



UNIVERSIDADE  
CATÓLICA  
PORTUGUESA

MOVING (IN) SPACE: THE ROLE OF THE BODY IN  
ARCHITECTURAL EXPERIENCE

Dissertation submitted to Universidade Católica Portuguesa to  
obtain a Master's Degree in Culture Studies – Management of  
the Arts and Culture

By

Jule Kurbjewit

Faculdade de Ciências Humanas

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## **ABSTRACT**

Space, being omnipresent, is as much taken for granted as it is formative for the experience of everyday life. Acknowledging the experiential dimension of space, architecture has seen an increased interest in its lived quality, as opposed to pure formalism or functionalism. The phenomenological critique of architecture in particular, with its beginnings in the 1950s, has called for a commitment to the aspect of human experience, emphasising the role of the body. In this view, the question of the role of the body in how we experience architectural space arises. Any thinking about the experience of space is necessarily informed by how space itself is understood. Indeed, the conception of space has seen a significant shift within both culture and science since around the middle of the last century, and with it the way in which architects and artists deal with spatial relations.

Based on the research combining a theoretical investigation with interviews and a central case study, it will be argued that spatial and architectural experience is essentially bodily. Firstly, it is through the body that we are situated in the world and in space and secondly, it is the body's own corporeality and spatiality that allows us to experience architecture's physicality and spatiality. Finally, architecture stimulates movement, and the body responds to this stimulus with movement, expressing our capacity to act as subjects. Therefore, the body and space articulate each other in a reciprocal relation of mutual signification.

**Keywords:** space, architecture, experience, embodiment, being-in-the-world

## RESUMO

O espaço, sendo omnipresente, é muitas vezes tomado como um dado adquirido enquanto elemento formador da nossa experiência da vida quotidiana. Ao reconhecer a dimensão experimental do espaço a arquitectura atribui um interesse acrescido à qualidade de vida, por oposição ao puro formalismo e funcionalismo. A crítica fenomenológica da arquitectura em particular, com raízes na década de 50, buscou um compromisso com o aspecto da experiência humana, enfatizando o papel do corpo.

É neste contexto que surge a questão do papel do corpo na forma como experimentamos o espaço arquitectónico.

Qualquer pensamento sobre a experiência do espaço está necessariamente informado pela forma como o próprio espaço é entendido. Efectivamente a concepção do espaço assistiu a uma mudança significativa desde meados do século XX, quer no campo da cultura quer no campo da ciência, e isso influenciou a forma como os arquitectos e artistas lidam com as relações espaciais.

Baseado numa pesquisa que combina a investigação teórica com entrevistas e um caso de estudo central, argumenta-se que a experiência espacial e arquitectónica é essencialmente corpórea. Primeiro porque é através do corpo que nos situamos no mundo e no espaço; em segundo lugar porque é a própria corporalidade e espacialidade do corpo que nos permite experienciar os aspectos físicos e as qualidades espaciais da arquitectura; finalmente porque a arquitectura estimula a acção e o corpo responde a esse estímulo com movimento, expressando assim a nossa capacidade de agirmos enquanto sujeitos. Desta forma, o corpo e o espaço articulam-se, numa relação recíproca de significação mútua.

**Palavras-chave:** espaço, arquitectura, experiência, corporalidade, ser-e-estar-no-mundo

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## INTRODUCTION

*“Poeticamente o homem habi(li)ta o Corpo do Espaço.” (Os Espacialistas 2020)*

It is a truism that our experience of the world – and of ourselves within the world – is profoundly shaped by our environment, including our built environment. Architecture forms a significant element of our surroundings and thereby structures how we perceive the space around us and ourselves in it. In relation to architecture, we develop a sense of how we are situated in, and move around, our environment. The way we experience space is of central concern to architecture.

“Poetically, man inhabits/enables the Body of Space” – so does the Lisbon-based collective *Os Espacialistas* (2020; my translation<sup>1</sup>) reflect on the human relationship with space, bringing together some essential aspects: as humans, *we inhabit space* (with the body); *we enable space* (through the body); *the body is of space*; *space has a body*; and *there is something poetic to this relation*.

The interest in the human relation to space, and to architecture, is based on a view of space as the realm of lived experience, in contrast to the mathematical concept of space as an abstract, universal and neutral backdrop. The humanist view of spatial relations, as opposed to the space of mathematics, emphasises the dimension of lived experience. Humanist geography, in particular, is marked by a focus on the experiential and subjective aspect of spatial relations. It is also this experiential and subjective aspect that the philosophical strand of phenomenology is interested in.

The mathematical notion of space is engrained in the modernist and rationalist paradigm which is based on the Cartesian idea and ideal of a purely rational mind and dedication to logical, abstract theory. In reaction to this paradigm’s disregard for human experience, phenomenology stresses the primacy of perception and direct experience in the acquisition of knowledge (Merleau-Ponty 1978). According to phenomenologists, such perception and experience are grounded in the body. Perception of the world is possible because we are embedded in the world in the form of our bodies, and it is through the body that we establish a contact and relation with the world and the space around us. The fact of corporeal situatedness is what phenomenologists call “being-in-the-world” (Heidegger 2010, 39), which is the condition of our existence. By being situated in the world, *we inhabit space*, and we do so with our body.

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<sup>1</sup> Original quote: “Poeticamente o homem habi(li)ta o Corpo do Espaço.” (*Os Espacialistas* 2020)

Being physically embedded in and extended into space, that is, being physical and spatial, *the body is of space*. The experience of space is corporeal not only because the body's embeddedness allows us to establish a contact with the surrounding space, but also because the body's own spatiality allows us to make sense of the concept of spatiality. Through our spatial body, we gain a primary notion of spatiality. Our most fundamental experience of space is that of the space of our own body. It is on the basis of our body's spatiality that we are able to experience spatiality and make sense of space.

The experiential dimension of space that is inhabited shows how, regarding the reality of our lived experience, space is not simply 'out there' as a neutral backdrop but gains meaning by being occupied. This idea expresses a significant shift in how space is viewed – from a purely mathematical concept to something dynamic to be produced and to be occupied by the body – a shift exemplified by the French theorist Henri Lefebvre's *The Production of Space* (1991). As the body physically occupies space, establishing a relation with it, space becomes significant for our experience. Only through the body does space come to exist in our experience. Therefore, *we enable space* by occupying and inhabiting it with the body. Through occupancy by a body, a particular portion of space is delineated; the body establishes and creates a specific space as distinct from infinite space. Defined by a body, any one particular *space has a body*.

The articulation of space largely happens through movement. By moving in and through space, the body appropriates it. In this dynamic, the environment, including architecture, is an influence and a frame: Architectural space affects how we move and how we relate to our environment. According to *Os Espacialistas* (2020; my translation<sup>2</sup>), "the principal effect that architecture has on our body is its capacity to set it in motion, from a physical and an imaginary point of view". Moving our bodies and our imagination, *there is something poetic about the relation* we have to space and to architecture.

"Poetically, man inhabits/enables the Body of Space" (*Os Espacialistas* 2020) – these spatial relations are essential to architecture and our experience of it. While the body is the primary signifier of space, architecture similarly delineates and defines space. It gives structure to space and thus to our experience of it. By actualising the space in which we are situated, it can make us more aware of our own presence, strengthening our sense of self as embodied beings. Architecture and the body not only articulate space but also each

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<sup>2</sup> Original quote: "O principal e-feito que a arquitetura tem sobre o nosso corpo é a sua capacidade para o colocar em movimento, do ponto vista físico e imaginário." (*Os Espacialistas* 2020)

other in a reciprocal relationship. While the body is the basis for how we experience architectural space, architecture is conversely also crucial for how we experience our own body and our embodied being-in-the-world.

Against the background of these ideas, and parting from an initial question about how space is experienced, the following research question comes up: *What is the role of the body in how we experience architectural space?* It is to this question that the initially quoted statement from *Os Espacialistas* is a response.

Architecture is concerned with the question of how to structure space in a way that serves a particular purpose. The element of serving a purpose or function is central to architectural projects. Here, function seems to go hand in hand with form: It is through adequate form that architecture fulfils a function. Although form and function are often considered opposites, they are inextricably linked in architecture and in other design forms.

On the one hand, architecture is often defined by its functionality with which it differs from other art forms. On the other hand, however, architecture has been categorised as a visual art and fine art, a category that is traditionally defined by being free from concerns of usefulness. While these two ideas are both deeply embedded in architectural discourse and theory, they are in conflict with each other and imply a paradox.

This paradox is already pointed out in the seminal *Experiencing Architecture* by the Danish architect and scholar Steen Eiler Rasmussen (1962), opening with the critical observation that over centuries, architecture has been considered a fine art, together with painting and sculpture. With its appeal to the eye, architecture is sometimes judged by its appearance alone. The concern seems to be almost only with aesthetics (Harries 2000). But, as Rasmussen stresses, the visual appearance and aesthetic component is only one of many important aspects. According to him, what fundamentally distinguishes architecture from painting and sculpture is that architecture serves a pragmatic function. As Rasmussen (1962, 10) reminds: “Architecture is a very special functional art; it confines space so we can dwell in it, creates the framework around our lives.” By structuring space in a way that allows us to inhabit it, architecture serves the important function of providing spaces to live in. Hence, it has a concern not only with form but, importantly, also with function. Rasmussen’s reminder echoes in a more recent, phenomenological critique of architecture. In *The Eyes of the Skin* (2005, 32), a key work of architectural phenomenology, the Finnish architect and scholar Juhani Pallasmaa similarly describes architecture’s essential function:

“Architecture domesticates limitless space and enables us to inhabit it”. While form may be crucial for functional adequacy, it does not supersede it.

Likewise with a phenomenological approach, the German philosopher Karsten Harries (2000) explores architecture’s paradoxical relation to form and function. He points out that what distinguishes the fine arts from other categories like the applied arts lies in the ideal of the fine arts being beyond and removed from any functionality, investing them with a certain purity. The fine arts serve no function other than offering a sublime artistic and aesthetic experience (Harries 2000). Thus, the inclusion of architecture in this category is problematic as it disregards its distinctive functionality. By highlighting the ‘fine’ aspect of beauty, form and aesthetics, the visual dimension of architecture is privileged over the functional dimensions and over the other senses. As a consequence, the lived experience of spaces and the fundamental function and task of architecture to provide spaces to live in has come to be neglected.

In view of this, Harries (2000) criticises what he calls the aesthetic approach. He holds that the problematic judgment of architecture according to aesthetic considerations alone has brought about a crisis in architecture due to the conflicting views concerning the function of art. “It is thus hardly surprising that with the rise of the aesthetic approach in the eighteenth century, architecture should have entered a period of uncertainty and crisis from which it has still not emerged” (ibid., 26). In response, he seeks to develop an ethical function of architecture in the sense of the Greek *ethos* as nature, disposition and spirit rather than the common ‘ethics’. Harries (ibid., 4) is concerned here with *ethos* as “the way human beings exist in the world: their way of dwelling”. He explains: “By the ethical function of architecture I mean its task to help articulate a common *ethos*” (ibid., 4). The aim is to define an approach to architecture that acknowledges its potential to frame ways of dwelling.

The confusion about the function of architecture is a philosophical problem because it is a problem of architecture being “uncertain of its way” (Harries 2000, 2). The problem of architecture is not just an internal one, concerned with technical questions about the craft itself, but one related to its essential function. “To claim that architecture today faces a philosophical problem and to suggest that philosophical reflection should be part of any well-constructed program of architectural education is to claim not just that architects have become uncertain of their way and of the maps on which they have been relying, but that

such uncertainty reflects a deeper uncertainty about how we ought to live, where our place should be, and how architects are to help shape that place, to ‘edify,’ to build in that sense” (ibid., 11). This notion expresses a dedication to the experiential and subjective dimension of architecture. The ethical function of architecture has to do with lived experience and the way we exist and dwell in the world.

The phenomenological critique contextualises architecture’s uncertainty within postmodernism and its relation to modernism (Harries 2000). Architectural postmodernism is a reaction to the perceived failures of modernism. Modernist architecture is accused for having contributed to a sense of alienation. It is from this perspective that architectural phenomenologists ask how architecture can fulfil its function, not merely in a technical sense but in a holistic way, acknowledging and enhancing the lived, human relation with architecture.

This philosophical problem is inextricably linked with the role of the body in the experience of architectural space, as described above. Therefore, the research at hand may lead to an open conclusion, which invites further research more specifically concerned with architecture’s ethical function in the sense developed by Harries (2000), with respect to the relationship between the body and architectural space and architecture’s potential of strengthening the sense of being-in-the-world as embodied subjects.

The question at issue is of a philosophical nature. Therefore, a theoretical analysis based on a review of relevant literature establishes the foundation of the present work. As a complex issue involving various aspects and angles, contributions from different fields will compose an interdisciplinary approach, including art history and theory, philosophy and more specifically phenomenology and architectural phenomenology, humanist geography, curatorial studies, performance studies and, to some extent, dance studies.

Furthermore, interviews with *Os Espacialistas* (2020), with the Portuguese artist Fernanda Fragateiro (2020) and the Portuguese curator, professor and writer Delfim Sardo (2020) serve to enrich the theoretical analysis. *Os Espacialistas* work on the intersection of art and architecture. Between play and research, through interventions, performances, photographic series, workshops and other formats, they explore architectural space, the role of the body in measuring and mediating space and the relation of thought with architecture. This practice is always founded on and framed by theory, that is, in relation and with reference to the philosophical questions and issues that contextualise their

practice-based approach. Under the purview of Sardo, himself with a strong connection to architecture (for example in his role as the general curator of the Lisbon Architecture Triennial in 2010), the collective is firmly established in the arts, while their professional background in architecture provides them with a solid foundation in the matter. With this practice-based but theory-framed approach and with their interest and competence in architecture and art, the perspective of *Os Espacialistas* adds a rich, fresh and current dimension to the present research.

Given the object of study, a case study seems imperative to illustrate and deepen the discussion. While different works will be cited in order to illuminate various aspects, the central case study is the 2005 installation *Caixa para guardar o vazio (Box to Keep the Void)* by Fragateiro. The interviews with her and with Sardo, who curated the piece twice, allow for a better and deeper understanding of the work. The choice of an art installation as case study, rather than a conventional piece of architecture, is related to the fact that, by already embodying a philosophical reflection on closely related if not the same questions, the work offers a unique conceptual depth and relevance.

The first chapter, “Making Sense of Space”, serves as a theoretical foundation and a conceptual framework. By reviewing the philosophical and artistic traditions of treating the concept of space in a first part, a state of the art on this central matter will be established. Following the distinction proposed by the American art historian David Summers in his seminal work *Real Spaces: World Art History and the Rise of Western Modernism* (2003), two major traditions of treating space are contrasted: space as the virtual space of two-dimensional representations on the one hand and as the real space of lived experience on the other hand. The latter is characterised by a notion of space as embedded in lived reality and thus reflects the phenomenological view. That is why, in a second part, the philosophy of phenomenology is introduced and its approach to making sense of the experience of space and of architecture is presented. Here, *Phenomenology of Perception* (1978) by the French philosopher Maurice Merleau-Ponty serves as the central source regarding the phenomenological conception of perception and experience in general and the experience of space in particular. Further, the strand of architectural phenomenology, in particular of the Essex School, is given special interest due to its direct relevance for the present work.

The introduction to architectural phenomenology in chapter 1 leads to an account of the phenomenological critique of architecture in chapter 2, “The Paradox of Architecture”. This critique addresses architecture’s paradoxical relationship to form and function and the seemingly prevalent privilege of form over function in modernist architecture. Because of the involved uncertainty regarding the purpose of architecture, its task will be explored more closely, leading to Harries’s (2000) proposition of what he calls architecture’s ethical function, which is concerned with providing orientation, a meaningful frame and order, and an experience of self as being-in-the-world as embodied beings.

Thus re-asserting the role of the body in the experience of architecture, the involved relations and dynamics will be explored more closely in the third chapter, “Architecture of the Body”. After suggesting an analogy between the body and architecture, both being of physical and corporeal form, the significance of the different senses in architectural experience will be analysed, and architecture’s potential for stimulating movement will be explored. This latter aspect entails the idea that architecture stimulates not only physical movement but also activity of the imagination and memory.

Finally, in chapter 4, “Occupying Space, Keeping the Void”, the ideas established in the previous chapters will be applied to examples and, notably, to the central case study. The installation *Caixa Para Guardar o Vazio (Box to Keep the Void)* (2005) by Fragateiro is uniquely interesting and relevant in the context of the present work because it puts to practice several of the elements discussed and, through experience, gives a practical understanding of what has been discussed here in theoretical terms.

The present research engages in and continues a long-standing conversation about the experience of space and architecture and about artistic approaches to dealing with spatial relations. This theme is relevant to architectural and artistic as well as curatorial practices, to art theory, culture studies and philosophy. With its wider philosophical and cultural perspective, this work is not only directed at academics, professionals and practitioners but is open to a wider public interested in such fundamental questions of how we experience the space and the world around us and ourselves in that space and in the world. Thus it is positioned within culture studies with its dedication to understanding lived culture and ways of living in their real complexity and totality.

## **1 MAKING SENSE OF SPACE**

*“To live is to pass from one space to another, while doing your very best not to bump yourself.” (Perec 1997, 6)*

To engage in the conversation about the bodily experience of architectural space is to follow in a significant history and body of research. From philosophy, architecture, art, culture studies, human geography, performance and dance studies to cognitive and neurosciences, diverse fields have contributed to this complex topic and will be drawn on for the present work.

Whether as an a priori background or as the object of study itself, the rather abstract notion of space, and consequently our experience of it, has been understood in a multitude of ways. With architecture operating on the medium of space and being substantially concerned with place, Lefebvre (1991, 15) stresses that “any definition of architecture itself requires a prior analysis and exposition of the concept of space”. In the context of the present research, making sense of the concepts of space and place is essential.

Any conversation about the experience of space, architectural or not, is deeply informed by how the closely related concepts of space and place are understood. How space and place are conceptualised shapes how spatial experience is interpreted. Indeed, the British human geographer and poet Tim Cresswell goes as far as viewing place as a way of seeing, experiencing and sense-making in his book *Place: An Introduction* (2014). Place, for him, is thus not a mere object of study but a metaphysical epistemology. Space and place are such fundamental concepts that the way we conceive of them shapes our general sense-making of the world.

### **1.1 Traditions of Treating Space**

Engaging in a discussion about space is a challenging endeavour. Space is a very abstract and therefore hardly graspable concept. Although there is a common sense idea of what space is, its essence seems vague, at risk of being abused in its commonplace use, and elusive upon closer philosophical investigation. The Swiss architect Peter Zumthor (1997, 22) thus appears to refrain from trying to understand space: “I do not claim to know what

space really is. The longer I think about it, the more mysterious it becomes”<sup>3</sup>. For the present research, a conceptualisation of the much used and abused terms ‘space’ and in close connection ‘place’ is paramount in order to approach the matter.

The first rather clear conceptualisation of space and place in Western thought is formulated by Plato (2008). Interested in how things come to exist, he describes ‘chora’ as the material substratum or *prima materia* and that which is distinguished from the void. Chora is extended into space if not space itself (Cresswell 2014, 25), functioning as a type of “receptacle of all created and visible and in any way sensible things [...], but is [itself] an invisible and formless being which receives all things and in some mysterious way partakes of the intelligible, and is most incomprehensible” (Plato 2008) and further as a “third nature - that of space, which is indestructible, and is perceived by a kind of spurious reason without the help of sense. This is presented to us in a dreamy manner, and yet is said to be necessary, for we say that all things must be somewhere in space” (ibid.). Though conceived as a receptacle, space is not a mere container extended in space. Space, as chora, is the condition of existence; it is that which allows for things to exist. In this sense, objects are not so much *in* space but rather *of* space.<sup>4</sup> Differentiated from chora is ‘topos’, which is an “achieved place - the product of a process of becoming” (Cresswell 2014, 25). As such, topos is a natural place, a site defined by its specific features of nature. Chora, in contrast to the natural place of topos, is the space in which forms are in the process of becoming.

Aristotle’s (1991) distinction between chora and topos is rather one of scale, with chora as a larger region and topos as a smaller site. But in line with Plato’s concept of chora, Aristotle understands space or place as that which is the basis of existence for everything in the world (Cresswell 2014, 25). For anything to exist, it must be in space, it must have a place.

In contrast to this conception of a *prima materia* which underlies and constitutes all existence, modern philosophy has come to theorise space in more analytical, logical and mathematical terms (Hubbard and Kitchin 2010). The modern notion of space is founded less on metaphysics and more on the mathematics of Euclid, the founder of geometry

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<sup>3</sup> Even in this statement we find something of the essence of space, namely that its meaning can hardly be grasped through reflection, as will be further explored from a phenomenological view in the next sub-chapter.

<sup>4</sup> This notion of space as the material substratum enabling, rather than containing, all existence reverberates in Merleau-Ponty’s (1978, 148) claim that “our body is not primarily *in* space, it is of it”.

(Heath 1956). Euclidean space is geometrical, universal and absolute. Deeply engrained in the Cartesian and Kantian rationalist worldview, such logico-mathematical space governed by coordinates corresponds perfectly to modernity's project of making measurable the world and everything in it. Similar to Plato's notion of the receptacle but without the metaphysical aspect, Euclidean space is conceived of as an empty container and blank canvas of infinite extent, a neutral framework for a collection of contents, for actors, objects and experiences (Hays 2000; Summers 2003).

It is based on this conception that the geography of modernity has developed. As an academic discipline, geography has been concerned with the physical traits of the type of space that is similar to topos, that is, a natural space or place. In line with the notion of a neutral container, phenomena are thought to appear in specific locations more or less by coincidence, their nature independent and without any metaphysical or causal connection to the place. But the image of the container is logically problematic, as Merleau-Ponty already stresses in *Phenomenology of Perception*, originally from 1945:

There is naturally no question of a relationship of container to content, since this relationship exists only between objects, nor even a relationship of logical inclusion, like the one existing between the individual and the class, since space is anterior to its alleged parts, which are always carved out of it. Space is not the setting (real or logical) in which things are arranged, but the means whereby the positing of things becomes possible. This means that instead of imagining it as a sort of ether in which all things float, or conceiving it abstractly as a characteristic that they have in common, we must think of it as the universal power enabling them to be connected. (Merleau-Ponty 1978, 243)

Merleau-Ponty (1978) understands space not as neutral and inactive but suggests a certain dynamism which is more similar to Plato's and Aristotle's notion of space as the enabling condition of existence than to the Euclidean concept of a neutral container and setting. Rather than an abstract ether or passive receptacle, space involves power, energy, something of activity. Several decades after Merleau-Ponty, Summers (2003, 40) argues that the coordinate space of Euclid's geometry is the "framework for the channeling and control of modern resources". In this view, space does not neutrally accommodate existing objects and relations, but plays an active role in producing and establishing these.

Although Merleau-Ponty (1978) had already challenged Euclidean space before the middle of the nineteenth century, the logico-mathematical paradigm has initially persisted and was reinforced in the Quantitative Revolution of the 1950s and 1960s (Hubbard and

Kitchin 2010, 2). Under the modernist motto of making the world measurable, space has been conceived of and treated as a neutral and geometrical backdrop.

During the second half of the twentieth century, however, the geometrical concept of space as a neutral container with more or less randomly situated contents has been questioned by various voices and from diverse perspectives. In response to the strictly mathematical approach of the Quantitative Revolution, the spatial turn in the social sciences and humanities of the 1980s, when “many anthropological readings of the tactics of everyday life have foregrounded place in setting the rhythm of social conduct” (Hubbard and Kitchin 2010, 2), has profoundly challenged the mathematical paradigm. By acknowledging and emphasising the spatial dimension of social and cultural phenomena, the spatial turn has inspired a seeming omnipresence of spatial thinking in the humanities. Thus, while Merleau-Ponty’s phenomenological notion of space has not initially and by itself changed the discipline of geography, space has become “the everywhere of modern thought” (Hubbard and Kitchin 2010, 2) with the spatial turn, in which diverse objects of study are approached through the lens of space.

Despite the various formulations proposed as part of the spatial turn, it was “arguably not until the work of the Marxist theorist Lefebvre (1991) that this notion of space as socially produced was convincingly (if sometimes obtusely) articulated” (Hubbard and Kitchin 2010, 5). According to Lefebvre, space is not pre-existent and absolute but relativised and produced by social activity within a historical context or, more specifically, within capitalist society<sup>5</sup>. As the concept of space is being redefined by social groups over the course of history, the kinds of spaces we seem to or deem to inhabit change and are constantly re-negotiated, developed and produced. The absolute space implied by the Cartesian and Euclidean logic does not exist for us in our lived realities. There may be absolute space, but it is not available to our direct experience. Hence, to conceive and represent space as absolute is implied in a relativised, historical abstract space, which is an abstract conception and representation of space. The historical particularity of the production of space, as suggested by Lefebvre, “counters the Kantian treatment of space and time as universal, empty containers whose forms stand as frameworks that structure experience but are not themselves part of that experience” (Hays 2000, 174). Based on

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<sup>5</sup> Although Lefebvre (1991) is concerned with the socio-political dimension of space, coming from a Marxist perspective, the implications of his conceptualisation of space are relevant to other contexts, such as the arts.

such historicity, Lefebvre suggests investigating the variety of historical conceptions of space. While a history of space has been initiated by the Swiss architectural historian Sigfried Giedion in *Space, Time and Architecture* (1967), Lefebvre develops and qualifies this approach (Hays 2000).

In an attempt to describe the intertwined relation between cultural, spatial practice and representations and imaginations of space, Lefebvre (1991, 40) proposes a trialectics of spatiality, distinguishing between spatial practices or perceived space, representations of space or conceived space and representational spaces or lived space (Hays 2000). Perceived space is the space of the everyday and of common sense, the space according to popular understanding, spatial practices and lived reality and is of a corporal nature (Hays 2000). Conceived space is the official and professional space of theory and science and includes various representations of space. Lived space, finally, is the space of dwelling and of the imagination, the representational spaces sustained by the arts and literature. The imagination, art and literature maintain experiential space. It is a space of transcending and refiguring (Shields 2010, 281). Lefebvre (1991, 34) stresses the significance of the lived dimension of space: “Like all social practice, spatial practice is lived directly before it is conceptualized”. Therefore, he criticises that the supposed “primacy of the conceived over the lived does injustice to the ‘unconscious’ level of lived experience *per se*” (ibid.). This view presents a significant shift in how space has come to be conceptualised since the Euclidean and mathematical concept.

In a similar vein, the humanistic approach taken by geographers like Anne Buttimer (1976; 1983; 1994), Edward Relph (1976) and Yi-Fu Tuan (1974; 1977) acknowledges and emphasises the experiential properties of space, in reaction and as a counter to the physical geography of geometrical coordinate space (Hubbard and Kitchin 2010, 6). The humanistic and phenomenological notion of experienced and lived space highlights the subjectivity of experience which constitutes a world of meaning.

In Lefebvre’s (1991) conception, space is articulated or produced, gaining meaning through a process of signification. He thus speaks of the production of space which is in stark opposition to the view of space as always-already there in form of a ready container. In his words: “To speak of ‘producing space’ sounds bizarre, so great is the sway still held by the idea that empty space is prior to whatever ends up filling it” (Lefebvre 1991, 15).

The nature of space, then, is not passive but, in line with Merleau-Ponty (1978, 243), involves a spatial practice and an activity of production.

The idea of production underlines the role of the subject with regards to how space is defined. Imagining completely empty space, we must realise the following: “In space *itself*, independently of the presence of a psycho-physical subject, there is no direction, no inside and no outside” (Merleau-Ponty 1978, 204). Therefore, absolute space is indiscernible (Lefebvre 1991, 169). What is needed in order to discern space is orientation and axes. In order to establish those, “it is necessary for space to be *occupied*” (ibid.)<sup>6</sup>. More precisely, it is necessary for space to be occupied by the body. A space without orientation or direction, which are its essential properties, is not a space. It is therefore necessary for a body, a subject, to occupy space in order to invest it with orientation, direction, in short, with significance. In this sense, “there can be a direction only for a subject who describes it, and a constituting mind is eminently able to trace out all directions in space, but has at any moment no direction, and consequently no space, without an actual starting-point, an absolute ‘here’ which can gradually confer a significance on all spatial dimensions” (Merleau-Ponty 1978, 247). Space is then “absolutely relative” (Lefebvre 1991, 170): it is abstract as a mathematical and primordial space and yet concrete because it allows for an absolute ‘here’ in that “it is in space that bodies exist, that they manifest their material existence” (ibid.). Perhaps space is not clearly one or the other, neither a purely passive, universal, absolute backdrop, nor entirely subjective, malleable and relative, but has dimensions of both. And the subject or body actively inhabits such absolutely relative space rather than passively being in space.

The space established by the body differs from the mathematical and homogenous space concept inherited from Euclid and Descartes. The Austro-Hungarian dance artist and theorist Rudolf Laban (1960) differentiates between neutral, infinite space and the space within immediate reach of the body, which he calls the ‘kinesphere’, derived from the Greek *kinesis* for movement and *sphaira* for ball or sphere. The space defined by the body is a sphere of movement and action because it is the space within reach of, and available to, the expression of body movement. It is part of the field of perception and action which

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<sup>6</sup> This observation is an interesting counterpart to Plato’s observation that for anything to be at all, it “must be somewhere and occupy some space” (Plato 2008). Space must be occupied in order to signify anything, while things and humans must occupy space in order to be at all. There is thus a reciprocal, mutually constitutive relationship between space and beings.

constitutes our being-in-the-world. This movement or action space, this experienced space in phenomenological terms, is not absolute but changes in size and expansion according to the movement of the body (Maletic 1987, 197).

### 1.1.1 Making Place, Making Meaning

While the body, as discussed above, is the primary signifier of space and marker of place, it is not the only one. The German philosopher Martin Heidegger (1971), in his influential article “Building, Dwelling, Thinking”, originally published from a lecture presented in 1951, offers the example of a bridge in order to differentiate between undefined space and specific locations, claiming that “only that, which is itself a *location*, can make space for a site” (Heidegger 1971, 9). He uses the example of a bridge to demonstrate how the position of a construction articulates a certain space, produces a specific site or location so to say. “The *location* does not already exist before the bridge does. [...] it is from the bridge itself that a location is made. [And thus] a *space* has been made” (Heidegger 1971, 9). Considering the original meaning of the German word ‘Raum’ or in old German ‘Rum’ which means “a place cleared for settlement or lodging” (ibid.), space is understood as being enabled by making room for it within a boundary. A boundary then is “not that which stops something, but rather, [...] that from which something *begins its nature*” (ibid.). Therefore: “*Space* is essentially *that which is made room for*, that which is let into its boundary” (ibid.). In this sense, boundaries define space and let place come into being. This idea resonates with Zumthor’s (1997, 22) statement, with which he continues and counters the previously cited resignation: “About one thing, however, I am sure: when we, as architects, are concerned with space, we are concerned with but a tiny part of the infinity that surrounds the earth, and yet each and every building marks a unique place in that infinity”. Buildings, by drawing boundaries and demarcating portions of space, give meaning to space and thus create place<sup>7</sup>. It follows that “*spaces receive their nature from locations and not from space in general*” (Heidegger 1971, 9). And thus, locations come into being by means of constructions and sites like the bridge, by being occupied.

Place, being demarcated, has come to be conceptualised as the specific form of space, distinguished through naming and particular activities (Hubbard and Kitchin 2010,

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<sup>7</sup> Rasmussen (1962) elaborates on the difference between the architecture that focuses on the solid and tectonic elements on the one hand and the architecture that centres around the cavity, in other words the space that is made room for within the boundaries, on the other hand.

6). In a similar vein, Cresswell (2014, 25) speaks of the “space-making properties of place”. In this now widespread view, place is essentially a space invested with meaning and as such also different from location. Defined by meaning rather than by geodetic location, place “need not have any fixed location at all” (ibid., 37). Rather, it gains its distinct and more-or-less delineated character from the lived, meaning-making experiences of those who inhabit and pass through it (Hubbard and Kitchin 2010, 6). If space is the realm of abstraction, then place is that of experience (Cresswell 2014). The notion of meaningful place as differentiated from the often very abstract notions of space owes much to humanist geography. With their distinctive features, “space provides the context for places but derives its meaning from particular places” as the Canadian geographer Edward Relph claims in his famous book *Place and Placelessness* (1976, 8). Space and place are not only closely related but also mutually dependent and constitutive.

The humanist view of place is dedicated to the human and experiential dimension, in contrast to conceptions of space in which the human subject is simplified (Tuan 1974). It foregrounds its role in constituting a sense of belonging and a locus for identity (Hubbard and Kitchin 2010, 6). The commitment to human existence and experience is quite explicit in Relph (1976). According to him, the where and how of the enactment of everyday life is based on the intuitive and experiential knowledge of places. In this sense, the “essence of place lies in the largely unselfconscious intentionality that defines places as centres of human experience” (ibid., 43). Place is of fundamental importance for the human experience and existence in the world.

While place is understood here as space invested with meaning, the term space is frequently used in cases where a process of signification and meaning-making takes place. Although in these cases it could be argued that, due to such meaning-making, we are to speak of place rather than space, the term space is often preferred because it seems to express the open possibility of signification as opposed to the rather fixed and established meaning of place. That is why, in the following, the term space will often be used despite signification taking place in order to emphasise the openness and dynamism of the process.

The practico-sensory and experiential emphasis of humanist geography – in stark contrast to the logico-mathematical notion of Euclidean space – resonates with Lefebvre’s (1991) concept of spatial practice and of lived space. A better understanding of what he calls ‘spatial codes’ can be gained thanks to this background. Spatial codes are structures

of spatial practice and production. Through an inventory of spatial codes, he seeks to establish a system of space with the aim not to produce a discourse on space but to expose the production of space, establishing a 'truth of space' rather than any one 'true space'. On the basis of such a system, "an already produced space can be decoded, can be *read*" (ibid., 17), which implies a prior process of signification. However, as Lefebvre (ibid., 47-48) points out, "a spatial code is not simply a means of reading or interpreting space: rather it is a means of living in that space, of understanding it, and of producing it". Space is produced not to be read but "to be *lived* by people with bodies and lives in their own particular urban context" (Hays 2000, 183). This concept of spatial codes echoes Merleau-Ponty (1978, 221) when he speaks of "a particular manner of being in space and, in a sense, of making space". A spatial code is a manner of living in a space, of being in space, of producing or making space. Hence, "place is seen to be made through the rhythms of being that confirm and naturalise the existence of certain spaces" (Hubbard and Kitchin 2010, 7). In this sense, places are the lived spaces of spatial practice (Hubbard and Kitchin 2010; Lefebvre 1991). Such production of space through being and living in it after a particular manner is not a production in the sense of manufacturing but rather in the sense of articulating, defining and activating a specific space.

Since "place is involved with *embodiment*" (Hubbard and Kitchin 2010, 6; Thrift 2003) through the necessary occupancy of space by a body (Lefebvre 1991), it is only through the body that we experience, comprehend and therefore inhabit space. Lefebvre (ibid., 170) asks: "Can the body, with its capacity for action, and its various energies, be said to create space?" And he answers that "each living body is space and *has* its space. [...] the body with the energies at its disposal, the living body, creates or produces its own space; conversely, the laws of space, which is to say the laws of discrimination in space, also govern the living body and the deployment of its energies" (ibid.). The subject, the human body, and the object, the surrounding space, stand in a reciprocal relationship. To make sense of the experience of architectural space, this reciprocity between subject and object is a central idea.

### **1.1.2 Real Space and Virtual Space**

The historical and cultural traditions of treating space have implications not only for how we relate to it, but also for how art has been theorised and how art history has been thought

and written (Summers 2003). This relation is reciprocal in that the arts, simultaneously, sustain the lived space of the imaginary (Lefebvre 1991). Space concepts shape artistic practices while artistic expressions generate ideas and imaginations of space.

In an approach to rethink art history by analysing the spatial concepts that inform it, Summers delineates two rather contrasting notions of space in *Real Spaces: World Art History and the Rise of Western Modernism* (2003). Distinguishing between real space and virtual space, he postulates: “*Real space* is the space we find ourselves sharing with other people and things; *virtual space* is the space represented on a surface, space we ‘seem to see’” (ibid., 43). In this distinction, real space compares to the Lefebvrian (1991) lived space of corporeality. It is three-dimensional, involves all sensory modes and corresponds to the terms of human spatial existence. Virtual space, in contrast, is a visual and two-dimensional image of space on a surface such as a canvas. “Virtual spaces are always *representations* of space” (Summers 2003, 43), in a literal as well as a Lefebvrian sense.

Summers’s (2003) distinction serves as a framework for the analysis of different artistic and art-historical traditions. According to him, the traditional disregard for the real space of embodied and embedded experience has brought about a formalist history of art that is dedicated to the so-called ‘visual arts’ (ibid., 41). The notion of visual arts is based on the “Western assumption that art taken altogether is *about* visual perception” (ibid., 15). A formalist art history of visual arts, then, risks reducing art to the visual and images to form, treating other aspects “as art-historically irrelevant” (ibid., 28).

The visual in the visual arts, according to Summers (2003, 41), is not so much just about eyesight, but rather about the inner, strongly pictorial faculty of imagination. The notion of pictorial imagination goes hand in hand with the formalism of Western modernism. As formalism and representationalism assumed increasing centrality in art history as a “*counterforce* to the newly mathematical and objective space” (ibid., 29), imagination became associated with pictorial vision.

That is why, in pursuit of a more complete art historical understanding, Summers (2003) proposes a post-formalist art history which is centred on the concept of ‘spatial arts’ rather than ‘visual arts’. Where visual art is about two-dimensional representations of virtual space, spatial art acknowledges its embeddedness in real space and therefore allows for an interaction in the spatial dimension of human experience. Summers’s distinction between visual arts and spatial arts serves to highlight different emphases in the art-

historical analysis of works, where the approach to visual arts, on the one hand, privileges their qualities that pertain both to pictorial imagination and the approach to spatial arts, on the other hand, acknowledges their presence in real space. Hence, the concept of spatial arts offers a better tool to make sense of the history of art by recognising the significance of the real space of embodied relations between works of art and those who engage with them. Summers's distinction thus somewhat differs from the categorisation of visual arts as painting, drawing and photography as opposed to spatial arts which include sculpture, installation and architecture.

In line with the idea that space is articulated and produced by the body, Summers's (2003, 36) real space is likewise defined by the body. The body's conditions of existence are the "*conditions of real space*" (Summers 2003, 36). These are the positive conditions which enable human life and space and the existence of space for the human experience. The "'anthropomorphism' of the conditions and values of real space provides the irreducible basis for the meanings given to the world ... and for our self-understanding *through* that world" (ibid., 38). In relation to our own spatiality, space has meaning. "The conditions of our own real spatiality entail the broader conditions of our finding ourselves in the world" (ibid., 38). In this sense, real space correlates to Lefebvre's (1991) lived space and is different from the historical representation, to use his terminology, of space as a metric and infinitely large geometrical container governed by coordinates and mathematical laws

The dependence of our experience of space on our own spatial existence is fundamental to the phenomenological view of the experience of space, as will be elaborated in the following section. Indeed, the phenomenological view of space is one that emphasises its embodied and synesthetic dimension as opposed to the purely visual and disembodied virtual space.

## **1.2 Phenomenology and Space**

The criticisms of the logico-mathematical concept of space were largely a response to a perceived inability of that paradigm to represent and respond to lived, human experience. It is this experiential dimension on which the philosophy of phenomenology is founded and in which it is interested. That is why phenomenology has widely served as a framework to re-think space in more human and lived terms.

As a strand of philosophy, phenomenology is difficult to define and delineate. Since different thinkers focus on different aspects and ideas, some argue that there are “as many phenomenologies as there are phenomenologists” (Spielberg 1982, xxviii). However, despite the variety and at times seeming ambiguity of approaches, certain shared themes can be said to establish the common basis of phenomenological thought. Furthermore, phenomenology appears to be less of a theoretical system and more of a method, practice or approach. In contrast to other ‘ologies’, it is a way of thinking rather than a theory.

Inheriting central ideas from the German philosophers G. W. F. Hegel (2018), Edmund Husserl (1970), considered the principal founder of phenomenology, as well as Heidegger (2010), Husserl’s student and successor at the University of Freiburg, Merleau-Ponty’s (1978) phenomenology is particularly pertinent for the question at hand. His grand *Phenomenology of Perception*, originally published in 1945, is not only a key work on phenomenology and perception but also a classic reference on the experience of space. While the concept of space and spatiality is recurrent in various forms, the chapter on “Space” offers one of the foundational investigations of the issue in modern Western philosophy. Ever since, phenomenology has been of interest for studies concerned with the experience of space as well as architecture, thanks to its philosophical yet concrete appeal and potential for architectural practice.

As the study of essences, phenomenology is characterised by a return to the things themselves (Husserl 1970). Indeed, it is “the process of letting things manifest themselves” (Heidegger 1967, xiv). At the foundation of phenomenology is the question of knowledge, of how knowledge is obtained. To approach this question, phenomenology opposes the logical rationalism that has shaped modern philosophy and science and instead returns to direct perception and experience as such.

Phenomenology is a reaction and opposition to rationalist and positivist philosophy, which has its origin in Descartes’s thinking and on which much of modern science, as well as so-called common sense, is founded. According to the Cartesian emphasis on reason and logic, knowledge is largely obtained through reflective thought. Through reasoning, the subject is deemed capable of revealing the truths of objects and of the world, in other words, gaining objective knowledge. Such objective knowledge, that is, knowledge of the object as it is, i.e. the object *in-itself* in Immanuel Kant’s (1998) sense, cannot be obtained through any one specific, hence partial and incomplete view from somewhere but must be

an abstract, universally valid, third person view: instead of a view from somewhere, it must be, like God's ideal perspective, a view from nowhere.

Phenomenology draws attention to the crucial incoherence of this approach, namely that "a view from nowhere, after all, would not be a *view*" (Carman 2012, xi). Instead of the impossibility of such a third person perspective, phenomenologists consider the human perspective, which is "always a view from *somewhere*" (ibid., xi), and a specific perspective, the starting point of knowing. Phenomenology seeks to "describe the basic structures of human experience and understanding from a first person point of view, in contrast to the reflective, third person perspective that tends to dominate scientific knowledge and common sense" (ibid., viii). It is through the subject's perspective, through subjective experience, that knowledge about the world can and must be gained. Therefore, experience must be "at once *in* a point of view and yet open *out* onto the world" (ibid., xi). Hence, the subject's situatedness in the world, the subject's "being-in-the-world", as coined by Heidegger (2010, 39), underlies all knowledge acquisition.

With this understanding, phenomenology opposes the Cartesian rationalist tradition. The emphasis on subjective perspective as grounded in experience is in line with the notion of perception as "our primary form of knowing" (Pérez-Gómez 1983, 3), in other words with the "primacy of perception as the ultimate evidence of knowledge" (ibid., 9). This form of knowing is not reflective and logically derived but, instead, experiential and factual in the sense that it is founded on the direct experience of lived facts. Therefore, in contrast to reflective rationalism, phenomenology is the study of essences because it "puts essences back into existence, and does not expect to arrive at an understanding of man and the world from any starting point other than that of their 'facticity'" (Merleau-Ponty 1978, vii). The facticity of things is grasped through perception which is characterised by a naive contact with the world, established by being-in-the-world. The perceptual field is "a surface in contact with the world, a permanent rootedness in it" (ibid., 207). It follows that perception is grounded in a situatedness in the world and therefore knowledge, rather than being abstract and reflective, is concretely grounded in perceptual facts and "takes its place within the horizons opened up by perception" (ibid.). Perception is the foundation on which knowledge is based and the scope within which knowledge can manifest itself.

This is not to deny the possibility of deepening knowledge through rational and analytical thought or scientific investigation, but to stress that all such analysis has a foundation in perceptual experience. To use a rather simplified example, we would not be able to do research on the laws of gravity if we did not have an initial perceptual experience of the lived facticity of gravity.

While perception thus underlies knowledge, it is to be distinguished clearly from thought: “Perception is *not* a mode of thought; it is more basic than thought; indeed, thought rests on and presupposes perception. [...] We learn *how* to think about what we already find ourselves seeing, hearing, grasping: ‘a child perceives before it thinks’” (Carman 2012, xii). It is this basic perception, this “pre-reflective grasp of our own experiences” (ibid., xiv), that phenomenology is interested in. Phenomenology is founded on the direct description of experience as such, leaving aside causal explanations and theoretical or deductive approaches (Carman 2012; Merleau-Ponty 1978).

Based on its reawakening of immediate and primary experience, phenomenology is the appropriate lens through which to investigate how we experience space and architecture. The dimension of experience is that of the lifeworld (Husserl 1970). It is the practical and taken-for-granted realm of the everyday which shapes our experience of the world and which Husserl describes as follows:

In whatever way we may be conscious of the world as universal horizon, as coherent universe of existing objects, we, each "I-the-man" and all of us together, belong to the world as living with one another in the world; and the world is our world, valid for our consciousness as existing precisely through this 'living together.' We, as living in wakeful world-consciousness, are constantly active on the basis of our passive having of the world... Obviously this is true not only for me, the individual ego; rather we, in living together, have the world pre-given in this together, belong, the world as world for all, pre-given with this ontic meaning [...] The we-subjectivity [is] constantly functioning. (Husserl 1970, 108-109)

Not only is our experience and all our knowledge shaped by and grounded in our being-in-the-world, this being-in-the-world is a constant backdrop and framework to our existence. To exist is to be profoundly, if perhaps not conceptually, aware of one's own being-in-the-world and to have a world-consciousness. The lifeworld, as the sphere of what is familiar, common and taken-for-granted, is exactly what phenomenology seeks to describe. Through the naive contact and an attitude of wonder towards the world, an attitude free from presuppositions, experiences that are otherwise taken for granted are

described and made aware of, not through reflection but through the immediacy and a certain naiveté of wonder.<sup>8</sup> In this way, phenomenology, and in particular Merleau-Ponty who develops it, performs the recollective function of philosophy: “to remind us in a flash of recognition what we feel we must already have comprehended, but had forgotten precisely owing to our immersion in the visible world” (Carman 2012, xvi). With an approach to direct and perhaps naive experience, phenomenology seeks to regain this fundamental knowledge that is grounded in being-in-the-world in an almost naive state of wonder.

Of course, the way phenomena are experienced, despite a shared level of similarity, differs between perceivers: we have common and yet different worlds. What and how we perceive is not a mere question of coincidence but is directed and determined by what phenomenologists call intentionality. Conceived in the phenomenological sense by Husserl (e.g. 1970), this central concept describes the searching or seeking nature, that is, the directedness or ‘aboutness’ of perception and consciousness. It stresses the significance of attitudes in the perception of things in that “the attitude directly determines the phenomena” (Norberg-Schulz 1965, 31). A perceiver’s attitude and intention has a significant influence on the way something is perceived or experienced. Therefore, perception “is anything but a passive reception of impressions” (ibid.). The notion of intentionality describes this “*active* character of the act of perceiving” (ibid.) and the directedness of perception and consciousness. In other words, consciousness must always and necessarily be directed towards something, must be consciousness of something (Carman 2012, viii; Merleau-Ponty 1978). The subject is not conscious in a floating, undefined state but is always conscious of an object as part of the world. Similarly, while experience is multi-layered and holistic, it is always an experience of something, of the world and of being-in-the-world. The active and directed quality of perception entails the possibility of intentional depth, that is, the closer study and active judgment of a perceived object (Norberg-Schulz 1965, 31). Thereby, the object can be understood on different

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<sup>8</sup> The French novelist Georges Perec beautifully describes such an attitude in *L’Infra-Ordinaire* (1989, 9): “Ce qu’il s’agit d’interroger, c’est la brique, le béton, le verre, nos manières de table, nos ustensiles, nos outils, nos emplois du temps, nos rythmes. Interroger ce qui semble avoir cessé à jamais de nous étonner. Nous vivons, certes, nous respirons, certes; nous marchons, nous ouvrons des portes, nous descendons des escaliers, nous nous asseyons à une table pour manger, nous nous couchons dans un lit pour dormir. Comment ? Où ? Quand ? Pourquoi ?”

levels, with the mere physicality as a lower object level and cultural meanings as a higher object level.

Through the directedness of consciousness and experience, a reciprocal relationship is established between subject and object. In *Phenomenology of the Visual Arts* (2009, 3), the British philosopher Paul Crowther defines the notion of phenomenological depth as the “*ontological reciprocity of subject and object of experience*”, describing “*how the relation between object and subject of experience changes character on the basis of different modes of perception and action*”. This idea is particularly interesting with respect to the relationship between the subject’s body and the experience of architectural space through perception and action, and the details of this dynamic will be further elaborated on in what follows. It also resonates with Lefebvre’s (1991, 170) idea introduced earlier that the body creates or produces space, and space in turn frames and influences the body. The idea of reciprocity and co-dependence between subject and the environment points to what according to the American philosopher Taylor Carman (2012, xv) is the most important acquisition of phenomenology, namely to join extreme subjectivity and extreme objectivity in its notion of the world or of rationality.

### **1.2.1 Bodily Perception and Being-in-the-World**

Our experience, through which knowledge is gained, is grounded in our being-in-the-world. This Heideggerian (2010, 39) concept describes human existence in the world as being always and necessarily bodily. It is through our body that we are physically situated in the world. Consequently, it is also through the body that we perceive and that we have the perceptual perspective which is crucial for knowing. In the words of Merleau-Ponty (1978, 206): “we shall need to reawaken our experience of the world as it appears to us in so far as we are in the world through our body, and in so far as we perceive the world with our body. But by thus remaking contact with the body and with the world, we shall also rediscover ourselves, since, perceiving as we do with our body, the body is a natural self and, as it were, the subject of perception”. Phenomenology thus stresses the connection and interdependence between the body, bodily being-in-the-world, perception and a sense of self. Through the body, we are in the world, which enables us to perceive the world. Simultaneously, through perception, we experience our being-in-the-world and thus

strengthen our sense of self and of subjecthood, experiencing ourselves as the subject of perception.

Based on the body's being-in-the-world, perception is "not just contingently but *essentially* bodily" (Carman 2012, xiii). Perception is a function of corporeal existence: We perceive the world by being in the world as bodies. It is through the bodily capabilities of the senses and the motor system that we perceive. Therefore, the "phenomenal field is neither caused nor defined but *constituted* by the sensorimotor structures and capacities of the body. The structure of perception just *is* the structure of the body: my body 'is my point of view upon the world'" (ibid., xv). Through bodily perception, the world takes on form for us.

Not only does the body's embeddedness in the world give access to it through perception; moreover, the structure of our embodiment shapes the structure of perception. This relationship is not just based on the seemingly passive and receptive functions of the senses. Since perception and consciousness must always be perception and consciousness of something, must be directed towards something, there is always an active element of intentionality involved. The active engagement with the surroundings shapes the structure of experience. Intentionality is constituted "by noncognitive – indeed often unconscious – bodily skills and dispositions" (Carman 2012, x); it is the "skillful bodily responsiveness and spontaneity in direct engagement with the world" (ibid.). Perception is the active and intentional pursuit of the experience and of knowledge of the world. Through intentionality and perception, the body and the environment relate to each other. In fact, the proximity of this relationship has been emphasised by neuroscientific research into the so-called mirror neurons which is based on a bio-cultural approach emphasising the connection between biological and cultural factors in the human experience of life (e.g. Gallese 2015; Zahavi and Gallagher 2008). According to such research, perceptions have a resonance effect on our body. The discovery of the mirror neurons has inspired the suggestion or interpretation that the perceptual process involves a kind of imitation or simulation by the body in order to make sense of the perceived object, an idea which is already expressed in Aristotle's concept of *mimesis* (Pallasmaa 2015, 16). In such a way, the body and the environment are integrated and interwoven through intentional perception.

If perception, our primary means of knowing, is bodily, then the body has access to knowledge prior to reflection and reason; "long before the analysing, separating intellect,

long before formal knowledge, there was an intelligence of the body” (Lefebvre 1991, 174). Ours is a “knowing body” (Merleau-Ponty 1978, 283). And bodily knowledge differs from rational, intellectual knowledge. Rather than being formulated around abstract concepts in logically coherent ways, corporeal knowledge is an experience of significance prior to its expression in linguistic and logical structures (Carman 2012). Objects and situations have meaning and make sense for us as they do for animals and preverbal children. In a primordial way, environmental circumstances are processed for the meaning they have for our lives (Mallgrave 2013, 61). Such sense-making is directly linked to the experience, habit and familiarity of the lifeworld: “I perceive with my body or my senses, since my body and my senses are precisely that familiarity with the world born of habit, that implicit or sedimentary body of knowledge” (Merleau-Ponty 1978, 238). Things are perceived and understood according to the perceived and indeed felt significance they have for us in the context of our lived experience. This happens in and through the body; it is the body that gives meaning.

Phenomenological and embodied meaning is not, and does not claim to be, equal to the positivist notion of truth. Phenomenology is not interested in establishing the objective truth of things but in the experience of things. Therefore, it does not make use of theory and scientific method. Knowledge, in the phenomenological perspective, corresponds to the experienced meaning rather than to some objective truth. Likewise, phenomenology, although critical of scientism, does not attack science *per se* but rather the position of and attitude towards science as the key to knowledge of the world (Gallagher and Zahavi 2012, 99). In opposition to such scientism, phenomenology emphasises the primacy of perception for the acquisition of knowledge. But architectural phenomenology in particular has been criticised for deepening a gap where it seeks to close one by separating lived, subjective experience from the wider structural and historical context which is to be analysed in theoretical terms, rather than uniting both (Hays 2000, 462-463).

Bodily perception is shaped and enabled by a subjective perspective. Perception must always be perception from somewhere, from a particular perspective. Just as perception is corporeal, so must perspective be corporeal, characterised by our embodied being-in-the-world. “Perceptual perspective is not just sensory or intellectual, but *bodily* perspective.” (Carman 2012, xii) All dimensions of our experience, not only sensory but also intellectual, social, personal, cultural, and historical, are anchored in our corporeal

existence. Echoing the concept of the lifeworld, it is because we have a body that we have access to the world, that we have a world (Sartre 2001). To have a world means to have a world available to perception and experience thanks to the fact of being embedded in it.

The role of the body in perception highlights the corporeal dimension of existence. In contrast to Cartesian rationalism and dualism, embodied perception and embodied knowledge place consciousness inside the body. As opposed to Descartes's famous dictum 'cogito ergo sum', we are not only because we think; we are not only minds. Instead, we are the whole of our being and, fundamentally, "we are our body" (Merleau-Ponty 1978, 206). Our existence is an existence as bodies. Therefore, phenomenology understands "the fact of the sensory experience as the assumption of a form of existence" (ibid., 221), of a form of being-in-the-world. The acknowledgement of the role of the body in perceiving and knowing, which according to rationalist philosophy take place in the mind alone and thus establish the seat of consciousness in the mind, contrasts with Cartesian dualism (Buchli 2013, 139). To recognise bodily knowledge and consciousness of the world is to recognise the unity of body and mind and, moreover, the integration of body, mind and world which together constitute consciousness (Noë 2009).

Perception in this sense originates from a very primary experience of one's own body. From early on, we sense the unity of our own body and develop a conception of our body as unified. The resulting body image underlies the way in which all perception and experience are framed. Indeed, the body image structures perception. Therefore, "the theory of the body image is, implicitly, a theory of perception" (Merleau-Ponty 1978, 206). The perception of objects, and of their unity, is made possible through one's own body image, that is, the experience of the body's unity: It is because I am aware of my body's unity, that I can perceive the unity of objects as I move around them (ibid., 203). Indeed, a certain sense of one's own body is necessary in order to structure the perception of external objects. To learn from sensation means to experience "the living relation of the perceiver to his body and to his world" (ibid., 208). It follows that any "external perception is immediately synonymous with a certain perception of my body, just as every perception of my body is made explicit in the language of external perception" (ibid., 206). Perception not only gives access to the world, making it manifest for us: "The thing, and the world, are given to me along with the parts of my body, not by any 'natural geometry', but in a living connection comparable, or rather identical, with that existing between the parts of

my body itself” (Merleau-Ponty 1978, 205). Perception not only confirms to us the existence of an outer world but also our own bodily existence.

### **1.2.2 Embodied Meaning of Space**

Through bodily perception, we gain knowledge of objects and of the world. We experience our being-in-the-world. The sense of being-in-the-world as embodied beings entails a sense of being in space. Our being-in-the-world is spatial because our physical body is spatial. It is extended into space and has spatial dimensions. The body image, which structures all experience, is that of a “spatial body” (Lefebvre 1991, 195), which constitutes an internal space. The most primary experience of space, prior to any conceptual thinking about the notion of space, is the experience of one’s own body as being spatial and the conception of a spatial body image. The distinction between the German terms ‘Körper’, which is the physical body, and ‘Leib’, with reference to the living body which is an actor in the world, highlights this dimension of the body as experienced and lived. It is on the basis of one’s own spatial body that the experience of being-in-the-world is structured.

Our experience of space is first and foremost corporeal before being mental and rational. The phenomenological approach suggests that we can gain knowledge of the concept of space through the naive contact of direct experience, through “our experience of space, the ultimate court of appeal, according to Kant himself, of all knowledge connected with space” (Merleau-Ponty 1978, 244). We have meaningful experiences of space before we learn spatial concepts through language and theory. “From the outset of life as an individual, man measures and structures the world according to his own body: the world opens up in front of him and closes behind him” (Bloomer and Moore 1982, 13; my translation<sup>9</sup>). We have a pre-reflective grasp of the meaning of space. Such meaning is embodied in the sense that through and in our body, we experience the significance of space. Through this bodily sense-making process, “for any living body, just as for spiders, shellfish and so on, the most basic places and spatial indicators are first of all *qualified* by that body” (Lefebvre 1991, 174). Moreover, since it is the unified body – not individual parts or gestures – that signifies, embodied meaning is a holistic experience.

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<sup>9</sup> Original quote: “Al comienzo de su vida como individuo, el hombre mide y ordena el mundo partiendo de su propio cuerpo: el mundo se abre por delante de él y se cierra por detrás.” (Bloomer and Moore 1982, 13)

Long before learning spatial concepts through theory and language, spatial elements are experienced in the body. Long before learning to think in terms of anatomy, mathematical axes and physical laws, we “learn the meaning of verticality through our bodily comportment. We experience the effects of gravity everywhere and without surcease. We struggle to stand erect, and we learn, through our bodies, some of the meaning of vertical posture” (Johnson 2002, 80). The American architect and professor Mark L. Johnson describes how, through the body, spatial elements such as containment, balance, forces and motion are experienced and given meaning, how embodied meaning is established. In this sense, “if the words ‘enclose’ and ‘between’ have a meaning for us, it is because they derive it from our experience as embodied subjects. [...] A space is ‘enclosed’ between the sides of a cube as we are enclosed between the walls of our room. In order to be able to conceive of the cube, we take up a position in space” (Merleau-Ponty 1978, 204). Through bodily experience, the subject gives meaning to spatial concepts like ‘enclose’ and ‘between’. This is what Merleau-Ponty (ibid., 151) refers to when he speaks about having the impressions of his apartment “in the hands” and “in the legs”: spaces are remembered by the body, and the meaning of spatial experience is stored in the body<sup>10</sup>. It is from the body and in relation to the body that a notion of space comes into being. Merleau-Ponty (ibid., 235) proclaims: “It is my body which gives significance”. The embodied subject defines and articulates space which would otherwise have no meaning.

If spatial meaning is embodied, then the structure of the body must affect the structure of the given meaning. Johnson (2002, 76) thus claims: “*What and how* things have meaning for us is a result of the kinds of bodies we have”. Entering a room as an adult that was last visited as a small child, the room may appear smaller than in memory. As the own body has grown and changed, the perspective and structure of perception has changed. And people with impaired vision or hearing, for example, create different structures of meaning in perceiving the world than people with normal vision and hearing.

In corporeal, spatial experience, movement and sense perception are coordinated “whereby each immediately summons the other” (Massumi 2002, 1). We move, and as we move our senses confirm the impact of our movements in relation with the world. As a consequence, we develop a body image and a sense of self as embodied subjects (Bloomer

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<sup>10</sup> In a similar way, the architect Miguel Lawner in the 2010 film *Nostalgia for the Light* by Patricio Guzmán used his steps to discreetly measure and thus memorise the various spaces at the Chilean concentration camp in which he was imprisoned.

and Moore 1982). The concept of one's body as a unified, individual body situated in the world is established through the integration of movement and sense perception, that is, the correspondence of expected sense perception to real sense perception while moving (Bloomer and Moore 1982; Massumi 2002). As the body moves through space and the senses confirm our relation to such space, the coordination of movement and senses affirms not only the unity of the body but also its situatedness in the world.

It is this notion that space is articulated by movement which informs Laban's (1960) theories of dance, movement and gesture. In line with the phenomenological understanding, he proposes that movement establishes perceived space (Maletic 1987, 189). For him, gesture is the basis for all perceptual experience. Laban's concept of gesture is similar to Merleau-Ponty's (1978) concept of the 'lived body' as the source of action-perception-consciousness, defining the field of perception and action.

The relationship between the body and spatiality is reciprocal. We make sense of the experience of spatiality with our own body, and we make sense of ourselves as embodied beings through the experience of spatiality. On the one hand, we experience spatiality thanks to our being-in-the-world. On the other hand, the experience of space affirms our corporeal existence in the world. Based on the significance of spatiality for our experience and sense of existence, Merleau-Ponty (1978, 221) goes as far as claiming: "Every sensation is spatial".

### **1.2.3 Towards a Phenomenology of Architecture**

Architecture, as a spatial art, is defined by its relation to our experience of space which is essentially a bodily experience. Therefore, embodiment plays a fundamental role in our experience of architecture. "The body is the primary material of the construction of space and the ultimate unit of its sensitive measure, capable of relating to it" (*Os Espacialistas* 2020; my translation<sup>11</sup>). It is our means of experiencing architecture and our lens through which we perceive it. In this context, Johnson (2002, 78) warns that "[i]f we forget our embodiment, and the fact of our being situated within particular environments, we lose the very means for explaining the power and importance of architecture." To experience and to make sense of architecture, the body is the starting point.

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<sup>11</sup> Original quote: "O corpo é o primeiro material de construção do espaço e a única unidade de medida sensível, capaz de se relacionar com ele." (*Os Espacialistas* 2020)

Through the body, we give meaning to space and experience its significance. It is through the body that we give meaning to architecture and that we grasp architectural elements: “The body has a dimension. Through motion it polarises external reality and becomes our instrument of meaning; its experience is therefore ‘geo-metrical.’ The extension of this ‘geometry of experience,’ in Husserl’s phrase, beyond the body’s (and the mind’s) spatiality constitutes the thrust of architectural design, the creation of an order resonant with the body’s own” (Pérez-Gómez 1983, 3). An anecdote offered by Rasmussen (1962) illustrates this. Describing a group of children playing a ball game on the square in front of an Italian cathedral, a game that involves the church walls, the steps that lead up to the square and the square itself, Rasmussen (*ibid.*, 17) remembers: “I do not claim that these Italian youngsters learned more about architecture than the tourists did. But quite unconsciously they experienced certain basic elements of architecture: the horizontal planes and the vertical walls above the slopes. And they learned to play on these elements. As I sat in the shade watching them, I sensed the whole three-dimensional composition as never before”. This situation shows how the natural interaction with architectural and spatial elements establishes the primary foundation for their meaning.

On the basis of these ideas, the strand of architectural phenomenology, beginning in the 1950s, became particularly popular in the 1970s and 1980s with the Essex School, directed by Dalibor Vesely (e.g. 2002) and Joseph Rykwert (e.g. 1981). Based on its practical and experiential dimension, phenomenology has a concrete potentiality for the practice of architectural design and construction (Shirazi 2010). That is why several architects and architectural thinkers seeking a philosophical framework for their practice have turned to phenomenology, including Steven Holl, Daniel Libeskind, Christian Norberg-Schulz, Pallasmaa, Alberto Pérez-Gómez, David Seamon and Peter Zumthor.

Reviewing approaches of architectural phenomenology and summarising key ideas, the Iranian scholar M. Reza Shirazi (2010) proposes an articulated, phenomenological interpretation of architecture. His aim is to develop a method applicable to the thorough analysis of architecture on the basis of a kind of phenomenological itinerary which helps guide the visitor’s perceptions of a building. However, Shirazi (*ibid.*, 85) points out that pure, phenomenological description is illusory because, although stemming from a positive wish for closeness to architecture itself, any description in terms of objects is always based on theoretically defined concepts. Although a direct knowledge of the architectural work is

necessary in order to make sense of it on the level of lived experience, an adequate attitude is needed, according to Shirazi. He argues for an approach combining phenomenological description with theory: “While the theoretical investigation should uncover the possible dimensions of the work of architecture, the immediate experience should grasp it as a totality, as an intermediate object. Theory and experience therefore do not substitute for each other, but may help each other mutually” (ibid., 87). Having been criticised for widening a gap rather than bridging it, architectural phenomenology would benefit from a closer connection rather an opposition to theory.

## 2 THE PARADOX OF ARCHITECTURE

*“Quando (se) faz um projecto de arquitectura, o principal objectivo é libertá-lo da função para o qual foi desenhado.” (Os Espacialistas 2020, referencing Álvaro Siza Vieira)*

### 2.1 A Phenomenological Critique of Architecture

The trend of architectural phenomenology is characterised a phenomenological critique of modernist and contemporary architecture, which is argued to be in a state of uncertainty (Harries 2000) or even crisis (Pérez-Gómez 1983). With an emphasis on the experiential realm, architectural phenomenology criticises the common disregard for the corporeal, synesthetic and lived experience of architecture in favour of visual formalism or also functional minimalism. The criticism includes a variety of aspects and varying emphases, depending on the author. In *Intentions in Architecture* (1965), Norberg-Schulz sketches an overview of the main positions involved – including the client, society, and architects – in the negotiation of issues like aesthetics and artistic status, functionality and technology, which are raised by the phenomenological critique.

Pérez-Gómez, a member of the Essex School of architectural phenomenology, expresses a particularly strong criticism of the seeming crisis of architecture in his book *Architecture and the Crisis of Modern Science* (1983). His perspective largely stems from an application of Husserl’s seminal *The Crisis of European Sciences and Transcendental Phenomenology* (1970) to architecture. For Pérez-Gómez, the crisis of architecture is a manifestation of the general crisis of the modern European sciences as observed by Husserl. The origin of this crisis is found in the apparent omnipresence of technology and of quantitative methods which neglect human experiences and values. Consequently, as modern architecture has focused and relied on mathematics for solving its task, it has lacked consideration for the full human experience. Substantially inspired by Husserl’s phenomenological critique of modern sciences, Pérez-Gómez’s criticism of architecture is similarly a phenomenological counter to modernism, viewing the modernist approach as the source of the problem with today’s architecture. From this perspective, the issue seems “particularly timely and the answer urgent with regard to the predicament of modern architecture, where the prevailing trend of rationalist design, even with its occasional flirting with formalistic trends and populist post-modernism, is not only inadequate to mitigate, but also frequently contributes to, the worsening human condition in modern mass-societies” (Seamon and Mugerauer 2000, 184). In a similar vein, Hannah Arendt

maintains in *The Human Condition* (2013) that one source of the difficulties faced by the Western world is the growing schism between people and their built environment. The result is a loss of intimacy and of nearness (Seamon and Mugerauer 2000, 184). But Pérez-Gómez's condemnation of technology in particular has itself been criticised for ignoring the various and complex ways in which diverse technologies can be, and have been, used and experienced by people (Hays 2000, 463).

Such criticism of modernism is a characteristic postmodern phenomenon. Harries (2000, 7) describes postmodernism as a “phenomenon of modernity's bad conscience, of its self-doubt”. In other words, postmodernism is the “return of everything that modernity tried to repress” (Clarke and Doel 2010, 48). Architectural postmodernism then appears to be “a realization and a response to the failures of modernism. Architecture, along the principles of functionalism, programmatic determinism, and technological expressionism, produced buildings without connection to site, place, the human being, and history” (Jahn 1983, 239). In this sense, several essential dimensions of human experience have been neglected since, as Pallasmaa (2005, 19) claims, “modernist design at large has housed the intellect and the eye, but it has left the body and the other senses, as well as our memories, imagination and dreams, homeless”. As a consequence, architecture has brought about a sense of superficiality, disconnection and even “inhumanity” (Pallasmaa 2005, 17; Pérez-Gómez 1983). In reaction to this, architects and scholars like Pérez-Gómez (2016) raise the question of how architecture can move beyond the modernist enthusiasm for technological and formal innovation to better accommodate, respond and correspond to human needs and values.

## **2.2 How (not to) Look at Space**

According to Pallasmaa (2005), the problem of modernist architecture has to do with a singular focus on the eye and on visuality. This so-called ocularcentrism characteristic of the modern, Western worldview entails a neglect of the other senses and of the body as a whole in architectural experience. The privileged and even hegemonic position of vision causes an imbalance among the senses. With this view of the dominance of vision, which is especially apparent in architecture<sup>12</sup>, Pallasmaa critiques the hegemony of the artistic

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<sup>12</sup> The inclusion of architecture among the visual arts points to this singular focus.

and architectural tradition of treating space as virtual space rather than real space, to borrow Summers's (2003) terms.

The trend of ocularcentrism can be traced back to the origins of Western culture with several ancient Greek philosophers considering vision as the key to knowledge about the world (Jonas 1954, 507). Already Plato and Aristotle thought of sight as offering privileged access to the truth about the world and used visual metaphors to describe knowledge and the noble mental activity of *theoria* (Jonas 1954, 507).

A crucial milestone in establishing the privileged position of vision came with the Renaissance discovery of perspective in painting. Perspectival representation is not only a stylistic device to render paintings, that is, the virtual space of paintings more realistic by creating the illusion of depth; the significance of this discovery is much more profound than that, with philosophical rather than just formal implications. In the revolutionary context of the Renaissance, in which the supposedly God-given world order was questioned, and science challenged divine authority, perspective created the impression that the viewer, whose point of view coincides perfectly with the illustrated perspective, assumed the central position. Perspective places the human being, rather than God, at the centre of the universe. But in painting, the original medium of perspective, this was a very visual experience. Hence, to be more precise, perspective places the eye at the centre of the universe.

With the Enlightenment, the dominant position of vision in Western culture was significantly consolidated (Jonas 1954). The Enlightenment movement is founded on the metaphor of light, equating clear vision with reason and knowledge. Sight is celebrated as the highest of all senses and as the one which gives access to truth. Modernity, with its foundation in the Enlightenment, is therefore marked by an ocularcentrism which views the eye as the source of knowledge and rationalism.

Moreover, by combining the modernist emphasis on vision as the access to truth with the modernist dedication to science, to exact measuring techniques and to rational judgment, the field of aesthetics has assumed a significant place in the modern view of the world and of the arts. The "aesthetic approach", in Harries's (2000) words, applies the methods of mathematical and supposedly universal laws to the realm of beauty. Rather than being in the proverbial eye of the beholder, beauty is understood as the function of specific rules. Such formal aesthetics differ from the Greek 'aesthetikus', defined as that

which pertains to sensorial perception, a conception that is closer to the phenomenological emphasis on the totality of bodily perception (Bloomer and Moore 1982). Modern aesthetics, instead, pertain to vision alone. What Pallasmaa (2005) calls ocularcentrism and what Harries (2000) calls the aesthetic approach are closely related phenomena of modernism in that modernism is inextricably, and perhaps ominously, intertwined with the hegemony of the visual.

In the ocularcentrist and aestheticist approach to architecture, space is treated as virtual space rather than as real space, in Summers's (2003) sense. With the dominance of the eye, the visual dimension of space is being privileged, and space is translated into an image to be looked at. Architecture, here, is considered a visual art form more so than a spatial art. The visuality of architecture is privileged over its spatiality. However, if treated primarily as spatial art, architecture's experiential dimension of real space can be acknowledged. By treating architecture as a spatial art rather than a visual art, real space is recognised as the essential medium of architecture.

While not denying the importance of the visual dimension for the appreciation of architecture, Pallasmaa (2005) criticises the hegemony of vision for causing an imbalance in the sensory experience. This imbalance is also due to the fact that the various senses differ in their nature, structure, and the relationship they establish with the world. Vision, like hearing, is a sense of abstraction and distance in contrast with the concrete, immediate and intimate senses of touch, taste and smell. Vision allows for the perception of an object by placing us at a distance from it. The domination of sight therefore entails a certain distancing and, according to Pallasmaa, a detachment and alienation. He considers ocularcentrist architecture to be narcissistic, serving "solely as a means of self-expression and as an intellectual-artistic game detached from essential mental and societal connections" (ibid., 22). That is why, in reaction, he places particular emphasis on the importance of touch, which is a sense of closeness and intimacy.

### **2.3 The Function of Architecture**

The aesthetic approach and ocularcentrism have implications for the relationship between form and function, which is a much discussed issue in architecture. The approach to architecture focused on visuality and on form has earned architecture a position among the fine arts. But, exploring the limits of this approach in the architectural context, Harries

(2000) points out that aesthetics and the fine arts, as opposed to the applied arts, are traditionally defined by their independence from concerns of functionality and use. Hence, if the fine arts are distinguished from the applied arts on the basis of being free from concerns of use and functionality, then the inclusion of architecture in this category seems to deny it any functional purpose. The emphasis on the visual and the formal is then not only a privilege of sight over the other senses but also one of visual appeal and form over function.

The implication of such a categorisation is in contrast with the common conception that a certain functionality, a practical reason or programme for building, distinguishes architecture from other spatial arts, like sculpture and installation. Already Kant (1951, 166) claims that “the suitability of a product for a certain use is the essential thing in an *architectural work*”, a view which persists in the idea of architecture’s intrinsic relation to functional possibilities, which distinguishes it from other forms of art (Crowther 2009).

From this point of view, the categorisation of architecture as a visual or fine art form – although rightfully stressing the important visual dimension of architecture, in contrast to music for example, and the level of artistic sublimity that it can be taken to – entails the danger of bringing about formally interesting and visually impressive yet self-referential and meaningless structures. This consequence of the dominance of visibility is key to the phenomenological critique of architecture. Advocating a renewed emphasis on architecture’s function of meaning-making, Harries (2000) highlights that successful architecture must consider form as well as function, must be both beautiful and practical.

The famous slogan “form follows function” coined by the American architect Louis Sullivan, which has come to lead much of the modernist and minimalist design movement, has been widely interpreted and misinterpreted, praised and rejected. In the context of the modernist obsession with machines, the celebrated French architect Le Corbusier conceived of houses in very functionalist terms as machines to live in. The Bauhaus school sought to develop the style of modernity which would be style-less and ‘pure’ by being reduced to the functionalist and pragmatic essence of things after the motto “less is more”, coined by the German architect and designer Peter Behrens and then immortalised and popularised thanks to his colleague, the Bauhaus-legend Ludwig Mies van der Rohe.

However, functionalism has turned out to be following a more or less specific style itself, guided by formal criteria and thus shaping a new formal language. Form and

function seem inseparable in design and in architecture, related to each other in a balancing act which has become even more complex with the increasingly blurry boundaries between design, fine art, architecture and other visual and spatial arts.

Despite such confusion, is it possible to define architecture's function? And is it even relevant and meaningful to speak of such an essential function in the contemporary context? On the level of common sense, the purpose of most buildings appears to be rather straightforward: whether family homes, cultural or scientific institutes, governmental buildings, airports or train stations – buildings seem to house or accommodate someone or something more or less specific. What they have in common is to provide shelter of some sort or another, for example for a family in a private house or for artworks in a public museum. Simultaneously, they establish a certain unity for the people, things and activities that they bring together under one roof, uniting both physically and metaphorically a family, an art collection, a governmental body, etc. Furthermore, it is a quality and function of inhabitability which is often brought forward to distinguish architecture from sculpture or installation, the other three-dimensional and spatial arts. Thus, “sculpture is object-form that is uninhabitable, while architecture is object-form that is inhabitable” (Artemel, 2017). This functionalist definition continues to hold sway in art and architecture theory.

But architects as well as artists have frequently challenged the functionality of architecture, questioning the notion that any one function defines the category. The French-Swiss architect Bernard Tschumi, with the work *Parc de la Villette* (1982-1998) for example, questions the division between architecture and sculpture. And regarding projects like *House IV* (1972-1975), the American architect Peter Eisenman maintains, “My work attacks the concept of occupation as given. It's against the traditional notion of how you occupy a house” (Eisenman in Crowther 2009, 175). Similarly, when the American artist Gordon Matta-Clark cuts houses in half, destroying their inhabitability, he plays with this exact criterion of architecture as being inhabitable<sup>13</sup>.

Nevertheless, such postmodern, deconstructive games are largely dependent on what they are challenging. As Crowther (2009, 175) argues, these projects are “playful gestures of rearrangement, rather than genuine challenges” and hence “whatever genuinely interesting games might be played at its periphery, architecture's central function will

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<sup>13</sup> Matta-Clark does so in his 1974 work *Splitting*.

always be *inescapable*". While we may take architecture's inhabitability and, thus implied, its use as the defining criterion, the beauty of architecture that goes beyond mere functionality is often thought to lie in the way it perfectly fulfils its purpose. Considering architecture's proximity to sculpture, arguably most evident in classical architecture, Hegel (1978, 660) claims: "The beauty of classical architecture consists precisely in [its] [...] appropriateness to purpose [...] although it subserves a purpose, it comprises a perfect totality which makes its one purpose shine through all its forms, and in the music of its proportions reshapes the purely useful into beauty". While Hegel celebrates classical architecture in particular, we may argue that a similar appropriateness to purpose can also be found in contemporary architecture. Formal and functional aspects seem mutually dependent in the categorisation of architecture in that architecture is defined by a formal perfection of purpose through which it liberates itself from mere functionalism. Indeed, the famous Portuguese architect Álvaro Siza Vieira teaches us, as *Os Espacialistas* (2020; my translation<sup>14</sup>) remind, "When working on an architectural project, the principal objective is to free it from the function for which it was designed". Paradoxically, architecture appears to be defined by its functionality from which it seeks to liberate itself in order to fulfil its purpose.

In this respect, the phenomenological critique of ocularcentrism and of the aesthetic approach in architecture concerns not just superficial matters of taste, but rather the "fundamental questions of how we should live and work in buildings and cities" (Norberg-Schulz 1965, 13). The perceived uncertainty or crisis of architecture is about the very task of architecture, its purpose, or *raison d'être* and is, therefore, an existential uncertainty. Architecture appears to be "uncertain of its way" (Harries 2000, 2), of the direction it is or should be heading into in order to fulfil its function into the future. The functions of providing shelter and creating unity point to some of humans' most primary needs. Zumthor (2006, 12) describes, rather poetically, that architecture "has a special physical relationship with life. I do not think of it primarily as either a message or a symbol, but as an envelope and background for life which goes on in and around it, a sensitive container for the rhythm of footsteps on the floor; for the concentration of work, for the silence of sleep". There is something very profound about the meaning that architecture has for our

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<sup>14</sup> Original quote: "Quando (se) faz um projecto de arquitectura, o principal objectivo é libertá-lo da função para o qual foi desenhado."

lives and our way of living. In that sense, it relates to questions regarding the way we live and work, as Norberg-Schulz (1965), quoted earlier, had pointed out. In a similar vein, Giedion (1967, xxxiii), in his seminal book on space and architecture, *Space, Time and Architecture*, defines the task of architecture as providing “the interpretation of a way of life valid for our period”. It is this definition on which Harries (2000) bases his notion of the ethical function of architecture, which will be explored in the following section.

## **2.4 Towards an Ethical Architecture**

With respect to the uncertainty concerning architecture’s purpose, Harries (2000) sees the solution in what he calls an ethical function. Referencing the Greek ‘ethos’ as in character, nature, disposition and spirit, Harries’s (ibid., 4) concept is about the “common ethos” and the way of life of a society. Instead of the framework of rules and guidelines that the common field of ethics proposes, Harries is interested in “the way human beings exist in the world: their way of dwelling” (ibid.); in other words, their way of being-in-the-world.<sup>15</sup>

Involving physical and spatial structures, architecture gives shape to otherwise infinite and indefinite space; it is “space as a meaningful order” (Harries 2000, 139). We can argue that this is applicable also to other spatial arts. Indeed, according to the American art critic and historian Rosalind Krauss (1979), sculpture draws its meaning from the space around it. But architecture’s concern with the way humans inhabit or dwell in the world, more so than the spatial arts that we usually experience in an artistic context and is less part of our everyday life, affords it a special position. Architecture articulates space in a sense similar to that of producing space, as previously discussed. Through the construction of boundaries, architecture makes room for place, as Heidegger (1971) shows. To build means “to wrest place from space” (Harries 2000, 147). As a consequence, architecture “confines space so we can dwell in it” (Rasmussen 1962, 10) or, to be more precise: “Architecture is our primary instrument in relating us with space and time, and giving these dimensions a human measure. It domesticates limitless space [...] to be tolerated, inhabited and understood by humankind” (Pallasmaa 2005, 17). Only by demarcating or delineating space, in the literal and metaphorical sense, by drawing a line, a boundary, by marking and defining space does it become graspable and comprehensible.

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<sup>15</sup> The seeming connection between architecture and a way of life is at the centre of the perceived crisis of architecture, as suggested by Norberg-Schulz (1965), quoted at the beginning of this chapter.

Architecture delineates space on a human scale and thereby creates meaningful place from vague space. As a result, space can be grasped and inhabited, navigated and come to terms with.<sup>16</sup> Thus architecture embodies the existential condition of inhabitability (Seamon and Mugerauer 2000, 184).

The idea of architecture as providing orientation and structuring the experience of being-in-the-world, in other words, its function of articulating a common ethos, goes back to the origins of Western architecture. In ancient Greek culture, “traditional architecture signified, for all of society, the order of the cosmos” (Holl, Pallasmaa and Pérez-Gómez 2006, 10). This, in ancient Greece, was a mathematical order, and therefore “architecture embodies *ta mathemata*, the invariable, an order that may allow man to dwell on this earth” (Pérez-Gómez 2006, 9). Although Pérez-Gómez (1983) vehemently criticises the dominant role that mathematics and geometry have come to play in modern architecture, the significance of mathematics and geometry in the ancient Greek worldview was quite different compared to modernist views. In much of Greek philosophy, the understanding of the world’s numerical order was pervaded with a mystical character and in that sense differed significantly from modern mathematics. Therefore, in contrast to today’s use of mathematics in architecture, the importance of numbers and geometry in ancient Greek architecture was in line with cosmological ideas. With respect to modern architecture, the following question arises: “Having lost its cosmological referent, does this mean that a radically secularized architecture either is condemned to become homogenized with technological building or, at ‘best,’ must pretend to operate legitimately in a space outside language?” (Pérez-Gómez 2006, 10). This leads to the existential question, “How can the architecture of the late twentieth century ‘represent’ and yet aspire to retrieve its status as an architecture of ‘presence’ embodying authentic cultural values?” (ibid., 11). In other words, how can architecture today offer an interpretation of a way of life valid for our period and thus fulfil its ethical function?

Inspired by similar questions, Heidegger (1971) explores the relations between the most fundamental activities or modes of being, which is a being-in-the-world and a being in space. He investigates the essence of building and dwelling and their meaning for

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<sup>16</sup> The expression ‘to come to terms’ can be understood quite literally here. Coming to terms with something means, literally, to come to a level of understanding by finding appropriate terms or concepts that are understood. As a result, coming to terms means, metaphorically, to mediate, reconcile and allow. In this rich sense, architecture helps us come to terms with space by giving it a human dimension and thus allowing for (conceptual) understanding, mediation and toleration of, or reconciliation with, something so vague and vast.

human existence through language, that is, through studying their etymological origins. Thus he finds that the origin of the German word 'bauen' (to build) means 'to remain', 'to stay in one place', to dwell. Hence, to build is already to dwell, serves the purpose of dwelling and is an expression of dwelling. He then recovers a kinship between the German 'bauen' and 'bin' (I am). To build, which originally means to dwell, is to be, to exist. In this conception, building and dwelling are the fundamental modes of existing, of being-in-the-world. It is through dwelling and through building that we are in the world. We build in order to accommodate the body, to allow the body to dwell and to exist in the world as embodied beings. Our relation to places is based on such dwelling, that is, the "relationship of people to *locations* and through *locations* to *spaces* is based on dwelling" (ibid., 12). This view draws attention to how existence in the world is bound to building, which involves the demarcation and occupation of space, in a similar sense to Lefebvre (1991).

Not only is Heidegger's (1971) concept of dwelling revoked in humanist geography and many conceptions of place (Cresswell 2014); his thoughts on building and dwelling have also deeply inspired many architects, their practice and the way they theoretically frame their work, as the British architect, professor and writer Adam Sharr points out in *Thinkers for Architects* (2007, 1): "When Peter Zumthor waxes lyrical about the atmospheric potential of spaces and materials; when Christian Norberg-Schulz wrote about the spirit of place; when Juhani Pallasmaa writes about *The Eyes of the Skin*; when Dalibor Vesely argues about the crisis of representation; when Karsten Harries claims ethical parameters for architecture; when Steven Holl discusses phenomena and paints watercolors evoking architectural experiences; all these establishment figures are responding in some way to Heidegger and his notions of dwelling and place". For Zumthor (2006), Heidegger's broad notion of dwelling in the sense of living and thinking in places and spaces relates concretely to his concept of reality in the context of architecture. With a very phenomenological tone, he describes:

It is not the reality of theories detached from things, it is the reality of the concrete building assignment relating to the act or state of dwelling that interests me and upon which I wish to concentrate my imaginative faculties. It is the reality of building materials, stone, cloth, steel, leather ..., and the reality of the structures I use to construct the building whose properties I wish to penetrate with my imagination, bringing meaning and sensuousness to bear so that the spark of the successful building may be kindled, a building that can serve as a home for man. (Zumthor 2006, 37)

While the body is the initial place and offers the initial meaningful experience of space by producing or articulating it, architecture expands this experience. In the book *Atlas do Corpo e da Imaginação*, based on a collaboration with the art collective *Os Espacialistas*, Gonçalo M. Tavares (2013, 414; my translation<sup>17</sup>) writes that an inhabited house “*ceases to be a space in order to become that which surrounds the body, which is different*”. If it is through the spatial body that we are in the world and give significance to space by articulating it, then architecture, by further giving shape to space, deepens the corporeal experience of being-in-the-world. It is therefore a “re-assertion of the human body as the locus of experience (whether on the street or from the 50th floor) as well as a firm aim to re-establish roots in the perceptual world with its inherent ambiguity” (Holl, Pallasmaa and Pérez-Gómez 2006, 116). Offering a framework for bodily self-awareness, architecture “strengthens the existential experience, one’s sense of being-in-the-world, and this is essentially a strengthened experience of self” (Pallasmaa 2005, 41). In a vast world, architecture gives concrete form to our being. “The ultimate meaning of any building is beyond architecture; it directs our consciousness back to the world and towards our own sense of self and being. Significant architecture makes us experience ourselves as complete embodied and spiritual beings” (ibid., 11). It is not only the subjective body or embodied subject that gives meaning to architecture but also architecture that gives meaning to the body and subject.

The spiritual conception of architecture has a long tradition, and its metaphor can already be found in the Biblical genesis. Based on a seemingly primeval need for a home, Adam is to build his house “not as a shelter against the weather, but as a volume which he could interpret in terms of his own body and which yet was an exposition of the paradisaic plan, and therefore established him at the center of it” (Harries 2000, 139). The need for a house and home represents the need to translate the environment into a human scale, in the sense of coming to terms with it, as described before. “Adam’s house mediated between his embodied self and his environment” (ibid., 139). So profoundly rooted in spiritual teachings, the importance of the human scale in architecture persists in more contemporary arguments. For example with respect to the vast dimensions of skyscrapers, authors like

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<sup>17</sup> Original quote: “*deixa de ser um espaço para passar a ser aquilo que rodeia um corpo, o que é diferente.*” (Tavares 2013, 414)

Carlos Marcos (2009, 2) emphasise “the major role of the human body as a dimensional reference”. Thus the meaning of “architectural scale implies the unconscious measuring of the object or the building with one’s body, and of projecting one's body scheme into the space in question” (Pallasmaa 2005, 64). As the body finds its resonance in space, not only the concept of space itself but also our existence in space and thereby in the world can be comprehended.

By defining space and creating place, architecture provides orientation as well as “frames and horizons of understanding” (Pallasmaa 2015, 7). Such orientation is not just geographical. More profoundly, it grounds our consciousness of where and who we are (Bloomer and Moore 1982, 16). This sense of orientation is direct and immediate as well as abstract and metaphorical. Beyond mundane navigational concerns, architecture provides orientation by outlining a “meaningful order for human life” (Pérez-Gómez 2006, 9). In this view, we can understand ethical architecture, in Harries’s (2000, 4) sense, as helping us “find our place and way in an ever more dis-orienting world” by expressing a common ethos, a way of living and dwelling.

### 3 ARCHITECTURE OF THE BODY

“*Sem corpo não há espaço arquitetónico.*” (Os Espacialistas 2020)

Architecture’s task of providing orientation by structuring and reconciling our embodied existence in the world highlights the significance of the body in spatial and architectural experience. According to *Os Espacialistas* (2020; my translation<sup>18</sup>): “The principal client of architectural space is the body, because in it the body constructs (itself) for itself”.

#### 3.1 Architecture as Embodied Space

Linking the body to architecture has a long tradition in Western culture, dating back to the Roman architect, engineer and author Marcus Pollio Vitruvius, perhaps the founding father of Western architectural thought whose grand work *De Architectura*, published as *Ten Books on Architecture* (2007), is the only of its kind to have survived from antiquity. As a building guide, it includes a first notion of an analogy between the body and architecture, one which has permeated Western cultural history with the notion of the body as the primary, metaphorical house that we inhabit.

The analogy between architecture and the body has been emphasised more recently by architectural phenomenologists (e.g. Pallasmaa 2005). With phenomenology’s emphasis on the role of the body in structuring perception, a comparison between corporeal and architectural form, both physical structures, seems natural. But this now commonplace analogy remains rather empty or incomprehensible if not developed and qualified, as Vesely (2002, 35) points out.

The origins of the body concept in Western history are marked by a special interest in the relationship between corporeality and reality (Vesely 2002, 29). As the physical structure of our being, the body is the place where to look for our link to the surrounding, material world. Again, Plato offers some of the first distinct formulations of the matter in *Phaedo* (1998) and in *Timaeus* (2008) by conceiving of the body as a contingent yet relatively stable structure within the contingency of the world as a whole (see also Vesely 2002, 29). The body, for Plato, is a dynamic and never complete element of the cosmological process of Becoming at large; it is a part of the whole.

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<sup>18</sup> Original quote: “O principal cliente do espaço arquitetónico é o corpo, que nele (se) constrói para si próprio.” (Os Espacialistas 2020)

Aristotle evolves this notion significantly in *De Anima* or *On the Soul* (2015) by pointing out the individuality and particularity of the essential structures or substances of things and bodies (see also Vesely 2002). He thus conceptualises the unity of bodies that are, at the same time, part of a larger cosmological whole. Further, he claims that no action is possible without contact. The resulting importance of contact, position, existence in place, lightness and weight underlies the Stoic notion that whatever acts or is acted on is a body, implying that only material bodies truly exist (Aristotle 2015; Vesely 2002, 30). In turn, Vitruvius (2007) elaborates the Stoic view of the body as primarily material in his analogy between the human body and the structure of architecture (Buchli 2013, 137; Vesely 2002, 30). Recognising bodily traits in architecture, as the example of the facade i.e. the face of a building shows particularly well, demonstrates the human tendency to translate their built environments into the terms of their own bodily existence.

At the basis of the analogy between the body and architecture is the notion of a shared proportionality (Vesely 2002). The original concept of proportion, as understood in ancient Greece, differs from the strongly mathematical concept of today. For the Greeks, proportion was based on the notion of ‘arithmos’, a term referring to a number or sum, that is, the unity of multiple entities. The synthesis of unity and multiplicity underlying this concept describes a mystical worldview in which individual elements, like bodies, are parts of a unified, cosmological whole. In this view, proportion is not a static, geometrical harmony but an “open and dynamic paradigm of mediation and participation of the visible phenomena in the unity of the world” (ibid., 38), in a way that is approaching but never achieving mediation to the whole, always remaining in a state of hypothesis – more Becoming than Being.

The fact of embodiment here is a manifestation of the cosmos at large and, as such, a proportionality or analogy in relation to the world as a whole (Vesely 2002). The body, as part of the world, is a proportion of, or *in* proportion to, the larger cosmos. In this sense, “the architectonics of embodiment reveals the most essential characteristics of proportion” (ibid., 41). Through the shared condition of embodiment, the body and the rest of the physical world are connected and related to each other; the body is established in proportion to the cosmos.

More recently, since around the middle of the twentieth century, the body has increasingly become the site for diverse explorations in Western academia: in the social

sciences and in philosophy, from feminism, biopolitics, identity politics, performativity and performance studies to technology (think cyborgs and transhumanism) and of course phenomenology, where the body is the premise of our being-in-the-world, our condition of existence (Merleau-Ponty 1978; Williams and Bendelow 1998). The significance of the body in many if not all areas of life is more and more acknowledged and emphasised, especially so by phenomenologists who place it at the centre of all experience.

Our embodied condition forms our experience of the world and of the space around us. The body's underlying role is "to feel the world and to house the environment in our being" (Seamon and Mugerauer 2000, 72). Being-in-the-world *qua* embodiment involves a corporeal grounding in the environment, an environment that starts with the body itself, which is the primary framework of our situated and embedded existence. The body and the environment are not separated as each other's conceptual or physical opposites. Rather, the body is already an environment, that is, the very first layer of the environment. The wider environment reverberates within the body, and the body echoes its context. It is in this sense of the body as the primary environment that, metaphorically, the body is the first house. Through the sense of being housed inside one's own body and of the architectonics of one's own body, the meaning of a house is understood. Regardless of how many houses one inhabits and passes through, the body is always the primary house, offering the primary experience of dwelling. The phenomenological view of the affinity between body and environment is what the bio-cultural approach of neuroscience in connection with the humanities has stressed, as described earlier, especially with the research into the mirror neurons, showing that the body apprehends and simulates its built environments, which in turn are defined by it (Gallese 2015).

In relating to the environment, the body develops a sense of place (Seamon and Mugerauer 2000). As seen earlier, it is through the experience of embodiment that the notion of place initially comes into being. Although not identical with the body, place "arises as a felt phenomenon through our body's participation in it" (*ibid.*, 83). By occupying a part of space, the body establishes place at and as the centre of experience (Relph 1976). This formation of place is organised according to our corporeal structure, which, according to the American geographer David Seamon and professor Robert Mugerauer (2000, 72) comprise posture, orientation, feel and comprehension, on a most elemental level. By means of these elemental structures combined, we make sense of the

world and build place at its centre, while each of them describes a particular way of relating to the world.

Posture, complemented by vision, is a structure of being-in-the-world which creates a notion of distance by placing us opposite the objects of perception (Seamon and Mugerauer 2000). It is in response and in contrast to the distance of posture that “[p]lace as *human flesh* showed itself to be the emergence of the value of nearness by reason of the postural fact of distance” (ibid., 81). Through the synergy of the elemental structures, place becomes the sense of physical embeddedness in the world.

Based on the significance of embodiment for experiencing space and constituting place, the body naturally grounds our experience of architecture. If human embodiment is an expression of proportionality, then architecture, as that which structures our corporeal existence, is “the most tangible embodiment and paradigm of proportion” (Vesely 2002, 43). This is especially clear if we consider the body to be the primary house, the most original architecture of our lived experience. Perhaps more clearly than the body itself, architecture can be seen as a part of a larger, physical world and as one that provides a bridge between the outer world and human existence.

The body and the built environment of architecture are associated and implicated in each other through a close interaction (Bloomer and Moore 1982). Architecture is “spatial and bodily, and so it emerges from and draws on our pre-reflective bodily engagement with the physical dimensions of place and space” (Johnson 2002, 76-78). It is in this sense that *Os Espacialistas* (2019) conceive of the imagined figure of the ‘spacialist’, “who develops a new organ/perception, intensification, rehabilitation, reproductive and instinctive sense of the quotidian space in its own body”. The spacialist demonstrates the way in which space is perceived within and through the body and through a specific form of perception. Without corporeal perception, we do not grasp space, whether the space around the body or the space of the body itself. “Without the body there is no ‘other light’, that of perception, which illuminates and eliminates the emptiness of the spaces and the body” (*Os Espacialistas* 2020; my translation<sup>19</sup>). The body is the very means of spatial sense-making, in that it fills the emptiness inside space, of which space is made.

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<sup>19</sup> Original quote: “Sem corpo não há a ‘outra luz’, a da percepção, que ilumina e elimina o vazio dos espaços e do corpo.” (*Os Espacialistas* 2020)

In the experience of architecture, the body finds its own form reflected in the architectural structure (Bloomer and Moore 1982). A building's verticality, for example, mirrors the body's upright position; its mass can be perceived as heavy because of the body's own direct experience of gravity; and the hollow interior echoes the interior of the body which we can sense to some extent and are more or less aware of. "Understanding architectural scale implies the unconscious measuring of the object or the building with one's body, and of projecting one's body scheme into the space in question" (Pallasmaa 2005, 64). To (almost literally) grasp architecture, we translate it into the terms of our bodily experience. In a way, we develop a peculiar empathy with buildings, if we define empathy as the emotional union between a person and an external object through the projection of personal emotions (Bloomer and Moore 1982, 39). The resulting bodily perception of architectural form may not always be an exact mirror of its objective design, but nevertheless grounds our architectural experience. The objective magnitude of a building may not always correspond perfectly to the sensation of magnitude derived from corporeal measure, but it is the resonance with the body and with the lived rather than the objective measure which ultimately shapes the experience of architecture (Bloomer and Moore 1982, 44; Scott 1954, 39-40).

Through the close connection between the body and architecture, buildings gain significance for our lives. By structuring our dwelling and being-in-the-world, architecture builds on, and is an extension of, the body's meaning-making function (Johnson 2002, 78). Following the American sculptor and author Kent C. Bloomer and the American architect and writer Charles W. Moore (1982, 16), the value of the family house, for example, is based on the notion that it is the only object in the world that surrounds us and relates to our body as the centre and measure of the world. All architecture, in their view, arises from this sense of space and place with the human body at their centre. For our experience, an inhabited house becomes that which surrounds the body (Tavares 2013, 414), which has an intimate significance. Beyond the physical and spatial dimensions of architecture, there is also "a refined form of symbolic expression that allows us to give meaning to the sites where we dwell and work, and it also allows us to expand our sense of the possibilities for experiencing our world" (Johnson 2002, 78). Regarding this emotional significance of the house, the French philosopher Gaston Bachelard (1969, 4) stresses that the house, or home, is a site and means of establishing and integrating meaning, memories and dreams, which

is because our home is “our corner in the world. [...] it is our first universe, a real cosmos in every sense of the word”. The process of thus connecting to buildings is mediated by the condition of embodiment (Johnson 2002). The meaning of a house and of architecture is, in this view, qualified by, and embedded in, the body.

### 3.2 Sensing Space

Stressing embodiment in the experience of architectural space, which is treated as real space rather than virtual space, entails an emphasis on non-visual sensory modes. The ocularcentrist tradition of treating space primarily in visual and virtual terms implies a neglect not only of the bodily experience of architecture but also of the full sensory experience, which in turn has implications for the human experience of being in space and being-in-the-world. Pallasmaa (2005, 17-19) makes this link explicit with the claim that the “inhumanity of contemporary architecture and cities can be understood as the consequence of the negligence of the body and the senses, and an imbalance in our sensory system”. With the focus on the visual, not only is the body placed at a distance from the architecture that surrounds it; the other senses are also disregarded. A renewed emphasis on the significance of the body therefore draws attention to the fact that architectural beauty is not exclusively based on visual criteria (Bloomer and Moore 1982, 44; Pallasmaa 2005; Rasmussen 1962). The original meaning of the Greek ‘aesthetikos’ as that which pertains to sensorial perception, in contrast to today’s conception of aesthetics as purely visual, is a suiting reminder here (Bloomer and Moore 1982, 35).<sup>20</sup> While perhaps not dominant in architectural practice, the importance of multi-sensory experience is certainly not a new idea. Already in his seminal *Experiencing Architecture*, Rasmussen maintains:

It is not enough to *see* architecture; you must experience it. You must observe how it was designed for a special purpose and how it was attuned to the entire concept and rhythm of a specific era. You must dwell in the rooms, feel how they close about you, observe how you are naturally led from one to the other. You must be aware of textural effects, discover why just those colors were used, how the choice depended on the orientation of the rooms in relation to windows and the sun. [...] You must experience the great difference acoustics make in your conception of space: the way sound acts in an enormous cathedral, with its echoes and long-toned

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<sup>20</sup> These different notions of aesthetics point to a larger conceptual variety between an understanding of aesthetics as visual, mathematical and geometrical on the one hand and related to the body and all the senses on the other hand (e.g. Bloomer and Moore 1982, 35).

reverberations, as compared to a small panelled room well padded with hangings, rugs and cushions. (Rasmussen 1962, 33)

Holl (2006, 41) asserts that “only architecture can simultaneously awaken all the senses - all the complexities of perception”. In his phenomenological view, architecture has a special potential of offering synesthetic, holistic experiences. “Architecture, more fully than other art forms, engages the immediacy of our sensory perceptions. The passage of time; light, shadow and transparency; color phenomena, texture, material and detail all participate in the complete experience of architecture” (ibid.). Furthermore, by operating on the three dimensions of real space rather than the two of virtual space, it involves the full continuum from foreground to background and from the concrete immediacy of touch to the scope of distant views. Architecture engages the sensory system almost fully and the whole body.

The notion of architecture’s appeal to the senses has been taken to a grand scale in the 2014 exhibition *Sensing Spaces: Architecture Reimagined* at the Royal Academy of Arts in London. Echoing Rasmussen’s (1962) words cited above, the ambitious exhibit revolves around the questions: “How does the room you’re sitting in make you feel? What is it about the soaring roof of a railway station, the damp odour of a cellar, the feel of worn stone steps beneath your feet, the muffled echo of a cloister or the cosy familiarity of your lounge that elicits glee, misery, fear or contentment?” (Royal Academy, n.d.). The relation between sensory perception and emotional response is emphasised here. *Sensing Spaces* plays with the effects of various sensory-spatial experiences on the visitor’s sensations and sentiments, in line with the idea that “architecture is part of our everyday life, but its ability to dramatically affect the way we think, feel and interact with one another is often overlooked” (Goodwin in Frearson 2014). Not despite but due to its ubiquity, architecture strongly influences our moods, attitudes and behaviours.

The American psychologist J. J. Gibson (1966) has profoundly influenced how we understand sensory perception by describing the senses as active systems, capable of obtaining information about exterior objects without the intervention of intellectual processes, rather than mere passive receptors. In this respect, perception in general can be said to have a tactile rather than a visual character, “all perception is touch-like, insofar as it involves an active, exploratory process, rather than the passive receipt of information”

(Ratcliffe 2018, 281). Thus, the hegemony of vision not only creates an imbalance of the senses but also a false notion that all perception is similar to vision.

Gibson (1966) distinguishes not individual senses but systems, namely the visual, the auditive, the gusto-olfactive, that of orientation and the haptic system. According to this systemisation, the latter two pertain to the perception of three-dimensionality and consequently, *sine qua non*, to architectural experience (Bloomer and Moore 1982, 45-46). While orientation, describing our position with respect to external objects and to the world, is often not counted among the senses in conceptions which are framed in parallel to the respective sense organs, the tactile sense is typically given particular importance in the phenomenological critique of the domination of visibility in architecture (Pallasmaa 2000; Pallasmaa 2005; Pérez-Gómez 1983). The sense of touch is particularly complex because it comprises five different types of sensation, including pressure, warmth, cold, pain and the kinaesthetic: the sensation of movement through articulation and muscular activity and therefore closely related to the sense of orientation. The tactile sense combines active and reactive modes, simultaneously involving both sensation and action (Bloomer and Moore 1982, 47). In effect, it has a special relation to the three-dimensional universe; it allows us to perceive three-dimensionality and to relate to it.

While vision and sound are abstract, touch is concrete in the sense that only real objects can be touched (Bloomer and Moore 1982). In contrast to the distance of the audiovisual, the haptic is a sense of proximity and, as a consequence, of intimacy. In this view, “vision separates us from the world whereas the other senses unite us with it” (Pallasmaa 2005, 25). This demonstrates the different modes and articulations of the various senses in a way that translation between them can be difficult. Touch may seem so particular, and so different from vision, that, as Merleau-Ponty (1978, 223) maintains, “there is a space so strictly tactile that its articulations do not and never will stand in a relationship of synonymy with those of visual space”. It is this particularity of touch which architects with a phenomenological approach are interested in.

Similarly, in response to the common prioritisation of the audiovisual forms of contact and engagement and to the perceived “necessity to reconfigure the touch, a new tactile mapping” (Norton 2019), the Portuguese artist Inês Norton works on the issue of touch in the age of technology, digital virtuality and artificial intelligence for the 2019 exhibition “Please [Do Not] Touch” at Museu Nacional de Arte Contemporânea (MNAC)

in Lisbon. In reaction to the changing relations and frameworks of our times, the show's curator Emília Ferreira maintains: "We definitely need the touch. We need the skin. Our body knows, not only through the screens that arrived very recently to our lives as human species, but especially through the senses. [...] we need to value the touch again. To value the touch means to appreciate closeness to others" (Ferreira in Norton 2019). If sight and sound are senses of distance, working over the distance but also putting us at a distance from the perceived object, then touch is the sense of proximity and intimacy.

This appeal to the importance of touch stresses the quality of real space over virtual space (Summers 2003). By translating space into a two-dimensional image on a surface, virtual space always creates a distance from the viewer, a distance from which the viewer is to look at space, which stands in contrast to the quality of immediate embeddedness of real space.

### **3.3 The Suggestion of Movement**

Sense perception is closely bound up with movement. There is "an intrinsic connection between movement and sensation, whereby each immediately summons the other" (Massumi 2002, 1). Perception is based on sensorimotor contingencies and an underlying, pre-reflective understanding, in a phenomenological sense, that movement is connected to particular changes in sensory input (Ratcliffe 2018, 281). Moreover, this connection is at the basis of the development of the body image and sense of self as embodied subject that acts and whose acts have consequences. The conception of one's own body as a unified, individual body is established through the coordination of movement and sense perception, that is, the correspondence between expected and real sense perception as the body moves.

The way we experience architecture through the body and the sensorimotor system shows that the relationship between the body and architecture is a reciprocal one. The body measures and comprehends the architectural structure by finding itself reflected in its form while architecture stimulates a reaction in the body. By appealing to the both active and reactive or receptive sense of touch, involving sensation as well as action, architecture not only offers a passively received perception; it also appeals to the kinaesthetic sense of movement and articulation. According to Bloomer and Moore (1982, 72; my translation<sup>21</sup>),

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<sup>21</sup> Original quote: "Cualquier arquitectura es un estímulo potencial del movimiento, sea éste real o imaginado. Un edificio es siempre un estimulante para la acción, un escenario en el que tienen lugar la interacción y el movimiento. Es como un interlocutor del cuerpo." (Bloomer and Moore 1982, 72)

“all architecture is a potential stimulus for movement, whether real or imagined. A building is always stimulating for action, a scenario in which interaction and movement take place. It is like an interlocutor of the body”. The architectural stimulus is a function of this interlocution with the body. It involves the reflection of the corporeal form in that of architecture. A tall building, for example, by reflecting the body’s verticality, invites us to stand taller and look upwards. It is only because we are embodied that architecture can offer us a stimulus for movement, because it is the body that is addressed by the stimulus. It is the body that allows the engagement with architecture and enables us to perceive the stimulus as such because it enables our reaction to it (Gallagher and Zahavi 2012, 156). In such a way, the built environment offers embodied subjects occasions and opportunities to move and behave, act and react as subjects in certain ways.

Similarly, the concept of affordances from the cognitive sciences describes “the possibilities for action provided to us by the environment” (Rietveld, Denys, and van Westen 2018, 42). These are possibilities to apply skills to an object, material or not, given by the circumstances. Architecture may provide such affordances, offering opportunities to act and respond with body movement. A door handle can be grabbed (the word handle clearly indicates its relation to the human body), stairs can be climbed or descended, a porch can be stepped over, etc. Of course, such affordances depend on the kind of body of a subject.

Furthermore, the capacity of buildings to stimulate movement and the type of movement it stimulates depends on their architectural forms and therefore differs between buildings. The skyscraper offers an interesting example in this context. Because of its colossal size, its sheer bigness, the human visitors or inhabitants are no longer able to fully measure and grasp, physically and mentally, the vertical extension of the building with their own body, out of their body’s own power and capability (Bloomer and Moore 1982). The movement is often carried out by a lift rather than by the human body and is therefore felt and comprehended differently, if at all. The body, rather than the subject of action, becomes the object to be acted on; rather moving out of its own vigour and vitality, it is an object to be moved.

In contrast, successful or what Harries (2000) would call ethical architecture offers an affirmation of corporeal vigour and vitality by stimulating and inspiring potential movement. Such architecture promotes the body, and consequently the self, as a subject of

action, as vital, productive, active, and physically embedded in a space in which it can act and to which it can respond through movement in a way that affirms its own corporeal existence in space and in the world. Movement, then, is a means of becoming the subject of one's own embodied and embedded existence. By stimulating movement, architecture stimulates a strong sense of self, of subjecthood and personhood (Bloomer and Moore 1982). By actively responding to such stimulation, visitors or inhabitants experience themselves more intensely as subjects.

### **3.4 Moving Thought**

As the significance of architecture for our sense of self and of subjecthood shows, the meaning of body movement is not reduced to physical movement, and the relation of architecture to the body is not purely physical but, through the body, also mental and emotional. Following the phenomenological conception of an embodied mind, the physical and the mental are inextricably linked (Gallagher and Zahavi 2012; Johnson 2002; Varela, Thompson and Rosch 2016). While ocularcentrism has traditionally linked the eye to the intellect, the phenomenological framework connects the entire body or rather the fact of embodiment with the mental aspect. We think with and through the body, and movement is a physical expression of thought and imagination. The word 'emotion' with its origin in the Latin 'emovere' which means 'to move out', 'to move away', or 'to remove' expresses the relationship between feeling and movement.

In this sense, according to *Os Espacialistas* (2020; my translation<sup>22</sup>), "the principal effect that architecture has on our body is its capacity to set it in motion, from a physical and imaginary point of view, by means of the action of our memories and the individual and shared experiences of each of us, through the aesthetic, constructed qualities which result from the fact that it surpasses function". Architecture inspires not only body movement but, through physical movement, also the mental movement of thought and imagination. In the way that architecture entices us to move in certain ways, it invites us to move our thoughts in certain ways.

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<sup>22</sup> Original quote: "O principal e-feito que a arquitetura tem sobre o nosso corpo é a sua capacidade para o colocar em movimento, do ponto vista físico e imaginário, pela acção das nossas memórias e das experiências individuais e partilhadas de cada um, através das qualidades estéticas construídas, resultantes da sua superação funcional."

Thought and imagination are not only forms of mental movement; they also find expression in the physical movement of the body. According to *Os Espacialistas* (2020; my translation<sup>23</sup>), “the gestures of each of us are the ideas of the body transformed into architecture”. Architecture inspires the imagination, and through imaginative externalising, mental activities mould the world (Pallasmaa 2015, 8).

For Bachelard (1969, 6), the chief benefit of the house is to shelter daydreaming and to protect dreamers, allowing them to dream in peace. Through daydreaming, memory and imagination, the dreamer relates the present architecture to other architectures already visited, projecting remembered or imagined houses onto the encountered architecture (*Os Espacialistas* 2020). Architecture gives occasion to remember and imagine not only other houses but also other body movements. As a shelter for the imagination, “any architectural space is, first of all, a memorial archive of the body’s ideas and circumstances of movement, in the form of an Atlas Mnemosyne, a Museu Imaginário, a Bodyb(u)ilder of images” (ibid.; my translation<sup>24</sup>). Where Bachelard (1969, 6) speaks of the house’s “powers of integration for the thoughts, memories and dreams of mankind”, *Os Espacialistas* (2020; my translation<sup>25</sup>) speak of an “ontological machine of the production of affects which constantly saves and keeps the memory body of who inhabits that body in a state of permanent poetic actualisation”. Architecture thus provides the framework not only for our physical existence embedded in the world but also for our imagination and memory. It simultaneously shelters and stimulates mental, ontological and imaginary movement which is inextricably linked with the movement of the body.

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<sup>23</sup> Original quote: “os gestos de cada um de nós são as ideias do corpo transformados em arquitectura” (*Os Espacialistas* 2020)

<sup>24</sup> Original quote: “qualquer espaço arquitectónico é antes de tudo um arquivo memorial das ideias do corpo e das suas circunstâncias de movimento, na forma de um Atlas Mnemosyne, um Museu Imaginário, um Bodyb(u)ilder de imagens.”

<sup>25</sup> Original quote: “A arquitectura é uma máquina ontológica de produção de afectos que salva e guarda constantemente o corpo memorial de quem nele habita em estado de actualização poética permanente.”

## 4 OCCUPYING SPACE, FILLING THE VOID

*“Emptiness after all is full of discoveries and we experience an environment where we understand that our body is also a place. The body is the ultimate place.” (Fernanda Fragateiro, n.d.)*

In line with the argumentation presented here, the experience of a real life example seems like the best approach to comprehend the proposed ideas. Within the framework of this dissertation, the discussion of a case study serves to evoke such an experience and to apply the theoretical concepts to an example from the arts.

With respect to the bodily experience of architecture, *Caixa para guardar o vazio* (*Box to Keep the Void*) (2005) by Fragateiro is a uniquely relevant work of art. Inspired by the experimental approach to architecture of Ciudad Abierta in Ritoque, Chile<sup>26</sup>, by Georges Perec’s *Species of Space and Other Pieces* (1997) which begins with the space of a sheet of paper that is inhabited through writing, and by the Brazilian artist Lygia Clark and her works in which the body is not only the central artistic medium but also a medium for art therapy, as well as the pedagogical aspect in much of her work, *Caixa* is an explorative, pedagogical and perhaps therapeutic device for the experience of space, specifically developed for an audience of children.

Somewhere between sculpture, installation, architecture and performance, *Caixa* follows in the line of Fragateiro’s work, which is often positioned on the borders and intersections of these categories. Having travelled exhibition spaces around and beyond Portugal for many years since its conception, the piece has received wide recognition.

### 4.1 Caixa Para Guardar o Vazio / Box to Keep the Void

*Caixa para guardar o vazio* is a large wooden box measuring 4 metres by 4 metres by 3.1 metres, when closed. The piece appears in different formulations, with different levels of complexity. In its closed configuration, it seems shut and still, revealing only outlines of openings. The uniformity of its almost completely wooden materiality, with only some pieces of metal at the openings and mirrors on the floor on its interior, highlights its even and monolithic appearance. The carefully crafted material has a compelling visual as well as tactile appeal.

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<sup>26</sup> See for example Alfieri (2016).



Figure 1: *Caixa para guardar o vazio* (2005), Fernanda Fragateiro © Carlos Fernandes

Although seemingly closed within itself, *Caixa* does not stand in full isolation. Displayed in the context of several exhibition spaces around Portugal, from the Lar-Escola Santo António in Viseu in 2005 at its first presentation, promoted by Teatro Viriato, to the 2019 show at Culturgest in Lisbon, *Caixa* is framed and qualified by its architectural setting (Fernanda Fragateiro, n.d.; Fragateiro 2020). Indeed, according to Fragateiro (2020), the piece's appearance slightly changes depending on the setting in which it is displayed. This relation was particularly highlighted at Álvaro Siza Vieira's CGAC in Santiago de Compostela, where *Caixa* touched the architecture which surrounded it in one point in what seemed like a gesture of acknowledgement. As a construction, *Caixa* relates to the built environment that surrounds it. It is a construction inside a construction.

With almost endless formulations and levels of openness, from a completely closed configuration, as in Figure 1, to one in which all its elements are opened, as in Figure 2, the formulation in which visitors find *Caixa* shapes their initial impression and experience of the piece (Sardo 2020). Thanks to this flexibility, *Caixa* is an architectural sculpture, a theatrical stage device and an interactive, performative installation. It belongs to different artistic categories and follows in various traditions of exhibiting art and of relating to the public, as will be elaborated in what follows.



Figure 2: *Caixa para guardar o vazio* (2005), Fernanda Fragateiro © José Alfredo

As a sculpture, *Caixa* has a strongly architectural character. Already in its closed form, the larger-than-human size denotes an architectural scale. In an open configuration, its “spatial penetrability” (Sardo 2007, 44) and the apparent suggestion to enter, by function of the opening devices and the seeming emptiness of inner spaces, the void, afford it a quality of inhabitability which bespeaks architecture, as seen earlier. Considering the strongly architectural character of this supposed sculpture, Sardo (ibid., 42) opens his curatorial text on *Caixa* with the statement: “We no longer know what sculpture is”. For a while already, the categories of sculpture, installation and architecture – all extended into three dimensions and operating on space as a medium – have been blurred and their distinction challenged. In twentieth century art discourse, the expansion and vagueness of the field of sculpture and consequently of the other spatial arts has become a widely accepted if not canonised idea, especially since Krauss’s (1979; also Sardo 2007, 42) observation of sculpture developing in an expanded field, and is expressed in theory as well as practice.

Here, as in several aspects, *Caixa* is positioned in an “in-between space” (Sardo 2020). By operating on the intersection between sculpture and architecture, *Caixa* follows

in the line of this thematic in general and, more specifically, of Fragateiro's body of work, which frequently demonstrates an architectural connection that consists, in part, of a "life-size scale and the permanent employment of a form of project that belongs to the cultural order of building" (Sardo 2007, 49). Playing with three-dimensional and spatial structures, and frequently blurring the lines between the different artistic categories, her work is "an attempt at understanding spatiality that is outside of an 'in front of' tradition [...]; instead, it presupposes a spatial penetrability, a haptic quality" (ibid., 44). By doing so, it moves away from frontally experienced sculpture and towards architecture, which is marked by being penetrable, inhabitable and occupied. Moreover, it moves away from the frontal and distanced representations of virtual space and towards the real space of embeddedness. It seems to acknowledge the phenomenological aspect of spatial structures and of how they are experienced.

*Caixa's* penetrable and inhabitable quality finds expression in the performance choreographed by Aldara Bizarro for the work, designed specifically for an audience of children who then become participants. As performers begin to open and playfully engage with the sculpture's structure and elements, *Caixa* is no longer only object-form, whether sculptural or architectural, but becomes a performative event and a happening (Fernanda Fragateiro, n.d.). In effect, the previous form undergoes a transformation, its spatial presence changing from a silent and inactive form into the activated "mimicry of an exploratory system" (Sardo 2007, 45), which is brought to life by the performers.



Figure 3: *Caixa para guardar o vazio* (2005),  
Fernanda Fragateiro © Carlos Fernandes



Figure 4: *Caixa para guardar o vazio* (2005),  
Fernanda Fragateiro © Carlos Fernandes



Figure 5: *Caixa para guardar o vazio* (2005),  
Fernanda Fragateiro © José Alfredo



Figure 6: *Caixa para guardar o vazio* (2005),  
Fernanda Fragateiro © José Alfredo

Conceived primarily for children, in particular school children between six and twelve years old, *Caixa's* pedagogical programme is central to the piece (Fragateiro 2020). It is an invitation to experience and learn about space, an omnipresence, but which is often not taught or talked about in school, and to learn about it in a way not guided by language and text but through the body in a phenomenological approach to real space (Summers 2003). The experience and potential learning process happens not by sitting, looking and listening, but through the children's physical engagement with *Caixa*.



Figure 7: *Caixa para guardar o vazio* (2005), Fernanda Fragateiro © José Alfredo

With the performance addressing children in particular, *Caixa* offers an experience that is not unlike that of the ‘Italian youngsters’ observed by Rasmussen (1962), as described in chapter 1. Like them, “they learn [...] to play on these elements” (ibid., 17). They experience the meaning of the spatial and architectural concepts playfully and pre-reflectively, through the body and through what Merleau-Ponty (1978) would call a naive contact with *Caixa*. Not being instructed by a teacher but being invited by the performance and by *Caixa*’s structure itself, they are free to discover and interpret on their own and in their own way. They learn the meaning of spatial notions such as containment, verticality, horizontality, and motion (Johnson 2002). Such meaning is not rationalised and reflected, but corporeal. As a consequence, the participants quite literally get the ‘feel’ of it, in a phenomenological sense. *Caixa* provides the kinds of primary spatial experiences which form the roots of the comprehension of architecture (Zumthor 2006, 55).

In the periods when there is no performance taking place, all visitors are invited to enter and explore *Caixa* on their own. The invitation is communicated not only by the exhibition text but also through the construction design itself. It is the material structure of *Caixa* and its various devices which stimulate a certain movement and engagement: A door asks to be opened; a hole in the wall asks for an arm or a leg to reach through it; a sloping ramp asks to be slid on; in short, the architecture asks to be answered with body movement. *Caixa* stimulates movement, and the visitor has the choice to follow that suggestion and respond with the body.

Through such interaction with the structure, the children or any visitor for that matter experience their own body in a new way within this spatial configuration. In effect, “(l)inking plastic and bodily expression through dance, [*Caixa*] becomes the place to explore the body, in a process of individual and collective discovery, in which skin and wood meet, reveal and question each other” (Fernanda Fragateiro, n.d.). And as skin and wood meet, the body and the structure enter into a relationship of mutual sense-making. While *Caixa* invites an exploration of the body, the body also explores and examines space. The body as a whole is engaged in this relation. *Caixa* invites touch, with the hands and with the rest of the body (Sardo 2020). In contrast to a purely visual and contemplative in-front-of relation, *Caixa* “is a space to explore with all the senses: seeing, touching, smelling, listening and feeling” (Fernanda Fragateiro, n.d.; Sardo 2020). It affords the kind of synesthetic and holistic experience that defines the phenomenological approach to

architecture, with a special emphasis on the haptic quality (Pallasmaa 2005; Zumthor 2006). At the same time, it engages both movement and sense perception in a way that establishes a sense of self as embodied subject that acts, and whose acts have perceptible effects. As the body in motion interacts with the construction, the sensory body becomes aware of how the structure is transformed by such movement.

The sense of self as being in space, and in this specific place, is emphasised by the mirrors on the piece's interior. Seeing oneself reflected in the structure "makes the viewer conscious that he is there. He's not in any other space. He's there, and he sees himself being there" (Sardo 2020). Through the synesthetic experience of the body in movement which is supported by the presence-confirming mirrors, the visitor gains a strong sense of being, of being in space, and of being in the particular, defined space of *Caixa*. This sense may be particularly strong because of the expectations that visitors have developed about the piece – expectations of something of significance to be found inside *Caixa*. But "when you go inside, there's nothing. There's nothing; there's no one, you just have the same wood, the same material, and then you have the floor which is a mirror – so you see yourself" (Fragateiro 2020). The built up expectations are met with one's own image reflected in the mirrors; one's own presence in this space turns out to be that something of significance to be found inside *Caixa* (ibid.). The presence in space seems to be exactly what *Caixa* is about.

Depending on the situation, whether closed, opened by performers or entered and explored by visitors, *Caixa* allows and invites different forms of spectatorship and of engagement. The term 'visitor' – as opposed to viewer, as in visual displays, or spectators, as in theatre – seems most suitable for the work as a whole. Regardless of the specific form of *Caixa* or the mode of engagement, we can speak of visitors in the sense proposed by the British theatre and performance scholar Georgina Guy (2016, 101), "signifying an embodied act of attending which does not necessarily involve taking part". The visitors' physical presence establishes their primary and their continued relationship with the work. Visitors can then choose to interact and become participants, while remaining visitors nonetheless. While the visitors stay outside, they contemplate the sculptural construction as viewers from a certain distance and from a position in front of it. Such contemplation follows in the tradition of Kantian aesthetics and in a tradition of treating space visually and as an image, as virtual space (Sardo 2020; Summers 2003). As the visitors enter, they

perceive it more physically, in a corporeal relation with the piece. This exploratory interaction follows in a different tradition, one that treats space as the real space of embodied relations and of the phenomenological corporeal experience. This tradition, as Sardo (2020) maintains, “calls for a haptic relation, touch, or the physical experience of the quality of the space and its density”. In such a way, *Caixa* makes reference to different and at times contrasting traditions.

What is more, the visitors’ free engagement with *Caixa* differs from the situation of the performance. On the one hand, the performance has a didactic element, with professional performers suggesting to the audience of children, poetically-pedagogically, where and how *Caixa* can be opened and unfolded (Fragateiro 2020; Sardo 2020). The performance points out possible ways of activating the piece while leaving room for further invention. When the visitors engage with the work on their own, on the other hand, they rather freely explore it. Perhaps though not necessarily inspired by the performance – it is possible to visit *Caixa* without seeing the performance – the visitors soon follow their own creative invention in how to interact with the work. According to Sardo (2020), “the two situations are very different: the situation of the performance, where it is a theatre machine, and the sculptural situation when people can enter. It’s two different traditions that come together”. Depending on the situation, the artistic category of *Caixa* seems to change and with it the role of the visitors. Where in the situation of the performance the children are at first spectators of a show, instructed in ways to use the device, their role changes in the situation where they are free to explore the sculptural object on their own, becoming active participants and subjects of action and interaction. There is no itinerary or programme to follow, *Caixa*’s “almost infinite possibilities” (Fragateiro 2020) allow for freedom in its exploration.

With such versatility regarding artistic categories and forms of spectatorship or engagement, Fragateiro points to various traditions and references in art, particularly in sculpture, installation, architecture and interactive art, such as the Russian constructivists, Robert Morris, Hélio Oiticica and Lygia Clark, in the way she explores the body in space and the possibilities of sculpture (Fragateiro 2020; Sardo 2020). *Caixa* shares its penetrable and participatory quality with the *Penetráveis*, a series of interactive installations that visitors could enter by the Brazilian modernist and avant-garde artist Hélio Oiticica. Perhaps the most famous of these was *Tropicália*, first shown in Rio de Janeiro in 1967.



Figure 8: *Tropicália, Penetráveis PN2 and PN3* (1966-7), Hélio Oiticica © Hélio Oiticica

With the participatory element and the possibility to enter and to playfully inhabit the structure, *Caixa*'s quality of use becomes apparent. Through the engagement of "viewers, who now become users" (Sardo 2007, 45), it becomes "a penetrable sculpture [...], available for use" (ibid., 49). Indeed, the engagement with and use of *Caixa*, in particular by children, is one of its essential and defining characteristics. By responding to the structure and thus participating in a dialogue with it, visitors fulfil and complete the work. On the basis of this characteristic, *Caixa* follows in the body of Fragateiro's works which "develop themselves as architectures in order to be enjoyed, that is to say, as devices aimed at gaining existence by being used" (ibid., 44). *Caixa*'s purpose is use, not in a specifically defined but in an open, exploratory and playful way.

With regard to the importance of use, *Caixa* plays with the criterion of functionality which, as shown before, is commonly but not without controversy considered the defining characteristic which distinguishes architecture from the fine arts, as discussed earlier. On the basis of this distinction between non-functional fine arts and functional architecture, *Caixa*'s existence-for-use would have implications for its status as an autonomous work of fine art. Its "use is an indispensable part of the work, but that brings in the question of the piece's validity apart from its use, or of how autonomous is it from the mechanisms of use" (Sardo 2007, 48). But it seems that it does not seek the kind of autonomy that still defines a romantic definition of the work of art. Rather, *Caixa* gains richness from the playful in-

betweenness of categories and the conscious and constructive ambiguity with regards to different artistic traditions. Such ambivalence is intriguing especially because “the piece’s manipulation and mobility are its reason for being: the Box is a device, and must be used as such, which means that only thus it will attain its fullest validity” (ibid.). Therefore, its use, functionality and inhabitability, qualities that typically characterise architecture, are essential for the full expression of *Caixa* but nevertheless do not clearly define it as architecture because of the playful and at times ambiguous expression of these qualities.

The versatility becomes particularly apparent since the structure also demonstrates a perfectionist consideration of form and carefully crafted carpentry which mark it as “an object that lives to be aesthetically enjoyed” (Fragateiro 2020; Sardo 2007). *Caixa* has a compelling formal quality as well as a clear quality of use. It celebrates both form and function, finding itself “in a limbo between device and form, between a pragmatic reason and an aesthetic pre-eminence” (Sardo 2007, 49). It thus exemplifies the debate concerning the role and relative importance of form and function in and for architecture.

The relationship between aesthetic form and use is negotiated in the way *Caixa* is prepared for every new presentation. After each use, the wood is meticulously sandpapered (Fragateiro 2020; Sardo 2007, 6). This expresses a careful attention to aesthetic detail, the tactile quality and the quality of use. It implies a commitment to the original surface and, thereby, to the original experience, visually as well as haptically. According to Fragateiro (2020), this treatment allows every new group of children and other visitors to experience the piece afresh and to be provided the freedom of a metaphorical clean, white sheet of paper<sup>27</sup>. Being designed for use and reuse, the installation has an interesting and complex relationship to the notions of originality and, in close connection, authenticity. The act of sandpapering prepares the surface for use while at the same time eroding the traces of past uses; it is a dedication to the quality of use while negating previous uses. Similarly, it celebrates the material’s appeal to touch by restoring the perfectly smooth and velvety surface after every use, but hardly allows for any tactile traces to show. These tensions point a playful ambiguity with respect to the notion of authenticity.

Authenticity is a vague and ambiguous concept and can be understood in different ways, as is the case with *Caixa* (Sudjic 2014, 3-20). On the one hand, the procedure of sandpapering reconstructs the original and, perhaps, authentic condition. However, this

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<sup>27</sup> The idea of the blank sheet of paper as providing possibilities of engaging with space echoes Perce’s (1997) account of articulating the space of the paper by writing, which has been an inspiration to Fragateiro.

notion may be problematic because, given the fact that *Caixa* is a construction made out of wood, there has already been a transformation from the raw material to the structure. The originality and authenticity of the structure may be a fallacy. On the other hand, by not showing the traces of the engagement with the installation, which is a crucial part of the work, it eliminates the arguably authentic traces of its use. Moreover, the process of sandpapering accelerates the piece's erosion by taking away slowly from the material structure. *Caixa*'s maintenance is marked by a dedication to the perhaps authentic original while seeking to minimise the traces of authentic use.

Shown in the context of artistic institutions and involving a scripted performance, the authenticity of *Caixa*'s quality of use and inhabitability may seem questionable. Its use remains within an artistic sphere; its inhabitability is played, acted and staged, somewhat removed from real life and perhaps self-referential. But functionality can and should be understood more widely. As the London-based architect and design editor Deyan Sudjic (2014, 201) maintains: "To ask what is the function of a chair, or a spoon, without thinking about the idea of ritual or of the social hierarchy that objects are used to express, is to take only the narrowest and most literal view of purpose". In this view, the function of an explorative device such as *Caixa* differs from other forms of architecture in other contexts. Indeed, it is this distance from the taken-for-granted everyday which allows for a new perspective and an attitude of wonder. The sphere in which *Caixa* is presented involves a strong exploratory quality and the potential to stimulate ideas and engagement. In its open and activated form, *Caixa* is

no longer a hermetic dwelling, but the mimicry of an exploratory system, which possesses a clear connection with a constructive stance, but does not refer to any specific allegory of an inhabitable system, though that does not imply it does not include a powerful set of hints at informal inhabitability. This means that, if the piece, in its open formulation, does not evoke an architecture of rationality, it nonetheless suggests informal architectures, [...] what has been systematically called *anarchitectures* [...]. Such *anarchitectural* open systems, vernacular in their eminent usefulness and defined by functional growth, are often used as models for artistic production. (Sardo 2007, 45-46)

As anarchitecture, *Caixa* makes apparent the question of what defines architecture and therefore inspires thought by leaving it open and uncertain in a way that a conventional architectural work would not because of the blind taken-for-grantedness of its architectural character. *Caixa* invites children and other visitors to become the type of 'spacialist,' in the

sense proposed by *Os Espacialistas*, who “transforms quotidian gestures in gifted gestures with artistic plasticity” (*Os Espacialistas* 2020). As anarchitecture rather than conventional architecture, *Caixa* allows for the kind of free exploration which can generate an open learning process while rendering questions of what architecture is about more apparent.

*Caixa* may be an anarchitecture rather than conventional architecture; the piece might not be architecture, but the architectural element is essential to it in the sense that Fragateiro uses “construction techniques that find in architecture their transcendental condition of possibility” (Sardo 2007, 44). In such a way, *Caixa* is “an architecture of space that ignores the rules for the construction of architectural space, that demands its re-creation in order to ensure the continuity of the abstraction that allows us to experience the reality of a dwelling of space in which architecture plays no part” (Taborda 2007, 20). *Caixa*’s abstraction affirms the fact of dwelling, of being-in-the-world in a way that is related to, but somewhat independent from, conventional architecture.

*Caixa* is not one thing or the other, but one and the other. For Sardo (2020), “the stimulating characteristic of that work is that always, when you say ‘*Caixa* is this’, [...] it’s also the opposite. It’s a sculpture, but it’s also an architecture”. The work does not clearly fit into one category or another and is not easily given any one name. Rather, it intelligently brings together different traditions. By doing so, the in-betweenness that it allows us to experience physically and spatially within the structure is also present conceptually. *Caixa* “works on very different levels, and those different levels sometimes belong to different artistic or architectural or stage traditions” (ibid.). For Sardo, this in-betweenness is the work’s outstanding achievement.

Having toured from one exhibition space to another around and beyond Portugal, if we analyse *Caixa* in terms of architectural archetypes, it must be within the tradition of nomadic architecture. As such, it also compares to the modernist development of sculpture as “essentially nomadic” (Krauss 1979, 34). The origins of architecture are often understood to involve one of two archetypes: the cave or the hut. The cave is a cavity within a nature-given solid and therefore subtractive. This type of architecture is stereotomic. The hut, in contrast, is additive in that it adds the solid elements in order to construct the space that they will contain. This is tectonic architecture. Where the prior creates inhabitable space by carving out and taking away from something, the latter builds a structure where there is not yet anything. In its construction, *Caixa* is clearly tectonic; and

this must be the case for all nomadic architectures since only a construction, not a hollow or cavity, can travel from one place to another.

## **4.2 Completion through Participation**

The active and physical engagement with the work designates not only a quality of use and of inhabitability; it also engages the visitor and participant in a particular and profound way. In the case of *Caixa*, the participation of visitors is indeed substantial to the work's full expression in the sense that the visitors complete the work by engaging with it.

Questions of active and participatory spectatorship and its potentialities have a history in Western arts dating back to theorists like the German philosopher Walter Benjamin (1970) whose ideal example was the German playwright Bertolt Brecht. With a movement of experimentations with, and dedication to, participation in theatre and the visual arts of the 1960s, the sense of countering traditionally passive spectatorship has been at the core of the enthusiasm (Bishop 2006). The French philosopher Jacques Rancière prominently explores the potential of active participation with regard to the problems of passive spectatorship in *The Emancipated Spectator* (2009). The theatrical dynamics and context can suitably be applied to other art forms and especially to *Caixa* with its links to the tradition of theatre.

Rancière's (2009, 2) point of departure is the "paradox of the spectator". It consists of the conflicting idea that, though all spectacles per definition involve spectators, being a spectator is an unfavourable thing. This is because, understanding the spectator's position to be a passive, unthinking and merely receptive one, "viewing is the opposite of knowing" (ibid.). In this position, the spectator is "separated from both the capacity to know and the power to act" (ibid.). Hence, the spectator's condition is one that should be avoided which would, however, imply the end of spectacle.

Considering this dilemma, Rancière offers an alternative view and explores the possibilities of emancipated spectatorship. He proposes a form of theatre "where those in attendance learn from as opposed to being seduced by images; where they become active participants as opposed to passive voyeurs" (Rancière 2009, 4). Participation is key here and can take on different forms. In Rancière's view, it does not need to be physical participation, as is the case with *Caixa*. More generally, he maintains: "Emancipation begins when we challenge the opposition between viewing and acting, [it] begins when we

understand that viewing is also an action” (ibid., 13). The active element in viewing consists in the spectator “refashioning [the piece] in her own way” (ibid.) by observing, selecting, comparing, and interpreting it. As spectators actively translate what is presented into their own terms, their perception becomes participatory, and they become participants (Norberg-Schulz 1965; Rancière 2009). In this sense, emancipation begins with “the blurring boundary between those who act and those who look” (Rancière 2009, 19). Through engagement and participation, spectators take on an active role and appropriate what is offered to them.

While the real emancipatory impact of such Rancièrian participation should be regarded with suspicion (Rancière 2009; Sardo 2020), it certainly engages the “viewer-participant” (Stern 2013, 6) in a way that is significant for how the work is received and experienced but also for the character of the work itself. A participatory piece lacks the romantically envisioned notion of the artwork’s autonomy and is, instead, dependent on an outside element, namely the participation of the viewer, in order to achieve full expression and completion. It becomes a more democratic and collective work by involving a community not of passive spectators but of active participants.

In Rancière’s (2009) context, participation is a mainly intellectual activity: through intellectually engaging with the work, the spectator takes on an active role. Indeed, the dynamic he is interested in becomes possible through an ‘equality of intelligence’ between teacher and student, as discussed in his *The Ignorant Schoolmaster* (1991), which partly inspired *The Emancipated Spectator* (2009). While *Caixa* involves a physical, corporeal and thus more concrete form, it similarly places the participating school children and the teacher in a situation of equal intelligence where students learn not from the teacher but on their own, where adults learn just like the children and can even learn from the children’s intuitive exploration (Fragateiro 2020). In *Caixa*, the action and activity on the part of the supposed spectators takes place in a very direct way. Through active and interactive engagement in a process of participatory and exploratory sense-making, the viewer-participant gains knowledge and gives up the passive position in order to become an acting subject who completes the work by acting and participating (Di Paolo 2018; Rancière 2009).<sup>28</sup> This changed dimension is crucial to *Caixa*’s pedagogical aspect in that the school

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<sup>28</sup> Interestingly, in the 2019 exhibition “Please [Do Not] Touch” by Portuguese artist Inês Norton, the sense of touch is considered to celebrate the capacity to act, which is opposed by the criticised “overvaluation of the audiovisual contact leaving aside our innate capacity to act” (Norton 2019).

children no longer sit, view and listen rather passively on the receptive end of the teacher's presentation but begin to act as subjects.

Oiticica, an important reference for Fragateiro (Sardo 2020), has been interested in the re-conceptualisation of the role and relationship of the artist and the audience which Rancière (2009) describes: from a tradition of completed objects exhibited for passive contemplation to pieces that incentivise the participation of the public and are indeed only complete through such participation (Oiticica 2006). With the *Parangolés* (1964), for example, a type of cape made of fabric, photos, plastic, Oiticica created performative experiences in which the spectator-participants wore the capes as mobile sculptures rather than dress and danced samba.

While, on the one hand, Oiticica (2006, 108) praises the “creative participatory notion” for the kind of experience it allows, he also explores the issues with participation and the danger it poses to the role of the artist, the danger of “deflower[ing]” (ibid., 111) the artist. Due to the necessary, plural subjectivities involved in participatory works, the artist not only gives up individual authorship to an extent, but also loses the privilege of ultimate knowledge about the piece. As participants create their own relations and experiences with the work, “the artist cannot in fact measure this participation, since each person experiences it differently” (ibid.). But Oiticica celebrates these dynamics for the new possibilities they open up. Fragateiro (2020) similarly confirms that in *Caixa*, the author is completely in the background: “that magical thing that the piece has is beyond me. [...] It's something that happens, and it happens because there is a sculpture, and there are people. They are connected.”

With his participatory works, Oiticica (2006, 108) explores the possibility of an artistic experience that ranges from the “‘givens’ that have already been produced, the ‘livings’ that structure as if architecturally the routes to be traced, to the ‘transformable givens’ that demand whatever inventive participation from the spectator”.<sup>29</sup> Such transformable givens are the “stimulus, [which] is born stimulus from the simple fact of ‘being there for that’” (ibid.). They are the stimulus for exploratory interaction and as such a counter to the display of finished works that inhibit active engagement. In a different

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<sup>29</sup> Applying these concepts to *Caixa*, it seems that the element of transformable givens is stronger than those of architecturally pre-structured routes due to the flexibility of the work for the use of which there is no itinerary.

context, Oiticica (ibid.) proposes that “the objects that *are* create a different relation with objective space: they ‘dislocate’ the environmental space away from obvious, already known, relations”. Such a dislocation also marks *Caixa*, which dislocates principles of architecture and spatiality from obvious contexts, allowing for a questioning of their meaning.

Furthermore, by involving viewer-participants actively, interactive works become the site and medium of various relations: among the participants, between each participant and the work, and between the artist and the audience (Bishop 2004). Such ‘relational aesthetics’, to quote the term coined by the French curator and art critic Nicolas Bourriaud (2002) with the objective of characterising the arts of the 1990s, are essential to *Caixa*, where relationships are similarly established on various levels (Bishop 2004). By engaging the participants not only in the work but also with each other, *Caixa* becomes a social space, that is, the place of a fictional, temporary community. Here, place is also a social environment (Sardo 2007; Seamon and Mugerauer 2000, 81). While the British art historian Claire Bishop critiques Bourriaud’s view of relational aesthetics for being not exactly compelling aesthetically, formally and intellectually in her 2004 essay “Antagonism and Relational Aesthetics”, the social aspect is a crucial element of participatory works.

The fact that ‘lots of people’ are frequently specified in the lists of materials of the Thai artist Rirkrit Tiravanija summarises what has earned him a position as a paradigmatic example of participatory art and relational aesthetics (Bishop 2004, 56). The audience’s participation is substantial to his performance-installations. In *pad thai* (1990) at the Paula Allen Gallery in New York and in *Untitled (Free)*, originally shown at the 303 Gallery in New York in 1992, Tiravanija cooked for the audience inside the gallery space; for *Untitled (Tomorrow is Another Day)* in 1996, he reconstructed his New York apartment in wood at the Kölnischer Kunstverein, inviting visitors to use the rooms as they would do in their own homes.



Figure 9: *Untitled (Free)* (1992), Rirkrit Tiravanija: installation view at MoMA, New York.

By involving the viewer-participants in the process of producing, activating and completing the work, a process which is also crucial to *Caixa*, Tiravanija blurs the boundary between artist and viewer. He does so by creating relations rather than finished pieces (Rokeby 1995, 10). Moreover, the involvement with his works consists in practical use rather than in contemplative reception. Art, thus conceived, is an object to be actively used rather than contemplated from a distance. In such relational works, the visitor is “both participant in, and creator of, body, work, and space” (ibid., 174) and, thereby, actively engaged and perhaps emancipated.

Tiravanija’s *Untitled, 1996, (Tomorrow is Another Day)*, offers a particularly interesting comparison to *Caixa* in the way it invites visitors to inhabit a somewhat fictional space. Here, to participate means to inhabit. Accessible to the public around the clock, Tiravanija’s installation consists of a life-size reconstruction of the artist’s flat and permits visitors to make full use of it, including sleeping in the bedroom (Bishop 2004, 57). Although within an artistic and artificial context, the installation superficially appears to fulfil all the functions of a regular flat. It does not, however, function as a home with the corresponding emotional values attached to it. In this respect, it is similar to *Caixa*, which

has an informal rather than a real inhabitable quality to it but is not actually inhabited as a house or a home.

In *Caixa*'s context, with its special dedication to children, the proposed community is a specific one. The "use as a performative device for interaction with an audience of children implies one further micro-fiction [...]; now, it is inhabited by a specific, ideal community, a metaphor for the last, lost ambition of aesthetics, the act of seeing for the first time, being there for the first time, touching for the first time" (Sardo 2007). In this way, *Caixa* can remind us of a dollhouse that opens up and changes according to the children's will. This association highlights the playful character of *Caixa* in the way it invites participatory experience.

*Caixa*'s exploratory dimension compares to such direct experience which is at the core of the phenomenological approach. In the way that *Caixa*, as a construction, "speaks through the silence of perception" (Holl 2006, 41), it offers an example of how art lets us assume a phenomenological perspective and mode of perception, lets us become aware of direct experience, opens our senses for perception and lets us become conscious of our perception through the body, through our bodily being-in-the-world.

In participatory works, physical presence and engagement are essential, and the spatial dimension is decisive. Active and perhaps emancipated spectatorship involves an element of acting within a space. In Oiticica's *Parangolés*, this becomes exceptionally clear with what he calls the "corporal expressive act" (Oiticica 2006, 107).

This also becomes clear in the interactive video installation *A Free and Anonymous Monument* (2003) by the British artists Jane and Louise Wilson, a large-scale arrangement, evoking an urban landscape and making reference to the British artist Victor Pasmore's Apollo Pavilion in Peterlee, among other buildings. With strong visual and spatial-architectural dimensions, the installation demonstrates the inextricable relation between spectating and acting: "here, seeing *is* an activity; looking *is* walking. As spectators walk through the space of the installation and engage in its visual display, they activate the work. Their presence and the physical articulation of their motion design the artistic space" (Bruno 2007b, 47-48). As in *Caixa*, the viewer-participants' presence and articulation by the body in motion are crucial for activating the work and its space. Such participatory and interactive works, including *Caixa*, involve both embodiment and enactment; they are completed and fulfilled by bodies, their presence and their actions or movements.

In the cognitive sciences, the theory of 4E cognition describes the mind as being embodied, enacted, embedded, and extended (Newen, de Bruin, and Gallagher 2018). According to this model, cognition is embodied in that it is situated in and enabled by the body's physical structure; enacted in that action and activity shape and direct cognition; embedded in that mental processes are related to their environmental context; and extended in that cognition is shared with minds and bodies beyond the individual (Valera, Thompson and Rosch 2016). Resonating with the phenomenological view of how our perception and experience is structured, relational and interactive works strengthen the sense that we are in the world as embodied, enacted, embedded, and extended beings.

What is more, by inviting viewer-participants to inhabit the installation, they reflect on the notion of dwelling. Dwelling, as the human condition of existing, is an “unfolding and constantly emerging process” (Buchli 2013, 143). This view of existence or dwelling as always unfolding highlights the dynamism and movement characteristic of being, a notion which is emphasised by the active, moving participation of visitors.

### **4.3 The Art of Spatialisation**

In and through embodiment and enactment, *Caixa* finds its full expression. It is the movement and action of the performers or visitors which fulfil and validate the piece. Stimulated by its architecture, bodies in motion mould the space in a dynamic process of spatialisation, an articulation and activation of space by the body in motion (Taborda 2007). “Dancers and visitors are matter in action and their gestures define space. In the relation between our body and the body of the dancers with the box, it opens, folds, unfolds and expands itself” (Fernanda Fragateiro, n.d.). In effect, *Caixa*'s completion or fulfilment is dependent on bodies in motion. It is “a space announcing the notion that it will exist in movement” (Taborda 2007, 23). In such interaction, visitors become spacialists in the sense of *Os Espacialistas*.

The process of spatialisation through body movement can be illustrated with a bird forming a nest with the shape of its own body, by moving in the material and imprinting its own shape onto it. In such a way, bodies give form to the spaces they inhabit (Tavares 2013, 414-415). A space inhabited in such a way merges constructor and construction, corporeal anatomy and action (ibid., 416).

The process of spatialisation is stimulated by *Caixa*'s own architecture which is, in turn, transformed by movement. Offering "transformable givens" (Oiticica 2006, 108) of spatial structure, *Caixa* is a proposition for spatialisation. The architecture invites and demands spatialisation by the body in motion in such a way that the structuration of *Caixa*'s space is articulated by the body at least as much as by the construction. The work "must be experienced through a self-concealing architecture, whose structuration of space is organised and produced by movement: a sequence of spatializations generated by its own form and structure" (Taborda 2007, 21). *Caixa* stimulates body movement and, through such movement, the body actualises *Caixa*.

If "to move one's body is to aim at things through it, it is to allow oneself to respond to their call" (Merleau-Ponty 1978, 139), then the response in the form of body movement is "the realization of the possibility to move in relation to the environment, to the being-in-the-world" (Maletic 1987, 193). The German dancer and choreographer Pina Bausch's method involves improvised gestures as answers to a posed question (Bentivoglio 1994, 23). This method highlights the notion of movement as a response and reaction in a form of dialogue or exchange. If architecture stimulates movement, then movement is the response to such stimulation (Bloomer and Moore 1982). By moving, the body engages in a dialogue and reciprocity with the built environment.

By moving in and around the architecture, the performer or visitor becomes the specialist who "creates form processes from the gestuality of his or her own body, in a concrete space situation." (*Os Espacialistas* 2019). It is in response to, and on the basis of, a given spatial context that bodily gestures develop a dynamic engagement with form. "The body describes the spatial geometry in an open, unpredictable, constantly renewed field of action" (Taborda 2007, 23). With action, in the form of movement, *Caixa*'s construction is acknowledged and responded to, while the structure unfolds in response to such moving action.

Through movement, a dancer articulates and moulds space. "To dance in and of this space, the space of the body, is to assemble the body and assemble space" (Stern 2013, 178). Through movement, both the body and the space are articulated. Moreover, through movement, a dancer's body can "prolong the body's limits beyond its visual contours" (Gil 2006, 22). The body extends into space and merges with it. As a result, the dancing body intensifies the continuums of body/space, and of interior/exterior (Gil 2006; Stern 2013).

Not only through dance but also through other movement forms does such spatialisation, such producing of the space of the body, take place. The space thus produced is an unfolding and always becoming space. Therefore, “to dance is to tell a story the end of which is not defined” (Tavares 2013, 268; my translation)<sup>30</sup>. There is never a finished or completed space just as any demarcated place is never set in stone; through bodies in motion, space remains a malleable dimension.

This sculpture is made of a multiplicity of visions, movements, gestures and sounds, which implicate not only the project itself in its manifold openings, but also the people in their multiple possibilities of movement. The combination of the two is the whole. And possible actions are never-ending: to open, to build, to dislocate, to separate, to do, to open out, to give, to take, to breathe, to laugh, to try, to feel, to add, to subtract, to think, to change, to repeat, to see. (Fernanda Fragateiro, n.d.)

*Caixa* not only demonstrates spatialisation as a dynamic process but also the body as dynamic and ever-emerging. “When a body is in motion, it does not coincide with itself. It coincides with its own transition: its own variation [...]. In motion, a body is in an immediate, unfolding relation to its own [...] potential to vary” (Massumi 2002, 4-5). The body in motion is never in a static position but always passing and becoming, not isolated but in an active relation to what surrounds it (Stern 2013). *Caixa* emphasises this exact sense of the body in relation to space, which is a dynamic relation. It is a model of how “interactive art is ideal for experiencing and practicing the body’s movement (as moving) and continuity (as continuous)” (Stern 2013, 58). The body is not seen from the outside as an almost static object but is felt, through its own enactment, as moving and as continuous.

The relation between *Caixa* and the body is reciprocal. While *Caixa* is actualised and validated by bodies in motion, it simultaneously offers the body possibilities of being a body. *Caixa* is a structure that finds in body movement its spatial possibilities as well as a “container in which the body finds countless possibilities of being a body” (Taborda 2007, 23) and its “multiple possibilities of movement” (Fernanda Fragateiro, n.d.). It is a space to explore possible “styles of being and becoming” (Massumi 2011, 52) as a body and as a subject (of moving action). Through its architecture, *Caixa* opens these possibilities by stimulating, provoking and inciting movement (Tavares 2013). In such a way, by opening a field of possibility for movement and action, *Caixa* offers the viewer-participants an

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<sup>30</sup> Original quote: “dançar é contar uma história cujo fim não está definido.” (Tavares 2013, 268)

experience of subjecthood. It offers an example of how “successful interactive art may make a potentialized context where we move-think-feel the assemblages of flesh and space as they are: continuously actualized and actualizing” (Stern 2013, 180). The reciprocity between *Caixa* and the body is a constantly and continuously unfolding and mutually actualising process, defined by movement.

Based on this reciprocity of continuous, mutual articulating and actualising, *Caixa*, through its inhabitable quality, reverberates the notion of dwelling as a continuous process of being and becoming (Buchli 2013). As dwelling is essential for articulating space and making place, *Caixa* creates a situation in which we constantly assert the structure’s space through the body in motion. In turn, *Caixa*’s spatial and architectural structure strengthens our sense of physical and spatial dwelling in the world (Pallasmaa 2005, 11, 41). What is more, by stimulating movement, it strengthens the sense of subjecthood. Architecture such as *Caixa* strengthens our experience of self as embodied and embedded, spatial and active subjects; it affirms our being by reflecting and structuring the essential conditions of our existence.

#### **4.4 Space-Imaginary**

*Caixa* is both context and stimulus not only for physical but also imaginative movement and activity. Indeed, the physical structure and the opening devices are only entryways and starting points for possible engagement. It is not only a shelter for (day)dreaming, in the sense of Bachelard (1969), but also a challenge to take the (day)dream to further spaces. In such a way, *Caixa* generates ideas and a way of experiencing, imagining and thinking about space that can be developed further and taken to other places (Fragateiro 2020). The physical process of unfolding only creates expectations while, on the level of imagination, the possibilities to unfold the spatial system are developed much further. “It’s much more on the level of the imagination of the possibilities of opening that space that the visit of the viewer takes place, either around or entering the space” (Sardo 2020). The most significant or ultimate transformation of *Caixa* takes place not because it is physically possible, but because the physicality of it invites an imaginative engagement that goes further or deeper than what the structure itself permits. It activates the imaginative function to “expand our realm of being” (Pallasmaa 2015, 8). *Caixa* becomes a “space-imaginary” (Sardo 2020) by

stimulating movement not only of the body but also of the mind: movement which is grounded in, but expands beyond, *Caixa*'s physical structure.

But the engagement on the level of the imagination is not separate from the physical dimension. Body movement is not only a metaphor, but rather a manifestation and materialisation of the imagination. In the “moving-thinking-feeling” (Stern 2013, 14) body, affect and action are inseparable. And *Caixa* stimulates both, in constant movement and constant reciprocity. *Caixa* invites the embodiment of the imagination.

Thanks to its vast possibilities of physical and mental movement, *Caixa* offers a “spatial device of sensorial, choreographic and philosophical enquiry of the body” (*Os Espacialistas* 2020; my translation<sup>31</sup>). For this to continue to be possible in a free and open way, *Caixa*'s void is essential. It is the emptiness, the lack of occupancy of the void which sustains the freedom and openness that allow for an exploratory enquiry.

#### **4.5 Keeping the Void**

For Fragateiro (2020), the void is not an absence but a presence. It is the void which allows for freedom by being not-yet occupied. Indeed, “that void is what allows you to be free, to make decisions and to have some control: you are in control. You're not controlled by all the powers around you [...] I wanted to talk about the importance of the void as a way of giving the kids the power to build space, to build something, because they have freedom” (ibid.). In this sense, the void is what enables the building and articulating of space. For this purpose, the void of *Caixa* must be kept. As the work's title suggests, its essential function, its reason for being, is *to keep the void*.

Normally “the *void* is a place unoccupied by the body” (Taborda 2007, 23). But following Lefebvre (1991), space must be occupied. And *Caixa* comes to be occupied by the bodies of children and other visitors whose presence is affirmed by the mirrors on the interior and who articulate and fill the structure with movements, memories and imaginations.

In a way, such physical and mental occupancy fills the void, in apparent conflict with *Caixa*'s purpose of keeping the void. As space must be occupied by the body, and *Caixa* clearly invites such occupation, the void comes to be filled. Through its qualities of use and of inhabitability, *Caixa* stimulates its own occupation. As a result, the void is no

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<sup>31</sup> Original quote: “dispositivo espacial de interpelação sensorial, coreográfica e filosófica do corpo.” (*Os Espacialistas* 2020)

longer void. It seems that *Caixa* only keeps the void when no-body engages with it. But this is to not complete, validate, and affirm its reason for being.

Perhaps, the box not so much keeps the void during the sessions but rather over the long run of several sessions. Occupancy is merely temporary, and *Caixa* goes back to being void after each presentation, and the traces of occupancy are eliminated through the procedure of sandpapering. As the treatment of the wood recreates the metaphorical clean, blank sheet of paper, *Caixa* regains the void, ready to be filled by a new group.

By seeking to keep the void, *Caixa* resists the creation of place as a defined, clearly demarcated portion of space given a specific meaning. Although the physical construction delineates a more or less defined portion of space<sup>32</sup>, the way it opens and unfolds, thanks to the flexibility of the various devices, implies almost endless possibilities of articulating and building space, stimulating not only physical movement but, moreover, a free imagination of spatial poetics. Although meaning-making takes place, it never finds a stable form that would define *Caixa* as a fixed place. Perec (1997, 91) describes the impossibility of such stable places: “I would like there to exist places that are stable, unmoving, intangible, untouched and almost untouchable, unchanging, deep-rooted; [...] Such places don’t exist, and it’s because they don’t exist that space becomes a question, ceases to be self-evident, ceases to be incorporated, ceases to be appropriated. Space is a doubt: I have constantly to mark it, to designate it. It’s never mine, never given to me, I have to conquer it.” *Caixa* is the opposite of the kind of place that Perec would like there to be. *Caixa*’s space is unstable and moving thanks to its opening devices; it is tangible with a compelling tactile appeal; it is touched by the performers and the visitors, indeed, its purpose is to be touched; it changes over the course of the performance, the visit, the presentation, and from one presentation to another; it is not rooted but rather a nomadic structure. In the way that *Caixa*’s space becomes a question and doubt, not self-evident, incorporated, appropriated, it provides freedom. It provides freedom to this ideal community of children who find themselves in a world that seems to be already occupied and appropriated. In *Caixa*, they have to mark and designate space, which is also a freedom and opportunity to mark and designate it. *Caixa* reminds them that although the spaces they find themselves in might never be theirs, never given to them, they are also nobody else’s. They have to conquer them, which means they *can* conquer them.

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<sup>32</sup> *Caixa*’s measurements depend on its configuration and level of openness of which there are almost infinite possible degrees.

## CONCLUSION

*“The subject [...] is not the void exactly, but rather what there is round about it and inside it.”(Perec 1997, 5)*

Space, being omnipresent, is as much taken for granted as it is formative for the experience of everyday life. As scholars have pointed out more and more, particularly since the second half of the twentieth century, the concept of space is much more complex, layered and perhaps problematic than often thought. Architecture, operating on the medium of space, is essentially concerned with the experience of spatial relations and has seen an increased interest in the dimension of lived experience rather than only formalist or functionalist concerns. Especially with the phenomenological critique of architecture, the significance of experience grounded in the body has been acknowledged and emphasised. The notion of real space (Summers 2003) highlights this embodied and embedded relation. We exist in the world as physical and spatial bodies. Through its existence in space, the body affords us the primary experience of spatiality (Merleau-Ponty 1978). We can experience spatiality because we ourselves are spatial, because our being is spatial.

Furthermore, the Lefebvrian (1991) conception of space as something dynamic and malleable to be actualised and produced, rather than some universal, neutral backdrop, has engendered a shift in thinking about and treating space, a shift away from the modernist paradigm founded on Cartesian rationalism and Euclidean mathematics. This shift has provided inspiration for architecture and other forms of art.

Fragateiro's *Caixa* brings together several aspects of this way of treating space as real space, as an embodied and a dynamic relation to be actualised. Its structure invites the kind of physical and imaginative action and interaction in a way that lets us experience the relationship between architectural space and the body in motion in an intensified way, while making a point of reflecting our presence and being in space by means of the mirrors. Through its construction, which stimulates a certain kind of engagement and to which visitors respond accordingly, it allows for a direct experience of the relationships and dynamics that have been discussed in theory in the previous chapters.

Space, which gains meaning through a process of articulation and spatialisation, is distinguished from place, which is already defined and demarcated, given a more or less specific significance. In this sense, as argued earlier, place is space invested with meaning (Cresswell 2014; Hubbard and Kitchin 2010; Relph 1976). It is through occupancy that a

portion of space is invested with meaning. And space needs to be occupied, that is, it needs to be occupied by a body (Lefebvre 1991).

By occupying and articulating space, the body invests it with meaning, establishing place. In effect, by giving meaning to the space it occupies, the body itself is already a place. In *Caixa*, “we experience an environment where we understand that our body is also a place. The body is the ultimate place” (Fernanda Fragateiro, n.d.). If place is meaningful space, and the body is the ultimate place, then the body is the ultimate ground of meaning. It is the means for making meaning, the seat and anchor of meaning. These relations become very clear in *Caixa*, the structure of which invites activity of the body and of the imagination and confirms our sense of presence in space with the mirrors on its interior.

By giving meaning to space, the body gives meaning to its own existence in space. Space and the body are in an ontologically reciprocal relationship in the sense that one gives meaning to the other, rendering each other graspable and comprehensible (Crowther 1993; Crowther 2009). As argued earlier, successful architecture has the potential to affirm our sense of being-in-the-world not just as embodied beings but more exactly as embodied subjects with a capacity to act. This capacity finds perhaps its most elementary expression in movement. By responding to architecture’s stimulus of movement, we express our capacity to act as subjects in the world in which we are embedded and situated with our bodies. Physical movement is both expression and metaphor of mental and imaginative activity. Through the body in motion, our imagination is inspired and finds expression.

As the body in motion responds to the stimulation of architectural space, space and body articulate and actualise each other as ever-emerging and ever-unfolding, in a dynamic process of becoming. For this dynamic process to be possible, a certain freedom is crucial. It is the void that provides such freedom. The void is full of possibilities. Indeed, it is necessary for the unfolding of possibilities. The void is that which space consists of – if it can be said to consist of something – before it comes to be filled. Since both space and the body are dynamic, ever-emerging, ever-unfolding and never complete, a certain openness and emptiness is needed for such unfolding and actualising to be possible. Only emptiness can be filled; only what is not-yet defined by some particular meaning allows for a free and creative process of signification. By keeping the void, which is the purpose of *Caixa*, the possibility of creative expression and meaning-making are kept.

Here, the fact that *Caixa* primarily engages groups of children is significant with respect to the idea that children are frequently confronted with established systems and with a lack of freedom in the way they engage with their surroundings and a lack of autonomy in decision-making.

The void is the spatial quality which characterises space as something yet to be occupied and filled, as something still open and full of possibilities by being empty. It is the void which provides the freedom to articulate and actualise space and thereby, in turn, experience ourselves as embodied and embedded subjects with a capacity to act in, and interact with, our environment, with the world.

Architecture, by framing space, articulates the void before and despite it becoming occupied with objects. Successful architecture, although being the frame for the objects with which it is filled, always maintains some quality of being void which provides freedom and possibilities of expression while, or by, stimulating the type of physical and imaginative movement which affirms our sense of self as embodied, sensing subjects.

The role of the body in the experience of architectural space is to translate architecture into the terms of human existence on the basis of the shared corporeality and spatiality; to enter into a dialogue with the architecture by responding to the structure's stimulus with movement; to articulate space in a way that conversely articulates our own existence and presence; to thereby establish a reciprocal relationship of mutual sense-making and affirmation with the architectural space. We experience architecture through the fact of our embodiment, and we experience our embodied existence through architecture.

The implications of these relations have relevance for both architectural and artistic practice, for pedagogical approaches and for the way we perceive and engage with our everyday environments. While the importance of the body in architectural and spatial experience is already not a new idea, it could be explored more deeply in several areas, such as arts, architecture and design, pedagogy and therapy. Especially performative and participatory approaches to exploring spatial relations seem to have a strong potential by engaging the body in a concrete, immediate way, thus speaking to the totality of our bodily, motor-sensory experience.

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## APPENDIX A

### Interview with *Os Espacialistas*. June 10, 2020<sup>33</sup>

#### What effect or impact can architecture have on the body?

Segundo Gaston Bachelard, o benefício mais precioso da casa é o de abrigo do devaneio, protege o sonhador e permite sonhar em paz. Generalizando esta afirmação, nós Os Espacialistas, acreditamos que a função primordial da arquitectura, é de facto, de abrigo do devaneio, não só das imagens, dos sonhos, mas também de todas as imagens que o homem é capaz de criar, nas relações que estabelece com o espaço, com o corpo dos outros e com o corpo próprio. Por isso qualquer espaço arquitectónico é antes de tudo um arquivo memorial das ideias do corpo e das suas circunstâncias de movimento, na forma de um Atlas Mnemosyne, um Museu Imaginário, um Bodyb(u)ilder de imagens em potência e de todas aquelas que cada um for capaz de fazer aparecer nele a partir da sua sobre/vivência e permanência nele, quer sejam de natureza onírica, técnica ou poética.

A arquitectura pede corpo, o corpo necessita de arquitectura para poder exercitar alguns dos destinos e in/tensões com que foi magicamente projectado. A arquitectura é uma máquina ontológica de produção de afectos que salva e guarda constantemente o corpo memorial de quem nele habita em estado de actualização poética permanente. Transforma-se no corpo de quem nela vive, à medida que é consciencializada enquanto dispositivo de percepção e pensamento das múltiplas tipologias de corpo que todos transportamos de um lado para o outro, carregado de metáforas.

Coloca-nos em movimento à medida que intensificamos os gestos quotidianos e os transformamos em esculturas i/materiais sem aparência, perturbadoras pela simplicidade invisível do seu processo de criação, que necessita apenas da acção / essencialização poética da consciência sobre as substâncias e matérias com que cada um de nós entra em contacto nas diversas actividades do dia a dia.

O principal e-feito que arquitectura tem sobre o nosso corpo é a sua capacidade para o colocar em movimento, do ponto vista físico e imaginário, pela acção das nossas memórias e das experiências individuais e partilhadas de cada um, através das qualidades

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<sup>33</sup> With the present thesis being in English, the interview questions were made in English. Because the interviewees felt more comfortable in Portuguese, and the Portuguese language is more suitable for the word-plays that are significant to their answers, the answers are in Portuguese. In order to reproduce exactly the questions that were available to the interviewees, they were not translated into Portuguese.

estéticas construídas, resultantes da sua superação funcional. A arquitectura torna-se arte quando se liberta da tirania do corpo.

A arquitectura só r/existe na presença do corpo, o único material capaz de questionar a vocação das suas especificidades arquitectónicas, enquanto resposta a uma circunstância programática, que a transforma num organismo à nossa imagem e semelhança e nos confirma constantemente a tirania fisiológica e a fragilidade física do corpo que nos abriga o outro corpo sem órgãos, uma espécie de arquitectura de intensidades domesticada pelas contingências do corpo como a fome, a sede, a doença ou o instinto sexual.

Afectivamente o Homem habi(li)ta o espaço em que vive, de novas formas de ser, mesmo quando este não tenha sido naturalmente pensado para a domesticidade da afectividade.

Para Os Espaciaisitas a imagem, o movimento e o amor são os três últimos materiais de construção do espaço por vir, na forma de uma casa sem órgãos: uma espécie de animal doméstico dos afectos, capaz de nos ensinar a intensificar aquilo que desejamos e sentimos e a construir a Forma da Vida do futuro.

O corpo é a Metáfora que todos transportamos de um lado para o outro à procura de sentido poético.

Os gestos de cada um de nós são as ideias do corpo transformados em arquitectura.

### **What is the role of the body in how we experience architecture?**

Os Espacialistas partem em direcção ao espaço, munidos da sua principal ferramenta de trabalho que é o corpo de cada dia. Acreditam que funciona como uma espécie de remedi(a)dor / intensificador natural das intensidades reais e imaginárias do espaço, capaz de fazer aparecer à sua passagem um conjunto de vocações artísticas latentes, só à espera de aparecerem e serem consciencializadas por eles através de um conjunto de exercícios ginástico/conceptuais de espaço, como reacções poéticas às especificidades encontradas em cada situação por onde passam.

Sem corpo não há espaço arquitectónico. Sem corpo não há a “outra luz”, a da percepção, que ilumina e elimina o vazio dos espaços e do corpo, próprio e dos outros. O corpo é o dispositivo de todas as ligações e constelações, sem ele os espaços não tinham consciência de si próprios. O corpo é a in/consciência i/móvel e i/material do espaço. O

corpo é a razão de ser do espaço em movimento. É ele que perturba/agita todas as suas substâncias, essencializando-as, intensificando-as e actualizando-as através da memória e da imaginação à medida que se desloca nele. O corpo é a sombra omnipresente do espaço, a medida de todas as suas aparências nele.

O corpo é o primeiro material de construção do espaço e a única unidade de medida sensível, capaz de se relacionar com ele, de acordo com as espécies de corpo que nos qualificam / intensificam e predominam no nosso quotidiano. A experiência arquitectónica constrói-se a partir da espessura e da multiplicidade sobreposta de corpos que cada um é capaz de fazer aparecer e carrega consigo ao longo da vida.

Na era digital pandémica em que vivemos muitas são as espécies de corpos predominantes em cada um de nós que podemos facilmente reconhecer, tais como: corpo sacrificial, corpo simulado, corpo metafórico, corpo redundante, corpo secreto, corpo oculto, corpo político, corpo fragmentado, corpo construído, corpo memorial, corpo verosímil, corpo vítreo, corpo virtual, corpo cyborg, corpo fractal, corpo transparente, corpo esquecido, corpo auto-regulado, corpo predatório, corpo utópico, corpo rizomático e corpo pandémico, todos eles capazes de nos criarem pontos de vista diversos na nossa experiência quotidiana do espaço conforme a sua predominância em cada um de nós e a nossa identificação mais sensível com algum deles em particular.

O papel do corpo na forma como cada um “erra” no espaço depende das espécies de corpo que cada um constrói, habita, consciencializa, exercita e intensifica à medida que se de/mora neles.

Sem Corpo não há Espaço, nem Arquitectura.

Todos nós somos os espaços que memorialmente e imaginariamente habitamos de acordo com as espécies de corpo que essencializamos e intensificamos à medida que o tempo passa. Todos nós somos o corpo que construímos, habitamos e pensamos, e dele nascem os espaços por onde cada um de nós erra. Errar para Os Espacialistas é caminhar. É o dispositivo de percepção, de omnipresença e perturbação re/existente em todas as i/mediações da Vida.

Se para nós, Os Espacialistas, os gestos de cada um de nós são as ideias do corpo transformados em arquitectura, o papel do corpo na forma como a experiência do espaço é feita por cada um de nós, vai mais longe quando ele próprio se transforma num

transobje(s)to arquitectónico, a única unidade de medida de construção material do espaço, capaz de se constituir como matéria autoconsciente de pensamento de si próprio.

O principal cliente do espaço arquitectónico é o corpo, que nele (se) constrói para si próprio. O colectivismo é o corpo. É a única coisa, que todos temos em comum. Quando falamos uns com os outros, com a consciência de que falar é a primeira forma de habitar, o que estamos à procura é do corpo no lugar arquitectónico do outro.

A arquitectura é sempre corpo, um corpo em processo de trans/formação contínua que se consciencializa em cada nova construção enquanto aferidor sensível do maior número pontos de vista do humano possíveis.

Poeticamente o homem habi(l)ita o Corpo do Espaço.

**Art. 29° of the definition of Espacialista says "Espacialista é aquele que desenvolve no próprio corpo um novo órgão/sentido de percepção, de intensificação, de reabilitação, de reprodução e de instinto do espaço quotidiano". How does such an organ or sense work?**

No caso d'Os Espacialistas é o *Aparelho Reprodutor Artístico*, uma espécie de órgão da consciência e da imaginação, que reflecte a cada instante da vida, a natureza criativa do homem e a sua tendência para o esquecimento estéril.

Arthur Schopenhauer, filósofo alemão, no seu livro "A Metafísica do Amor", diz-nos que aquilo que está em germen na primeira troca de olhares entre um homem e uma mulher é o aparecimento/nascimento de um novo Ser. A partir da ampliação dessa ideia, Os Espacialistas vão mais longe e imaginam que aquilo que está presente, não só na relação entre o corpo de quaisquer dois seres humanos, mas também na relação que o corpo de cada um estabelece com o espaço e a circunstância onde se encontra, é a germinação de um novo de ser ficcional, resultante não só do encontro com o outro e da nossa deslocação no espaço, mas principalmente do exercitamento criativo das qualidades reais e imaginárias de cada um.

Os Espacialistas acreditam que na génese de qualquer encontro humano no espaço, está a vontade de exercitamento da criatividade amorosa de cada um que resultará naturalmente no aparecimento de novos seres/géneros ficcionais no espaço da vida quotidiana.

O *Aparelho Reprodutor Artístico* aparece-nos por isso como o novo órgão reprodutor, responsável por todas as novas formas de Ser, que fomos capazes de dar aparência e partilhar, a partir da intensificação diária do desejo de cada um em permanecer em estado de criatividade pura ao longo da vida. Sentir acima da média será a premissa deste novo órgão, cuja sobrevivência no corpo de cada um dependerá quotidianamente do exercitamento imaginário da memória.

Leonardo da Vinci, recomendava aos jovens pintores, que na ausência de inspiração, entrassem pelas fissuras das paredes adentro, pois aí encontrariam mundos inimagináveis para pintar. Foi o que Os Espacialistas fizeram ao reconhecer numa mancha de água deixada pelo tempo, numa parede fissurada, qualidades de entrada e possibilidades de regresso ao útero materno, contra a qual saltaram repetidamente, até nela ficarem (fotograficamente ) presos pela cabeça. Situação que apareceu logo no início do nosso primeiro projecto profissional, “Os Espacialistas na Quinta”, e nos permitiu consciencializar que determinadas p/referências artísticas que tínhamos como Gaston Bachelard, Helena Almeida, Vito Acconci, Bruce Nauman, Marcel Duchamp, Mathew Barney, entre muitas outras, podiam vir ser praticadas e consciencializadas no espaço do quotidiano da realidade. Os Espacialistas gostam de levar à letra aqueles por quem desenvolvem p/referências artísticas.

O aparecimento da consciência de existência de um quotidiano artístico e da necessidade do seu exercitamento, cristalizado pela primeira vez nesse salto contra a parede, constituiu-se antes de tudo como um processo de forma de natureza escultórica, de consciencialização da omnipresença da criatividade, no corpo e na vida, de cada um de nós. Repetido cerca de trezentas vezes - o número de esboços fotográficos realizados - como um exercício ginástico de espaço, que se desenhou e ganhou aparência física / táctil a cada salto, ao mesmo tempo que fazia o aperfeiçoamento da imagem fotográfica, enquanto forma de um corpo imaginário, capaz de levar o corpo ao limite da r/existência física e conceptual, re(h)abilitou imaginariamente o espaço da parede escolhido/ pressentido pela imaginação espacialista, acrescentando-lhe outros pontos de vista através da interacção corporal que até essa altura ninguém tinha reparado.

O quotidiano como laboratório artístico, de transformação dos gestos quotidianos em formas criativas da consciência, tornou-se assim, para Os Espacialistas, o lugar por

excelência de reconhecimento permanente das potencialidades das acções humanas sempre à procura de novos sentires e novas reparações.

Partir à descoberta da vocação artística no espaço quotidiano é o nosso maior lema.

**Art. 22° of the definition of Espacialista says "Espacialista é aquele que desonvolve actividades espaciais laboratoriais com o único e exclusivo objectivo de alterar a percepção dos espaços por onde nos movimentamos diariamente". What can such activities look like? What defines them? How do they work?**

Para Os Espacialistas o pensamento que vale é aquele que anda, e os gestos são as ideias do corpo. Omniscientes destas situações corporais, em cada “promenade espacialista” que realizamos, o corpo é o laboratório ambulante, o gabinete de curiosidades e o museu imaginário que transportamos connosco, apetrechado de uma série de objectos i/materiais, enquanto dispositivos de percepção e mediação, construído com as memórias e as experiências de cada um, de naturezas afectivas diversas, mais ou menos conscientes, físico ou conceptuais. Daqui resulta a aparição mais visível das acções espacialistas, levadas a cabo nos espaços por onde passamos e que está na génese conceptual das actividades laboratoriais desenvolvidas: o esquisso fotográfico, uma espécie de desenho em tempo real que depende do(s) corpo(s) e da sua interação com os espaços, as pessoas e os objectos existentes nessa circunstância, encontrados ou transportados pel`Os Espacialistas.

Cada projecto espacialista é uma oportunidade laboratorial para o diálogo, para a consciencialização da importância que as palavras, enquanto formas escultóricas do pensamento, têm na nossa vida e nas relações que estabelecemos com os outros, para pensar a fotografia como dispositivo de percepção e consciência do corpo e do espaço, para compreender a natureza repetitiva do exercício físico e perceber de que modo na repetição está a génese da vontade de aprender e fazer aparecer novos mundos. Cada projecto espacialista é uma oportunidade para investigar a natureza e as diversas modalidades do conhecimento humano. É uma espécie de Laboratório para a Arte Directa, como aconteceu no projecto “Os Espacialistas no Quiosque” em Paredes, acontece todos os dias na Loja do Espacialista no Centro Cultural de Belém, ou no LAR- Laboratório de Arte e Arquitectura na Universidade Lusíada de Lisboa. A transdisciplinariedade está sempre presente nas práticas espacialistas.

Os melhores exemplos das “actividades espaciais laboratoriais com o único e exclusivo objectivo de alterar a percepção dos espaços por onde nos movimentamos diariamente”, o modo como se aplicam e resultam no espaço do quotidiano, estão presentes nos esboços fotográficos que realizamos de forma avulsa ou em projectos artísticos como “Os Espacialistas e o Piscocenho” e “Os Espacialistas no Quiosque”, ou em projectos participativos como Os “Espacialistas no Bairro São Vicente de Paulo” e “Over Flow” com o artista japonês Tadashi Kawamata, para não esquecer as performances e os projectos pedagógicos na forma de residências artísticas, seminários e workshops em escolas, universidades empresas e instituições culturais, etc.

Todo o nosso processo criativo é revelado no Diário do Espacialista, uma publicação de autor, com carácter de manifesto que tivemos necessidade de criar desde o início como auto-resposta metodológica a essa mesma questão, onde definimos o que é, e faz um Espacialista, e qual a importância do corpo, do espaço e dos objectos nas re/acções que levamos a cabo.

O *Kit Espacialista*, é dividido em *Kit de Objectos Encontrados*, e *Kit de Objectos Transportados*. O primeiro, é constituído por todos os objectos, espaços, pessoas e animais, que vamos encontrando, nas situações de espaço por onde passamos, o segundo é essencialmente constituído por todos os objectos que antecipadamente pensamos, pela imaginação da memória dos espaços onde anteriormente passamos e pelo corpo de pessoas que acrescentamos por estratégia projectual.

Os objectos para Os Espacialistas são instrumentos de medi(a)ção das intensidades imaginárias entre o corpo e o espaço.

Estão na origem de um conjunto de exercícios ginástico/conceptuais de espaço, que têm como principal propósito, fazer aparecer a vocação artística do espaço onde nos encontramos, e exercitar o aparelho reprodutor artístico, já referido, latente em cada um de nós. Da relação, com os objectos, a repetição, aparece-nos como método fundamental de todas as reacções poéticas que desenvolvemos, não só do ponto vista performativo, mas também, do ponto de vista processual, pois muitos dos Kits de objectos que encontramos ou criamos, são conjuntos de objectos iguais, passíveis de serem manipulados enquanto materiais a diversas escalas; desde a escala da mão, à escala da casa, à escala da paisagem, até à escala da imaginação.

O nosso processo depende também da (il)imitação das nossas p/referências arquitectónicas e artísticas que consciencializamos a todo o momento, nas palavras, nos movimentos do corpo e do espaço que realizamos à medida que caminhamos, com os pés e as mãos bem assentes na memória e na imaginação, de cada um d'Os Espacialistas e dos espaços onde nos encontramos.

Errar é caminhar, e à medida que o fazemos lúdica e lucidamente, com a ajuda do esquisso fotográfico, enquanto dispositivo de percepção e pensamento em tempo real, resultante das re/acções e de/composições que vamos montando a partir das especificidades físicas e psíquicas de cada espacialista e da circunstância que cada um vai revelando a partir dos gestos que desenvolve, e que se ligam com os movimentos dos outros, criamos os processos de forma que depois apresentamos publicamente.

Cada projecto-presente continua a pensar e a imaginar o anterior à medida que vai acrescentando as intensidades dos novos espaços e dos objectos onde nos encontramos.

O Kit Espacialista de natureza por/táctil, não pára de aumentar, cresceu da escala do corpo para à escala do espaço, sob a forma de Laboratório de Arquitectura e Arte - LAR, instalado na Universidade Lusíada de Lisboa e a Loja do Espacialista no Centro Cultural de Belém d'Os Espacialistas. O "Lar" é um gabinete de curiosidades, repleto de fotografias, desenhos, maquetas e muitos objectos de proveniências diversas, que servem as nossas práticas de investigação académica, arquitectónica e artística. A Loja é uma espécie de caixa métrica, negra, de natureza tecnológica e constelar, que espacializa muitos dos nossos conceitos de intervenção, uma espécie de atlas, constituído por postais, livros e sólidos geométricos, transformados em formas narrativas. Nela, conversamos com quem nos visita, e transformamos as palavras em objectos de natureza escultórica. É por natureza um espaço onde o encontro e o diálogo, são transformados em Escultura Social, segundo Joseph Beuys.

### **How does body movement relate to architecture?**

Qualquer Sonhador de Casas, à medida que caminha e atravessa paisagens, projecta nos sítios por onde passa as casas imaginárias que transporta consigo, com a secreta esperança de que um dia se transformem em realidade. Todos nós já experimentámos esta sensação de esperança de que um sítio por onde passamos e essencializámos desde sempre, e onde aprendemos a projectar todas as imagens da nossa vida cinematográfica interior se

transforme no lugar acolhedor das imagens de abrigo, que há muito transportamos conosco e que gostaríamos de ver materializadas na forma da casa dos nossos sonhos.

É a nossa capacidade de transportar metáforas de um lado para o outro que coloca os espaços (es/passos) em movimento, que monta todas as imagens nas paisagens que vamos guardando ao longo da nossa vida e que vão decorando o interior do nosso corpo, como promessa de uma vida feliz, sempre à espreita, mas improvável.

Para Le Corbusier, uma casa era uma *máquina de habitar*, para ser experienciada em movimento, numa relação visual íntima entre interior-exterior, ao longo de uma “promenade architectural”, que a transformava numa máquina da visão, bem consciencializada na suas janelas em comprimento, autênticos rolos fotográficos desenrolados da paisagem, que permitia ao corpo deslocar-se no interior do espaço, paralelamente à linha do horizonte e contemplar imagem a imagem. O contrário do que acontecia com a janela renascentista da perspectiva, onde o corpo para se relacionar com o exterior tinha de permanecer estático, no centro do seu enquadramento de olhos postos no ponto fuga da paisagem, como nos revela Beatriz Colomina, no seu livro “Privacy and Publicity. Modern Architecture as Mass Media,” onde ainda nos conta que para Adolf Loos um homem culto nunca olha pela janela, concentra-se nas suas imagens interiores e que a janela é um dispositivo de enquadramento cinematográfico da luz, de natureza translúcida.

Todos nós em algum momento da nossa vida já nos deixámos ficar a sentir acima da média, por alguém ou alguma coisa.

É o corpo com tudo aquilo que acontece dentro e fora dele que coloca qualquer espécie de espaço em movimento, animado pela intensidade daquilo que percebe ou sente. Não há nenhuma História de Amor, que não comece por ser narrada, como um encontro numa circunstância específica de espaço, seguida de todos os movimentos interiores e exteriores do corpo, que nela aconteceram. Basta pensar na História de Amor Platónico de Dante e Beatriz, nascido no primeiro encontro na Ponte Velha de Florença e em todas as consequências que esse encontro teve na escrita desse autor; ou na História de Amor de Romeu e Julieta e pensar no Pátio onde se encontravam e no Balcão que os separava, para perceber a força motora de qualquer espécie de amor ou paixão e a relação com a circunstância onde aparecem.

Não há histórias de amor sem florestas, fontes, castelos, palácios, casas ou torres, sem seres enamorados que se desdobram interior e exteriormente em movimentos infinitos com os espaços onde acontecem. Só o corpo enquanto máquina desejante desenha espaço arquitectónico: o espaço melhor, resultante do melhor que há no homem, do ponto de vista do pensamento e dos afectos. O Desejo é o seu principal catalisador, capaz de nos fazer de(morar) nele, e ligar os seus três últimos materiais de construção: imagem, movimento e amor no espaço.

Não há arquitectura sem qualidades (humanas).

Não há arquitectura sem corpo em movimento, sem corpo em estado de permanente re/paração e vontade de sentir acima da média tudo o que o rodeia.

**Art. 30° of the definition of Espacialista says "Espacialista é aquele que altera conscientemente a partir do próprio corpo os espaços da vida quotidiana". How so? How can the body alter such spaces?**

O que pode um corpo? A esta pergunta de Spinoza, Os Espacialistas gostam de responder, que o corpo pode tudo, por ser o lugar de todas as relações por vir, pode (constelar) com todas as espécies de mundos, se os afectos forem diariamente exercitados pela consciência, pela memória e pela imaginação de cada um. É o melhor Presente.

O Corpo é o primeiro espaço de que temos consciência, depois esquecemo-lo à medida que vivemos e o vivemos ao acaso.

“Eu a lavar, tu a sujares”, escreve Vergílio Ferreira em “Invocação ao meu corpo”, o mesmo acontece com os espaços da nossa vida. Nos espaços que habitamos, onde repetimos diariamente, os mesmos gestos de manutenção e superação da vida, onde criamos rotinas resultantes das necessidades, dos desejos e vicissitudes do nosso corpo de cada dia. Neles repetimo-nos até ao infinito, sonhamos, desenhamos objectivos, superamos na criação de fantasias que nos e/levam a estados de alegria e felicidade enquanto não caímos de novo com todo o peso da vida, num profundo estado de desânimo, apatia e tédio mortal, enquanto questionamos repetidamente o sentido da vida e consumimos todos os vestígios de lucidez daquilo que criamos, e que nos resta como droga *translúdica* daquilo que em algum momento da vida esteve e está sempre em jogo: o acaso. E na manhã de cada dia, em estado de h/oração voltamos ao jogo da vida, ao acaso e à repetição, voltamos para nos voltarmos a o/fender e a levantar para um novo dia. Partimos para a apanha das

tarefas do quotidiano, onde o dia - a unidade de medida temporal do corpo e o lugar-suporte de trabalho d'Os Espacialistas - é o grande campo agrícola, à espera das nossas melhores culturas e da nossa melhor paciência, capaz de aguardar aquilo que deseja ver e que sabe, que só desse modo, aí vai aparecer.

Só a partir de uma agricultura de subsistência de apanhas imaginárias, resultante de rotinas e gestos repetidos quotidianos, podemos exercitar a consciência, dar-lhe corpo e fazer aparecer nele a liberdade experimental da criatividade de cada dia.

A partir do corpo consciencializamos os gestos das acções repetidas que realizamos, transformando-as em processos de forma, capazes de alterar e esculpir os espaços da vida quotidiana.

O corpo enquanto máquina desejante em transformação e contradição permanente, na sua errante busca de sentido para a vida, liberta partículas, fragmentos i/materiais para a atmosfera na forma de pensamentos, palavras, imagens, que todos vamos inspirando e soprando na forma daquilo em que nos tornamos.

À passagem do corpo, os espaços nunca mais serão os mesmos... O corpo repete para aprender melhor, copia para aperfeiçoar, erra para caminhar melhor.

"Espacialista é aquele que altera conscientemente a partir do próprio corpo os espaços da vida quotidiana", a partir das imagens que cria e transporta consigo a cada dia que passa de um lado para o outro. É um Bodyb(u)ilder transportador de metáforas por natureza.

### **How do form and function relate to each other in architecture? Is one above the other? Does one follow the other?**

"A forma segue a função" e a beleza surgirá de forma natural, esta ideia popularizada pelo arquitecto Louis Sullivan, já está na tríade "Utilitas, Venutas e Firmitas" de Vitruvius, na máxima "Less is More" de Peter Behrens que Ludwig Mies van der Rhoë immortalizou ou no "Purismo" funcionalista das máquinas de habitar de Le Corbusier.

Todas elas têm como ideia de que apenas aquilo que é essencial é útil.

Para nós "Os Espacialistas", a essencialização das formas e das funções de qualquer espécie de arquitectura, desde a escala da mão à escala do corpo todo (através do contacto físico), é o primeiro es/passos para que as possamos compreender e colocar a falar.

Essencializar é colocar as palavras e as coisas em contacto com o corpo todo do mundo. É encontrar o intervalo de encontro entre as formas e ele.

A forma do espaço é inseparável da função para o qual é destinado. É naturalmente a função que alberga e depende não só da sua trans/configuração mas de todos os vazios que a intervalam com as outras formas. Nenhuma segue a outra, enrodilham-se uma na outra para trans/formarem-se naquilo que é verdadeiramente importante na sua relação: o vazio que também é forma e espaço. Nele está a potência dos gestos pelos quais as formas são responsáveis no desempenho de qualquer função habitacional real ou imaginária.

Informar é mudar de forma, é nesse sentido que a função forma um espaço ou um objecto. É a quantidade de informação que cada uma delas encerra que estabelece a (importância) ordem da sua ligação e as transforma numa única forma-função.

É no intervalo que está o movimento, diz-se a propósito do cinema. É no intervalo entre a forma e a função que está o gesto da sua verdadeira essência, é nessa in-tensão / in-tenção entre elas, que está a sua trans/formação em pensamento. É isso que conta a qualidade de pensamento que a relação entre elas é capaz de produzir. É isso que define a relação entre a forma e a função na hora de projectar um espaço ou um objecto para determinado fim. É a qualidade do intervalo caracterizado pela informação que habi(li)ta a forma e a função, que define a com/posição activa ou passiva entre elas, e decide qual a ordem delas no binómio forma-função.

Nenhuma delas segue a outra de forma definitiva, ambas são respostas de sentido que se reflectem mutuamente num espelho que as multiplica e cria um vazio virtual entre elas, que não pára de as significar. Uma espécie de relação em abismo, onde o vazio é o espaço que o corpo especular de cada um de nós habita, dando-lhe o sentido de intervalo-rua, que ambas (forma e função) criam por causa da forma do espaço, que aparece entre elas, podendo criar relações de vizinhança distintas entre si, de um lado da rua, mais forma, do outro mais função, ou aleatoriamente mesmo em frente de mais função, mais função, mais função e só depois mais forma. Uma espécie de rua onde os vizinhos partilham relações de forma e função conforme mais lhe convir, onde cada construção activa cada uma das possibilidades de ser conforme a sua razão de existir.

**Considering art installations with architectural elements like Fernanda Fragateiro's *Caixa para guardar o vazio*, what distinguishes architecture from sculpture or from installation art in your view?**

A arquitectura é arte ou não é arquitectura, ensina-nos Álvaro Siza Vieira. Quando (se) faz um projecto de arquitectura, o principal objectivo é liberta-lo da função para o qual foi desenhado. Álvaro Siza Vieira queria ser escultor, talvez esta vontade se reflita in/conscientemente em toda a dimensão poética da sua obra, reflexo de uma vontade permanente de transcendência, capaz de tornar uma obra de construção em arquitectura.

O programa é razão de existência de um projecto de arquitectura e aquilo que distingue tradicionalmente a arquitectura, da escultura ou de qualquer outra manifestação artística em geral, é o facto, da arquitectura ser um organismo com funções bem concretas, assentes num programa que lhe vai conferir razão e imaginação de ser. A arte de uma forma geral resulta daquilo que o artista quer fazer, da f/utilidade criativa das suas tormentas e paixões interiores.

A partir do momento em que escultores como Henry Moore, Chillida ou Oteiza, criaram vazios no interior dos corpos ou das formas geométricas que esculpiam e as ampliavam para lá da escala do corpo até à escala de um objecto arquitectónico, a clássica questão de que a arquitectura não era escultura, pois tinha um programa / uma razão de ser bem definida e acima de tudo era dotada de espaço interior ao contrário da escultura, inverteu-se, e passou-se a perguntar até que ponto a escultura não é também arquitectura, já que potencialmente passou a criar também espaços interiores passíveis de ser habitados e imaginados corporalmente. Frank Ghery é um dos arquitectos há muito no centro desta discussão. O vazio criado no interior destas novas formas escultóricas, transformou-se no lugar de intervalo e de questionamento desta nova relação entre arquitectura e escultura.

“A Caixa para guardar o Vazio” de Fernanda Fragateiro é uma espécie de espaço sem órgãos, construída para movimentos infinitos de corpos com menos órgãos ainda, em puro estado de descoberta do corpo próprio e do corpo dos outros. É uma caixa de sentir, sem necessidades fisiológicas, onde o corpo existe em puro estado exploratório, fascinado pela beleza escultórica de todos os gestos, antecipados e por vir, de que ela é capaz. É uma máquina dos sentidos que explora a plasticidade performativa da gestualidade humana transformando-a em esculturas relacionais. É uma escultura de natureza social, que nos

ensina a questionar o lugar do nosso corpo na relação com o corpo do outro, no corpo dum espaço performativo.

Estamos claramente na presença de uma escultura que recorre ao léxico gramatical e material da arquitectura, para construir um dispositivo espacial de interpelação sensorial, coreográfica e filosófica do corpo.

A caixa para guardar o vazio é a metáfora escultórica perfeita do corpo arquitectónico que cada um nós é, pleno de ligações, entradas e saídas, se não tivéssemos órgãos e fossemos apenas corpos de intensidades afectivas promovidas pela gestualidade humana. Apagar o vazio, foi o que nós, Os EspacialistaS, nos propusemos fazer no projecto: “O Palácio vai nu”, em 2016, no Palácio do Marquês de Pombal em Oeiras.

### **If you know *Caixa*, would you consider it a work of architecture? Why or why not?**

Antes de tudo a “Caixa para guardar o vazio” é uma escultura habitada por uma artista plástica que utiliza códigos lexicais e materiais da arquitectura na sua construção.

Do ponto de vista espacialista é uma obra de arquitectura aberta, com um programa de natureza poética, projectado para albergar e dialogar com o corpo real e imaginário de quem se demorar nela. É uma espécie de máquina performativa, elevada aos gestos em potência de cada um, pronta a fazer aparecer o corpo sem órgãos, de quem nela se aventurar.

É uma espécie de transobjecto arqueológico repleto de futuro, uma espécie de ruína por vir, a céu aberto, que guarda na memória todos os gestos daqueles que por ela passaram, ou simplesmente uma caixa exposta aos sentidos e ao sentido de todos aqueles que por ela vierem a passar e nela e com ela se relacionarem. Cada habitante é construtor de novas formas de apropriação. É uma espécie de obra inacabada, que a gestualidade de cada visitante irá terminar à sua maneira. A obra acontece, re-inicia e acaba, à passagem de cada habitante, à medida que cada um explora nela as possibilidades de afecção que partilha com ela.

Na sua condição de Escultura de Arquitectura libertou-se da sua condição de obra em construção, antes de ser arquitectura, passando logo ao estágio superior de escultura, onde todas as funções resultantes do corpo, enquanto organismo fisiológico foram ultrapassadas, transformando-a apenas na escultura de um corpo que revela em si traços de um espaço outrora habitado, agora desativado das necessidades programáticas do habitar

quotidiano. Uma espécie de abrigo, que já não protege o corpo das intempéries da vida, mas que nos abriga do vazio que nos assola, permitindo-nos habitá-lo, e confrontarmo-nos com ele e connosco próprio, transformado no abrigo exclusivo dos gestos e das imagens que formos capazes de despoletar na relação com ele.

A “Caixa para guardar o vazio”, de Fernanda Fragateiro é uma Escultura Coreográfica que tem na memória um Projecto de Arquitectura em estado de ruína aberta ao futuro em estado de auto-des/construção permanente.

**Is there anything else you feel is important to add with regards to these questions and your responses?**

Sim, há um outro ponto de vista que gostaríamos de acrescentar. Aquele que pergunta continuamente que espécies de outros espaços há no nosso corpo passíveis de serem habitados, quando a presença / a experiência do outro for substituída pela re/mediação tecnológica, imposta pela distância social, pelo isolamento e pelo medo (afectivo) cada vez maior do outro. E quem vai zelar pela qualidade do desenho (arquitectónico) das suas intensidades?

O quarto-corpo de que fala Paulo Valéry, para nós Os Espacialistas, não é um outro corpo, é um outro espaço: um quarto novo, para novas formas de identidade e intimidade, em que o corpo se con/funde com o espaço. Onde vamos ter de nos repensar, de forma concentrada e com / sem ligação ao outro, através da forma dos sonhos e dos desejos: as únicas capacidades / qualidades que o homem enquanto se reconhecer como conhece, não conseguirá nem quererá suprimir à sua natureza.

Qual a função da presença (do corpo) do outro, na definição da arquitectura do futuro? Será que no futuro já presente, o corpo que colocará em movimento a arquitectura, será um espaço-corpo virado do avesso, sem interior, nem sonhos que não sejam discretamente massificados, apagados e manipulados por qualquer tipo de consciência tecnológica exterior? Será que no futuro já presente, haverá lugar para a Poética do Corpo desvalorizado das suas funções humanas habituais e transformado em puro objecto de consumo afectivo e imobiliário, desprovido de qualquer tipo de subjectividade, por causa do desejo de segurança de todos nós?

Quem (não) tem medo de um corpo mau, a desenhar e a imaginar os es/passos nossos de cada dia, num Futuro já Presente?

## APPENDIX B

### Interview with Fernanda Fragateiro. August 6, 2020

**My research explores the role of the body in how we experience architectural space. In this context, *Caixa para guardar o vazio* is a very interesting and suitable example. What are the most important references for *Caixa para guardar o vazio*? If you were to make a “Materials Lab” about *Caixa*, what are the materials that you would include?**

This work, I started during kind of a residency I did in Chile. It’s “Open City” – I don’t know if you know this project, it’s a utopic project in Ritoque near Valparaíso that is linked to the school of architecture of Valparaíso. It’s a project that started maybe in the 60s as a thought, and it happened as a dialogue between two people: Alberto Cruz, an important architect in Chile at that time, and [Godofredo] Iommi, a poet from Argentina. They wanted to find and build a place where they could talk and teach architecture through the experience of building.

Alberto Cruz was invited to be the head of the school of architecture in Valparaíso, so he said, okay, I accept, but I want to bring with me very young architects, and I want to develop a project, a very experimental project. So they built this space near Valparaíso, they found a space by the ocean, the Pacific ocean, quite an empty and isolated space, and they started from the beginning; they started building studios, houses, and the process of building was very important, because it was done by multidisciplinary people, so you know like architects, engineers, artists, poets – and the poets were the ones that had a lot stronger power in deciding what was going to be built. And sometimes they stopped. They were in the middle of building a structure, and then the poets said, it’s done. So the places were left without roof, for instance. It’s a very experimental place, and I went to visit and to stay alone, actually, in this very small – well it’s not actually a city, but it’s a place where a big group of live – it still exists.

When I was there, I was very much interested in building something with your hands. Basically, *Caixa para guardar o vazio* was thought when I was alone in this place. Also, at Open City, they have a pedagogical project which is very strong. It’s learning through building. I was also very interested in this pedagogical aspect. *Caixa para guardar o vazio* has these two sides – on the one hand, it’s a sculpture, if you look at sculpture in a

very expanded field, and on the other hand, it is a sculpture with a pedagogical meaning and focus. This is one of my big inspirations, Cidade Aberta/Open City, also Georges Perec, the writer: *Espèces d'Espaces*, in English, *Species of Spaces*. This is the book I had with me at the time. So it was also the idea of how you understand space, the body is the last space; the body is also a space, and this idea that space starts with an empty sheet of paper. Then you can think about your body, your room, your house, your street, your village. It's a very political/poetic thing, space. And then there were also other influences. If I could make a box about *Caixa para guardar o vazio*, I'd have information about the Open City in Chile, I'd have Georges Perec's book, I'd have a Lygia Clark book because I was also looking to her last works, the last works she did, where she used the body as therapy, as her practice. Lygia Clark was also a big influence. Maybe there is more... And also the Constructivists, the first modern projects... There are a lot of layers.

**Caixa's pedagogical element is very interesting, and it seems particularly strong in the performance. How would you describe the difference between the moment of the performance and the moment where visitors are free to explore on their own?**

I thought about the project for very specific groups, well for everybody, but also for very specific groups: groups of school children from six to twelve, so the dimensions of the box are made thinking about smaller bodies, and also thinking about groups of people that usually work together, like a class, a classroom, a class of usually 25 kids that usually are at school together with a teacher and they learn several things together, but they never learn about space. The visual aspect and things related with space are not taught at school. The kids don't have any voice in the way they organise their classroom, where they put the tables... Everything is very controlled – also our cities, our houses. So this project in a way wanted to get these groups together, so they'll have this experience with the sculpture, and the experience is very abstract, very poetical. They don't have people say, sit here, they are invited very gently to perform, to use their body to read the sculpture, but not in a usual way where the teacher is always making questions, and then you have to give answers, and then you always give the answer that in a way the teacher is expecting. In total, the idea of the piece is about freedom – freedom to think with your own head, to experience things that you don't understand, and in the end, you go back to your school, and if you have a good teacher, you can develop more. You can go to your class and reorganise your class,

you can sit with your parents and maybe change your room, or you can be aware that your street or your city needs your involvement. This was more like the philosophical thing about the piece: to involve and to generate. It's not a piece that starts and ends with the performance, it's a way of generating ideas and feelings, and use all your senses, not just being seated at a table, learning from books... it's another way of learning: learning with your body, touching the materials. And also, give importance to very small things, like open the door, open a drawer. The language is very simple because it's very minimal.

**Is there anything somewhat specific that you had in mind for the children to learn?**

There were many things, but what I didn't want was to organise things in a way that you're going to get out of this experience learning this and that. This is a moment of... I didn't know when I did the piece, actually I thought this is not going to work. And I did the piece in 2004 – things were different, but kids were already very much used to dealing with images and television, and I thought, there's nothing here: there's no colour, there's no image, there's no music, so maybe this is going to be really boring for kids because nothing happens in a way. For me, it was a big surprise, when I started to work with the first group of kids – maybe Delfim Sardo told you that we worked with a group of kids from an orphanage. So this group of boys, that's why they are all boys, they lived in this orphanage in this beautiful old convent in Viseu. These kids don't have much. They don't have much of anything. They have a lack of attention; they have a lack of people touching them... With them, this was very strong because they engaged with the dancers; the dancers would touch them, and it was very nice... But I thought maybe with other kids that have a lot of things, this wouldn't be so interesting. But it happened to be very magic. As soon as we started doing the performance, and with the schools... It really depends on the groups. But it works really well sometimes with very difficult groups. Recently, we did it in Barcelona in this festival in this amazing space where they do performative arts, and suddenly they told us: "we're going to have a very difficult group, they live in this poor neighbourhood, and the teachers are amazing but the kids are really difficult. Be prepared for problems." And actually there were some kids that looked like gang, you know like 10 years old, 11 years old, wearing hats, very masculine, and at the end, they were the kids that were more engaged with the project, because it's a project that gives attention to them. They're not just there sitting and looking and they are part of it.

**Can you say a little more about the idea that, as you said, they are learning with and through the body and that, although the work is also visually appealing, it's more about an embodied relation? How would you describe this different dimension of learning and engaging with the space?**

Yes, that was exactly what I wanted to do. I wanted to get away from what you usually get. You have the space that is totally occupied by everything, most houses are full of things, you don't have free space, you don't have empty space. I also wanted to talk about 'void' as something that is not an absence, it's a presence, and that void is what allows you to be free and to make decisions and to have some control. You are in control. You're not controlled by all the powers around you, your parents, the teachers, the mayor... I wanted to talk about the importance of the void as a way of giving the kids the power to build space, to build something because they have freedom. That's why, when you finally go inside the box, and you think there's something very important there, you know, you're going to find something there, and when you go inside, there's nothing. There's nothing; there's no one, you just have the same wood, the same material, and then you have the floor which is a mirror, so you see yourself. Of course, no one explains the kids this, it's not giving a class. I'm sure it's an experience. When you have all those expectations about the sculpture and you go inside and you see yourself, maybe it activates something in your brain. I'm not sure if I lost your question... The void – and the silence. For example, the last dancer who worked with me, for him it was very difficult. He didn't quite understand the project. It was very hard for him to understand the project – one of the dancers. He always wanted to convince me to use music, to use sound. And I said, "but the project is full of sound." You have the sound of the body moving, you have the sound you produce on the wood, the echo, the sound is to distract you. And for him it was very difficult. Because people are so used to always be with sound, with music, with something, with image... But also it was nice with this new group of young dancers that entered the project this last year because they start making more noise, not noise, but sounds, with the piece, and that was really nice. The first ones were more silent, and these ones, because they needed more action, they started bringing some music to me. I couldn't choose a music, impossible, it would be decoration. They started making and communicating between the interior and exterior with more sounds. And that was really nice.

**Then *Caixa* itself is almost like an instrument with its void interior, like percussion.**

Yes, it's true. Actually, what I like more and more about the project are the almost infinite possibilities. And I would like to explore more. Not just having this performance, this performative text that we have more or less written, so it more or less follows a script. But I would like to invite new people to use the sculpture, to have one person, one dancer, to create a new thing with the piece.

**Do you already have somebody in mind?**

Actually, well now with Covid, we suspended it, so we'll do the next presentation in January, in Oporto. I don't know if you'll be in Portugal by then?

**Yes!**

Yes? So maybe you can join, it's in Teatro Rivoli. And then the piece will be in Guimarães, in the museum that will keep the piece, and then we will start thinking each year about to invite someone to create something for that piece.

**That would be very interesting because, as you said, the piece has so many possibilities. I also read that after every presentation, the piece is sandpapered. Is that an idea to recreate the original by eliminating the traces of use? What is the background of this procedure?**

When the piece was done, it was really perfect. I was really proud. It was done by amazing carpenters. You couldn't see the lines, the little lines. It was just like a flat surface. I remember the first group of teachers that came to see the box, they looked at it and they were like: "what am I going to tell my students? Because I need to tell them, 'you're going to see...'" Usually they say, you're going to see the theatre, and it's going to be about this or that, and I cannot find words to describe what they're going to see – a box? There's nothing. Because it was very perfect. And I wanted to keep that perfection on the surface of the piece, but of course, with the use, all these cracks and small things started to happen. For me, in the beginning, it was very difficult to deal with, but now I think they're very beautiful. You see the time on the piece. Anyway, I think it's nice to take off the marks and

start fresh and clean. Because sometimes it's very dirty, with all the kids putting their hands on it. It interferes, I think, on the surface. I think, like with paper, it's important to have a nice paper to start. Otherwise you have to do a drawing on top of another drawing, and it's a mess. I think it makes a difference to sand it. Also, when you sand the wood, it has these little hairs. When you touch it, the feeling is different, and when it's with a lot of grease, it's not the same feeling. It's a little detail, but to me it's important.

**How do think *Caixa* and the way it is exhibited will develop?**

I'd like to go deep into the project and to follow up with the project after the performance. I would like to go back to the school, not just me but me and Aldara Bizarro who made the performative text. She has a big experience in working with young people, using dance, and she also made a lot of projects with a pedagogical sense. So we talk many times of going to the school and try to use this experience in a more transformative way, to give more power to the kids, to talk about the importance of the space of the classroom, the way you organise the space, the way you put your works on the wall, the dimensions of the posters you use, how you could use this language of performance not as a therapy because it's not therapy but you need to learn about the space. I see teachers being very careful with the texts, but when they make a drawing – sometimes you see teachers asking the kids to make a drawing in the little square on the paper, a little square of 5 by 5. You cannot do this, this is very wrong. It's like to ask the kid to write a text with mistakes. Talking about the importance of the visual and the body... Actually, I and Aldara talked many times about doing this. The problem is that we never had the time.

**I imagine. Perhaps at some point the teachers could use this more. You give an impulse, and they continue it.**

Yes! I made a project, a small box of cardboard called *Caixa para pensar*. It's done as a model. It would be given to each school or each kid – it depends on the possibilities – a kit with all this cardboard already cut so you could make your own *Box to keep the void* as one element, as your box, or you could put together all the kits, like if you have twenty in the classroom, and build a big space that could be a city. This we couldn't produce because we

never got the budget to do that, but that would be a nice tool to expand the experience. So maybe it is something we can do in the future.

**I like the name *Caixa para pensar* because of how much is happening on the mental level in the experience of *Caixa*. What is the relationship between the spatial experience and the thought process or learning process?**

As a sculptor, I always use models. I use my hands when I deal with the model, and my hands are like the body. They replace the body. And it's amazing how close the work to the model is to the work on the real scale. This could be a really interesting experience for kids to work with the model, with their hands, and to talk about it, to be conscious of their hands could be on the same scale of the body. If you work, say 1:10. And everything is linked. Even *Caixa para guardar o vazio* is a *Caixa para pensar*. Your body thinks – you don't need your brain, your body has learned and developed meaning without you organising or explaining the experience you have. So this idea that the body knows is something that the dancers and the performers know and me as a sculptor, I also have the same knowledge that the body... When you do sculpture you need the body to read the sculpture.

**And if we watch children play or learn, we see how important the body is, but in school it is often ignored.**

Yes! In school, there is language. Everything is reduced to language and I think the project is about that. It's about learning in a more open way. What I like is that it works. Because sometimes we make things and they don't work. And that magical thing that the piece has is beyond me. I cannot do anything about it. It's something that happens, and it happens because there is a sculpture, and there are people. They are connected.

**And the author is quite in the background...**

Oh totally!

**How would you say does the piece work with adults?**

Adults - that's also something I believe: they should learn with kids, because we lose a lot of knowledge. That's why I think it works with adults because they feel like kids again.

**I'm curious to see the new presentation in January.**

It's going to be in the theatre, Teatro Rivoli. There is something that is important, that the work changes a lot depending on the place where you put it, and in Oporto, I don't like the space that much because it's a room for rehearsals, in a theatre. It's more like a lab, so the space that surrounds it, is not my favourite space. I usually like more open spaces and beautiful spaces, but that's what we have. And at Teatro Rivoli, they do very good work with the community, so it's also important to show there. And they have a good team of the education service of the theatre. So I'm pretty open to show the piece sometimes in places that are not the best in terms of space, but if they have a good team that could do the work with the kids I'm not like, oh no, I only show in beautiful spaces that give a good photo. We won't a good photo of the piece there but it's important for the theatre. And they want to do it, they desire to do it.

**Maybe this fact could also bring about some unexpected dimension?**

Yes, you never know. Maybe they could work more in the lab. After the piece, they could develop something deeper with the kids. Maybe we can make the piece shorter and then have more work. That's a good idea to propose actually.

**I agree, especially if one of the main ideas is to inspire the kids to think about all the spaces that they're moving in, and then it's nice to already make this translation from this piece to the space around it. So they already learn to link it to other contexts.**

Yes, let's see how things are in January. Because it's a piece that involves people touching, maybe we have to adapt a little bit. But we can also play with that: how to touch without touching.

**It seems that over the last couple of months, many people have become much more conscious of the space immediately around them. How do you think to people experience their home in a different way if they're hardly able to leave?**

Now, the empty spaces, the voids are the way you deal with that. You need more voids. You need more space where you could be and spread.

There is also a project that maybe you want to visit. It is a garden I did, *Jardim das Ondas*. It is in front of Oceanário. It's a big grass garden with modellation that simulates the movement of the water, of the sea. And it's also a very free space. You can move, you can use the modellation of the grass to sit and to relax... So it's a nice project to look at as well because in a way it has to do with the same spirit of building free spaces, spaces where you could use your body to build.

**That's a good point and another good example. Thank you very much.**

## APPENDIX C

### Interview with Prof. Delfim Sardo. June 8, 2020

**My research explores the role of the body in how we experience architectural space. In this context, *Caixa para guardar o vazio* is a very interesting and suitable example, a work which you know very well. What has been significant in your curatorial approach to the piece?**

The first decision that you have to take is, what is the level of openness that it will have in the moments when it is not activated by the performance. It's one of those, it's a sculpture that is also a device, and the status as a sculpture or as a tool is voluntarily never completely defined by Fernanda Fragateiro. You don't have it clearly formulated what is the kind of interaction that people have with the piece.

Recently, I installed it again in Culturgest, I don't know if you've seen it there. It's the second time that I installed that piece. I had installed it a long time ago in CCB. And now, almost 15 years after.

We, me and Fernanda we've been trying to find, how was the correct measure for the opening of the piece, knowing that somehow that piece embodies this statement by Henri Lefebvre that the body segregates space. And so the space is not something of a given, it's a construct that is produced by the body in action, either by the individual body, (or) also by the collective one(s), and this is also the second game that *Caixa para guardar o vazio* states, is this play between the individual as a beholder and the collective as a possibility of interaction, either with the performance or with the work itself and with the body of viewers. Like the viewers, when they enter the piece, they are simultaneously activating it, and they are also informal performers of the piece.

There should be the possibility of access to the interior, but an access that is not completely revealing, because expectation is a very important aspect of how that machine works. Because it is a machine. It's also a stage machine. That's something that I discovered more recently, not in that text that I wrote many years ago: that this is a theatrical stage machine. And being a theatrical stage machine, it also deals with the problem of the different representations of the body, the different representations of the space and different representations of the connection between the viewer and the space

itself. That first decision of knowing how it is installed when it is not being activated by the professional performers, I think, is the first big challenge of the piece.

Of course, the second one is the work that Fernanda has done with Aldara Bizarro and the choreography of movement inside, and how the/that choreographic movement is a kind of didactic performance to show how the space unfolds. I think that's a very interesting stage. But me personally, I'm especially interested in how, in the moment when people enter the exhibition space, they have to deal with an object that is half-closed and half-opened, and they can enter the object, and they can imagine how that object can unfold and be transformed. And it is transformed by the viewers not because they can, as a matter of fact, completely open it, because it's not possible in terms of the maintenance of the object itself, so it has to have some fixed positions, but, in terms of expectation, it builds a kind of space-imaginary. In a very simple way, it materializes very directly that statement from Henri Lefebvre that it is the body; the body is the complex of relations, and the body segregates the space. *Caixa para guardar o vazio*, in ultimate terms, is a machine for the expectation of living or occupying space. So it's much more a metaphysical object than a physical one.

**If, as you say, the first question is at what level of openness the piece should be presented, then what is the role do the bodies of the performers or of the visitors play in developing the piece further?**

There are different roles between them. The performers, they have a script. They have a strict script. And that choreography is even a didactic one, it has a function, a certain pedagogy of the space, of the viewer which in most cases they are children, but they can also be adults. On one side, there is this visit, this unfolding of the space that is done according to a script. And the viewers, in that case, they are enchanted viewers. Because they see the space unfold in ways that they didn't realise were possible. The other thing is when the viewer enters the space - it is half-open, half-closed, but you can go inside, you have to take off your shoes, you go inside, and when you go inside, you cannot open everything, you don't even know how to open it. It's much more on the level of the imagination of the possibilities of opening that space that the visit of the viewer takes place, either around or entering the space.

And then, of course, entering inside, there is a game of mirrors that permanently makes the viewer conscious that he is there. He's not in any other space. He's there, and he sees himself being there. So I think the two situations are very different, the situation of the performance, where it is a theatre machine, and the situation of the sculptural situation, when people can enter. So it's like two different traditions that come together. That's why I think it is so interesting. Every time that piece is installed, it is an amazing piece.

***Caixa* makes the visitor very aware of being in that particular space. Not only do the performers or visitors activate the space, but also *Caixa* offers us a particular experience of our bodies and of ourselves. How would you describe this experience?**

It explores all the different instances of that relation because you can be outside and there is even that carpet, that black carpet, which is very comfortable. You can sit on the black carpet. You can be subjected to this tradition of aesthetics, which is contemplation. You can activate that old possibility that aesthetics theorise, which is Kantian contemplation: you sit in front of it, and you see it as an image. Or you can enter inside, which belongs to a different tradition of aesthetics and of a more embodied relation with the piece. And when you are inside, you become self-conscious of your location. The piece returns you into your own image. It [*Caixa*] works on very different levels, and those different levels sometimes belong to different artistic or architectural or stage traditions. Somehow, Fernanda managed to put them together. That, for me, is really the amazing achievement of that piece: that it is several things at the same time, and it's very difficult to have a name for it. Indeed, it is difficult to say to what extent it is sculpture, to what extent it is architecture. It has clear architectural elements, but it is not conventional architecture in an urban context. It is clearly in the context of an artistic institution in the way it is presented.

**This play with categories seems to offer several layers of meaning.**

Yes. That in-betweenness in terms of status of the work is another metaphor for the in-betweenness that it always invites the viewer to be in. In conceptual terms, it's a liminal space, an in-between space, but also in physical terms it's also an in-between space, and when it unfolds it builds more and more in-between spaces. And in terms of the choreography that Aldara Bizarro made, it is usually exploring that thing of being inside

and outside in that successive unfolding of the space. When it's closed, it looks like a minimal sculpture and has the reference to Tony Smith and all that minimal tradition of the 60s. At the same time it has the tradition of the Russian avant-garde. But when it unfolds, it has almost a baroque quality because there is something always in between. So it's a very complex work. Its complexity comes always with this difficulty of not knowing exactly how to name it. And it's curious because it has been presented on a stage in theatres; it has been presented in exhibition sites, like Culturgest or CCB; It has been presented in ... of museums which are themselves not exhibition spaces but also in-between spaces. It's a very flexible work. Its flexibility allows the viewer to project himself. I go inside and I imagine a house, I go inside and I imagine a stage, I imagine a shelter. It's always inviting this work of imagination in the real sense, of building images, making up images.

**There are certain qualities which qualify this, like the quality of touch which also relates to this quality of use. It is a device or machine to be engaged with, to be activated and to be used. And the haptic quality invites us to use it and in another step it invites us to inhabit it. Can you say a little bit more about these qualities?**

It also relates to a tradition of sculpture that comes from the Russian avant-garde or from the 60s, for example with Robert Morris or Hélio Oiticica. There are traditions inside the artistic tradition that the work makes reference to. It is always in between those two situations, the haptic situation that has a relation with use - it's a piece that you can touch, you can touch with your hands or with your feet or you can sit, so it's directly connected with the perception of the space that is not the visual perception of the space, but that is a physical, embodied perception of the space.

And on the other terms, it also invites you to a completely imagetic perception of the space. I don't know if you've come across the work of Giedion and Giedion's history of architecture. It's always a visual history of architecture, and it's a linear history of architecture. And at the same time, it connects to this embodied experience of architecture which is a tradition that comes out of Foucault or Lefebvre, so it's a completely different and embodied tradition of dealing with space. You know, this book by David Summers, called *Real Spaces*. So in *Real Spaces*, David Summers makes these two traditions of dealing with space very clear: the one that he calls a more Neoclassical tradition which comes from space as an image, and another one, that is the more Lefebvrian tradition of the

space as an embodied relation that calls for a haptic relation of the touch, or the physical experience of the quality of the space and its density.

In a way, Fernanda's work also makes those two traditions be present. And it's a lot in-between, of course, this is not black and white, this is full of greys and in the middle. You can go inside, and then you come outside, and you sit on the carpet and you look at it as an image. And there are all the instances of relation in this work. That's why it's such an intelligent work.

**As you have suggested, the tactile but also penetrable qualities of *Caixa* are linked with a feminist statement.**

I think that is very present in lots of works by Fernanda, and in this work also. That tactile approach tries to get out of a vision-dominated relation. I think it is very present.

**And it seems that it is these same qualities that give it a feminist perspective that also invite engagement and participation. A purely visual work invites contemplation from a distance. But a strongly tactile work invites us to actively and physically engage with it, as embodied subjects. How do you understand the relation between the feminist dimension of a work and the participatory element, also if we consider Rancière's *The Emancipated Spectator*.**

As a matter of fact, Rancière is very critical of the participation quality. Because for Rancière, who comes from a Kantian tradition... Rancière is a Kantian. I'm very fond of Rancière's approach. I think that his theory of the domain of the sensible is quite interesting. The thing is, Rancière at the same time establishes the limits that theatre has regarding participation. And he also makes a critique of participation, saying that most of the time it's driven by a moralistic point of view. And he tries, in the end, to re-redeem it. He's very suspicious of that. I share with him that suspicion. I think participation is interesting when participation is not moralistic, when it is totally open, is something that is being defined by the viewer and not a sharing of the artwork.

The tradition of Fernanda in terms of participation is something that comes out of the work of Hélio Oiticica, for example, the Brazilian artist, with the Penetrables or even the Parangolés. Or the work of Robert Morris with that exhibition called "Bodyspace-

motionthings” that was presented at the Whitechapel Gallery. There is a very interesting comparison that you can make between two exhibitions that were in London at the same time, which is “Bodyspacemotionthings” by Robert Morris and “Eden” by Hélio Oiticica in 1970, in the same year, and they were open at the same time. Curiously enough, the press was much more attentive to Robert Morris, because he was Anglo-Saxon, and was very dismissive of the work that was at the Whitechapel by Hélio Oiticica. But both of them were working very much the same things.

Fernanda is very aware of that tradition. She knows exactly what she wants to take with her. But Fernanda also has a much more formal approach than for example Hélio. And that formality, for her, is very important, the quality of the material, the quality of the construction, how things go inside and come out, and the precision of the design. That is very important to her. Again, she’s in a totally formal approach to the work, and at the same time, she’s in that version of participation that she proposes, that haptic, physical relation with the object. For me, the stimulating characteristic of that work is that always, when you say, “*Caixa* is this”, then you can say, “it’s also the opposite”. It’s a sculpture, but it’s also an architecture. It’s formal, but it’s also participatory. It’s a stage, but it’s also a sculpture. Like the work itself, it’s always unfolding in different directions. And I think it’s very rare that an artwork can have these different levels.

**Indeed, and that an artwork comprises these different and at times seemingly contradictory statements – but not necessarily contradictory.**

They come from different, or usually considered different approaches. And in the end, they can intertwine.

**And that’s one of the things that make it such a beautiful piece. Thank you very much.**