unveiled to the visitor, here the visitor faces a labyrinthine scenario, difficult to be read, to be explored and discovered. Following the path of light, the visitor arrives at a kind of balcony (Fig. 10 – 1, 2), from where he will have a comprehensive view of the exhibition rooms at all floors (Fig. 10 – 3).



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Fig. 11: The exhibition spaces – Guggenheim and ICF.  
Source: The authors; Google Interior View (2015, 2016).

## The exhibition spaces

In its typical pathway through the Guggenheim's exhibition spaces, the visitor will have ahead the ramp in its subtle descent, framed by the sequence of niches with the works of art at his left (Fig. 11 – 1). The void on the right, presents itself in the background although many visitors stop at its sill either socializing or simply enjoying the space and the movement of people (Fig. 11 – 2). The way the exhibitions are displayed varies on the different floors according to the type of collection on display. The visual contact with the other floors at the void is permanent, creating at the interior of the museum a rather unexpected materialization of public space that is intensified by the visualization of the sky through the great louver.

In a different way, at ICF museum, the visitor, in its typical route of visitation, will have ahead at each floor, a sequence of three rooms of approximately rectangular shape, arranged in L, and connected vertically by ramps and tubular walkways. These rooms, nevertheless, are not proper rooms. The absence of walls on the left (or at the corner, in the case of the second room) makes the space asymmetrical, and the perception of enclosure – inherent to the concept of *room* - gives way to the perception of openness coming from the large balcony that faces the great atrium (Fig. 11 – 4). These are spaces morphologically hybrid, where the spatial volume of the traditional rectangular room is attached to the space of the atrium as a sequence of balconies. As it has happened to the visitor of the Guggenheim, this spatial situation offers two possible pathways; either to move towards the sill, so surrendering to the attraction of the great atrium, or enjoying the works of art on display at the opposite walls, at the right. Most visitors are attracted by the void, staying there for some time appreciating the spectacular spatiality of the building (Fig. 11 – 3), what suggests that, from this point of view, the monumentality of this building as a space of collective use surpasses by far its function as a space for exhibitions. Same as in the Guggenheim, from this position the visitor can appreciate the interior of the other rooms. Yet in this case the visual integration between rooms is parallel to the restriction of access between these same rooms, by means of a low wall – a curious ambiguity.

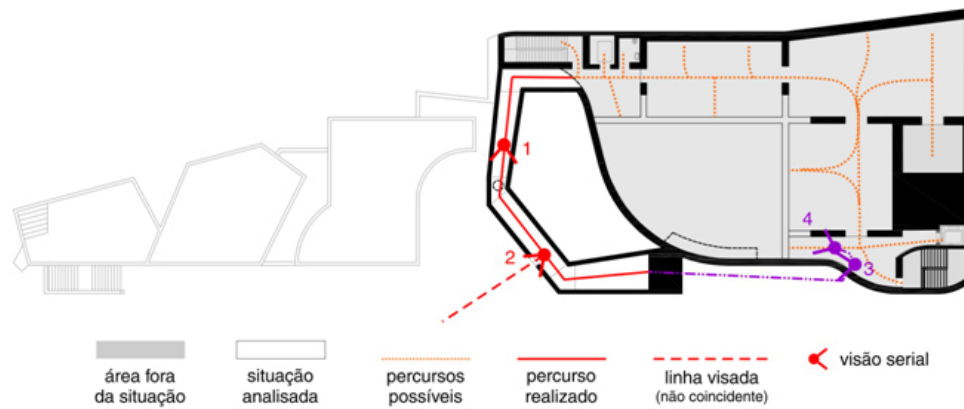


Fig. 12: The Tubular Walkways – ICF.  
Source: The Authors (2015).

### The tubular walkways

Next in the visit to the ICF museum, in its descending pathway, the visitor goes through the tubular walkways, in a rather unusual spatial experience. These tubular connections are proposed mostly to be spaces of enjoyment, although they also connect the pavements, something that in fact can be much more easily accomplished by the stairs, that are more visible, beside the elevator, while the access to the tube at the last floor is virtually hidden – same as what happens with the main elevator at the ground floor. A subtle light fixture strategically positioned diagonally at the end of a side corridor works as a sign and gateway to the tubes (Fig. 12 – 1). Punctuated by skylights and small windows of different shapes that open in an erratic and disconnected way – sometimes to the outside, viewing the lake, sometimes to the inside, viewing the white concrete of the building itself, sometimes facing up the floor of the tube above – situations that embark the visitor in a surprising journey of spatial disconnection. (Fig. 12 – 2). Next in the descent, the visitor will be again in visual contact with the monumental void and with the subsequent exhibition rooms, in a continuous circuit of visitation (Fig. 12 – 3, 4).

The visitor realizes, during the walk, the tubular walkways as works of art in themselves; large installations, penetrable elements interposed in the circulation system of the building as intervals for deliberately breaking with a sequence of events otherwise ruled by regularity. The tubular walkways are added to the route as intervals that make the visitor's objective displacement - in his search for appreciation of the exhibitions - a displacement open to subjectivity, where those

more gifted with imagination are allowed a break in the route, by diving in the disconnected information suggested by the communication of the building with the exterior, resulting in a rather unexpected route.

## FINAL NOTES

The set of analysis presented above have shown that the main difference between these two buildings, which overlaps all similarities, is one of configurational nature, and would be in the way the exhibition areas and the pathways in ramp relate each other. While in the ICF museum the ramps are autonomous elements, positioned separately and visually disconnected from the exhibition spaces, in the Guggenheim the exhibitions themselves happen along the space of the ramps. In the Guggenheim, the method of the observer has shown that although spatial integration around the atrium offers an aggregating and socially stimulating experience, the appreciation of the exhibitions along these ramps ends up impaired. On the one hand, the inclination of the floor makes the standing position for the appreciation of the exhibitions uncomfortable and, on the other hand, the lack of stability makes the visitor permanently impelled to move, to go forward, an attitude that is also stimulated by the usual intense flow of the public. It can be seen that the functionality of these ramps is naturally impaired as the visualization of the exhibitions is overshadowed by their natural propensity to movement.

In a different way at the ICF museum, the analysis have shown that the appreciation of the exhibitions along the classic layout of connected rooms competes with the attractiveness of the views of the atrium coming from the balconies. Functionality and legibility become problematic along the pathway. The visualization of the access to the tubular walkways was also problematic. Inside the tubular spaces, the visitor is transported to a situation of confinement, where the contact with the outside, as it was shown above, by means of disconnected openings that deliberately seek to place the visitor in a tricky journey. So it may be said that although these two buildings have a number of formal volumetric characteristics in common, they are radically distinct and even opposites in their spatial arrangements. While the Guggenheim is a building based upon spatial integration associated with an explicit legibility, the ICF museum is a building deliberately founded on ambiguity that leaves the visitor with a permanent perception of spatial disconnection. Comparing the two on how they both resolve their-respective relationships between form and function, the ICF museum would be a sort of parody of the NY Guggenheim.

Another contrasting aspect in the comparison between these two buildings refers to the way they relate to their immediate surroundings. While the Guggenheim is immersed in the city, so providing an enjoyable approach to the visitor, the ICF museum is isolated. Its site plan considers the highway in an inappropriate way, impairing the visitor's access and, consequently, the museum's performance as a social and cultural activator of its surroundings. This way, the ICF museum remains, nine years after its opening, a place almost imaginary for the people of Porto Alegre, something that is known but is not part of the daily life of the city.

Even considering, in comparison with the Guggenheim, that this one would be favoured by being positioned in a block central in New York City, what you see in the site plan of the museum of the ICF is the neglect with the visitor. This becomes evident in the allocation of space, assumed as natural, for cars and pedestrians at the ramp to the underground parking, what eventually results in a path of approach at least unusual, to say the minimum, for a public building. Let us not forget that this is the only possibility of access to the museum for the visitor that arrives either on foot or by public transportation, coming from the city center. In a building so lavish on ramps and elevated walkways, it is curious that the solution for the pedestrian access has not used, or even taken advantage of, such resources in the approach to the building. Yet it cannot be said that the visitor arriving by car is favoured, since he also has to walk under the elements before arriving at the museum. And what to say about the pedestrian that passes by and is compulsorily taken to the gravel bed that works as a sidewalk bordering the highway? Would this set of unusual spatialities be architectural resources deliberately used to bring about disconnection, discomfort, and nuisance? It is hard to believe.

In what concerns the internal progress, the analysis goes in this same line by showing that, unlike the Guggenheim whose legibility cannot be more explicit, the prompting of spatial disconnection seems to perform as an aim at the ICF museum. The analysis have also shown that this same strategy that emphasizes the perception of disconnection and discontinuity has been applied with harmful consequences at the immediate surroundings of the building, included its approaching pathway. It is not surprising that more recently the audience to the museum has been increasingly reduced.

It can be said, in conclusion, that since the two buildings taken as objects of study in this work are paradigms of architectural imaginary, it has been regarded as natural, throughout the analysis reported above, the dismantling of images and truths regarded as absolute - images built unconsciously in the world of architecture and based upon countless pictures, documentaries, books and magazine articles that document these celebrated buildings. The tool utilized in such dismantling task was the pure and easy verification of the concrete reality offered by these buildings in their relationship with the moving body. In this way the description of this spatiality by means of the so called *method of the observer* has provided objective descriptions of the different conditions experienced by the visitor in these buildings, taking into account their *spatial performance*. In this sense, in parallel with the thematic interest of the article, there has been along the work, on the one hand, a concern with a theoretical development involving a continuous search for describing as detailed as possible the constituent elements of the so called spatial performance and, on the other hand, a concern with a methodological development, in the search for describing as effectively as possible the effects of architecture upon the moving observer by means of an articulated set of descriptions using diagrams, images and text. Moreover, it is understood that both from a theoretical point of view as well as from a methodological one, the procedure given above leaves a set of open possibilities to be implemented in future works.

## REFERENCES

- AGUIAR, Douglas. Sobre o papel da caminhada na arquitetura. *Cadernos de Arquitetura e Urbanismo*, Belo Horizonte, v.22, n.31, p. 97-115, 2015. DOI: 10.5752/P.2316-1752.2015v22n31p96.
- AGUIAR, Douglas. Qualidade especial: configuração e percepção. *Políticas Públicas e Cidades*, v.4, n.1, p. 8-28, 2016. DOI: 10.23900/2359-1552.2016v4n1p8.
- BALLON, Hillary; CARRANZA, Luis; KIRKHAM, Pat; LEVINE, Neil; MAREFAT, Mina; SIRY, Joseph; SPECTOR, Nancy; STIPE, Margo. *The Guggenheim: Frank Lloyd Wright and the making of the modern museum*. Nova York: Solomon R. Guggenheim Foundation, 2009. 228p.
- CABRAL, Cláudia. No lugar: o desenho de Siza para Porto Alegre. *Arquiteturarevista*, São Leopoldo (RS), v.5, n.2, p.84-91, 2009.
- COMAS, Carlos Eduardo. Il cielo brasiliano de Siza. *Domus*, Milão (Itália), n.893, p.44-53, jun 2006.
- MARTINEZ, Alfonso Corona. *Ensayo sobre el proyecto*. Buenos Aires (Argentina): Nobuko, 1998. 250p.
- CULLEN, Gordon. *Townscape*. Londres: Architectural Press, 1971. 199p.
- HILLIER, B.; HANSON, J.; PEPONIS, J.; HUDSON, J.; BURDETT, R. Space Syntax: A different urban perspective. *Architecture Journal*, Londres, n. 30, p. 47-63, nov 1983.
- KEY, Sora; GROSS, Mark; DO, Ellen Yi-Luen. Computing Spatial Qualities for Architecture. In: ANNUAL CONFERENCE OF THE ASSOCIATION FOR COMPUTER AIDED DESIGN IN ARCHITECTURE (ACADIA), 28.: Silicon + Skin: Biological Processes and Computation, 2008, Minneapolis, Minnesota. *Silicon + Skin: Biological Processes and Computation: Proceedings...* Minneapolis, Minnesota: University of Minnesota, 2008, p. 472-477.
- KIEFER, Flávio; CANAL, José Luiz; FIGUEIRA, Jorge; FRAMPTON, Kenneth; SEGRE, Roberto. *Fundação Iberê Camargo: Álvaro Siza*. São Paulo: Cosac Naify, 2008. 176p.
- LE CORBUSIER [1937]. *Por uma arquitetura*. São Paulo: Perspectiva, 2006. 210p.
- LYNCH, Kevin [1960]. *A imagem da cidade*. São Paulo: Martins Fontes, 1995. 227p.
- ROSSO, Silvana. Paredes retas e superfícies onduladas. *Arquitetura e Construção*. São Paulo, n.171, p.40-51, 2008.
- SCHMARSOW, Auguste. The essence of architectural creation. In: *Empathy, Form, and Space, Problems in German Aesthetics: 1873-1893*. Santa Monica: The Getty Center Publication Programme, 1994, p. 281-297.
- SERAPIÃO, Fernando. Fundação Iberê Camargo. *Projeto Design*, São Paulo, n.341, p.48-69, 2008.
- VITRÚVIO [Marcus Vitruvius Pollio]. *Tratado de arquitetura*. São Paulo: Martins Fontes, 2007. 560p.

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