

**Francisco Javier
Fuentes Farías**

Doctor en Arquitectura, Profesor
Investigador, Facultad de Arquitectura,
Universidad Michoacana de San Nicolás de
Hidalgo, Michoacan, México
<https://orcid.org/0000-0001-9483-816X>
francisco.fuentes@umich.mx

The Urban and Architectural Space: Its Experience and Meaning from a Phenomenological Perspective

EL ESPACIO URBANO-ARQUITECTÓNICO: SU
EXPERIENCIA Y SIGNIFICADO DESDE UNA
PERSPECTIVA FENOMENOLÓGICA

O ESPAÇO URBANO-ARQUITETÔNICO: SUA
EXPERIÊNCIA E SIGNIFICADO A PARTIR DE UMA
PERSPECTIVA FENOMENOLÓGICA



Figure 0. Front paving of Juan de San Miguel, in Morelia, during an exhibition of offerings to celebrate the Day of the Dead. Source: Images by F. J. Fuentes F.

Se agradece el apoyo a la Universidad Michoacana de San Nicolás de Hidalgo a través de la Coordinación de la Investigación Científica.

RESUMEN

¿Cuál es la naturaleza de la vida emocional y significativa producida por las formas arquitectónicas y cómo pueden los especialistas en diseño urbano-arquitectónico entender las necesidades psico-afectivas –emociones, sensaciones, significados y recuerdos, etc.– de futuros inquilinos de su proyecto constructivo? Mediante una revisión bibliográfica de carácter histórico y teórico-crítico, en el presente trabajo se aborda el marco teórico de la arquitectura fenomenológica, según el cual es el contexto edificado y el mundo de vida de las personas donde se produce el significado de las experiencias mencionadas. Se plantea que la experiencia sensible o fenoménica ante las obras construidas, por parte de los diseñadores, les permite acceder a recursos cognitivos –empatía, inter-corporalidad, cognición social– que pueden emplear en futuros proyectos constructivos y habitacionales. En obras publicadas recientemente destacan alternativas epistémicas acerca de la naturaleza de la vida emocional y subjetiva del hipotético habitante, por ejemplo, en los casos de la empatía (ponerse en los zapatos de otro), de la atracción o rechazo a ciertos lugares, y de la 'atmósfera' o sensación colectiva creada por interacciones sociales en los espacios públicos y otros. A partir de estos resultados se demostró que es en el contexto socio-urbano donde los significados de la arquitectura son interpretados para su aplicación en tales proyectos. Se concluye que dicha perspectiva es subsidiaria del pragmatismo filosófico y semiológico, el cual afirma la importancia del contexto habitado para comprender el sentido de lo que hacen, dicen o sienten los demás. Se confirma también la necesidad de un enfoque interdisciplinar y humanístico, basado en metodologías de corte interpretativo y fenomenológico, que den preponderancia al conocimiento *a posteriori*, aquel que se obtiene mediante la experiencia.

Palabras clave: interacción simbólica, posmodernismo, subjetividad, *utilitas*.

ABSTRACT

What is the nature of the emotional and significant life produced by architectural forms, and how can specialists in urban-architectural design understand the psycho-affective needs - emotions, sensations, meanings, memories, etc. - of future tenants of their construction project? Through a bibliographic review of a historical and theoretical-critical nature, in this work, the theoretical framework of phenomenological architecture is addressed, considering the built context and the world of people, where the meaning of the aforementioned experiences gains life. It is suggested that the sensitive or phenomenal experience of the works built by designers, allows them to access cognitive resources - empathy, inter-corporeality, social cognition - that they can use in future construction and housing projects. In recently published works, epistemic alternatives are found about the nature of the emotional and subjective life of the hypothetical inhabitant, for example, in the cases of empathy (putting oneself in another person's shoes), the appeal or rejection of certain places, and the 'atmosphere', or the collective sensation created by social interactions in public and other spaces. The results reveal that it is the socio-urban context where architecture's meanings are interpreted for their application in such projects. It is concluded that this perspective is a subsidiary of philosophical and semiological pragmatism, which confirms the importance of the inhabited context to understand the meaning of what others do, say, or feel. The need for an interdisciplinary and humanistic approach is also confirmed, based on methodologies of an interpretative and phenomenological nature, which give preponderance to *a posteriori* knowledge, which is obtained through experience.

Keywords: symbolic interaction, postmodernism, subjectivity, *utilitas*

RESUMO

Qual é a natureza da vida emocional e significativa produzida pelas formas arquitetônicas, e como os especialistas em desenho urbano-arquitetônico podem compreender as necessidades psicoafetivas – emoções, sensações, significados e memórias, etc. – dos futuros inquilinos de seu projeto de construção? Mediante uma revisão bibliográfica de natureza histórica e teórico-crítica, no presente trabalho foi abordado o marco teórico da arquitetura fenomenológica, segundo o qual é no contexto construído e no mundo da vida das pessoas onde se produz o significado das experiências mencionadas. Sugere-se que a experiência sensível ou fenomênica diante das obras construídas pelos arquitetos permite a eles acessar recursos cognitivos – empatia, intercorporeidade, cognição social – que podem utilizar em futuras construções e projetos habitacionais. Em obras recentemente publicadas são apresentadas alternativas epistêmicas sobre a natureza da vida emocional e subjetiva do hipotético habitante, por exemplo, nos casos da empatia (colocar-se no lugar do outro), da atração ou rejeição por determinados lugares, e da "atmosfera", ou sensação coletiva criada por interações sociais em espaços públicos e outros. Com estes resultados ficou demonstrado que é no contexto sócio-urbano onde são interpretados os significados da arquitetura para a sua aplicação em tais projetos. Conclui-se que essa perspectiva é subsidiária do pragmatismo filosófico e semiológico, que afirma a importância do contexto habitado para compreender o significado do que os outros fazem, dizem ou sentem. Confirma-se também a necessidade de uma abordagem interdisciplinar e humanística, assente em metodologias de natureza interpretativa e fenomenológica, que dão preponderância ao conhecimento *a posteriori*, aquele que se obtém mediante a experiência.

Palavras-chave: interação simbólica, pós-modernismo, subjetividade, *utilitas*.

INTRODUCTION

The Significant Dimension of Architectural Forms

Several disciplines share an interest in the relationship between built space and people's behavior. Starting from this statement, this work is, in fact, a critical reflection on a great change that occurred in urban and architectural design during the second half of the previous century, one identified here as a new building tradition, one that is post-modern, phenomenological and interdisciplinary, scientific-humanistic, and that is particularly interesting for the world of life of urban players –their subjective experiences, sensations, and meaning of places, etc.,-from new conceptions of space-time and of human subjectivity.

This line of architecture is represented by historians and urban-architectural design theorists such as Sigfried Giedion, Christian Norberg-Schulz, Eiler Rasmussen, and, more recently, Alberto Pérez-Gómez, Juhani Pallasmaa, and Jorge Otero-Pailos, among others. In the scope of the design and execution of construction projects, Steven Holl, Peter Zumthor, Glenn Murcutt, and others stand out who, though not having openly followed any specific line, have a very sensory and inter-corporal work, like the case of Zaha Hadid or Frank Gehry.

In a recent publication (Mallgrave, 2018, p. 3) it is read that we owe the intellectual construct of "space-time" to Sigfried Giedion, as an architectural concept of enormous influence. In brief, Giedion argues that the role of Modern Architecture consists in closing a gap between reason and emotion - between feeling and thought-, opened by Cartesian dualism. However, postmodernism, as a constructive rather than philosophical tradition, would be a way to try to respond to what modern architecture has not yet managed to elucidate: the meaning of the inhabited space.

Since modernism had not been able to respond to the post-war human situation, the need to take the human figure as the key factor in urban and architectural design led to a redefinition of space as "(...) depending on the perception of people" (Montaner, 2013, p. 216). Montaner points out that "(...) one of the greatest novelties and contributions in architecture has been the gradual importance given to the senses, to perception, and to the human experience" (2015, p. 52). Thus, the experience and its meaning permeate the conceptual basis of the new constructive current in gestation, which was consolidated in the 1970s and 1980s and which remains in force today, namely phenomenological architecture.

This article defends the enormous importance, for those planning future construction projects, of the experience of directly perceiving buildings and the urban layout, public spaces, and

architectural forms, as a heuristic or epistemic resource to interpret and understand the emotional needs of future inhabitants. This proposal also seeks to offer possible lines of research in urban-architectural design, at a theoretical-critical level, about problems such as the meaning of built forms, and the emotional life of the hypothetical urban inhabitant. To this end, literature specializing in urban-architectural design theories was reviewed, and the relationship of these theories with those from other scientific and humanistic areas, such as social sciences, neurosciences, and cognitive sciences, was examined. Thus, a brief overview of recent decades was obtained about the integration of the Phenomenological and Hermeneutical traditions in the aforementioned disciplines.

The methodological proposal involved analyzing the core concepts of urban-architectural design and observing what changes in theories and concepts occurred during the constructive traditions of modernism, postmodernism, and phenomenological architecture. In this way, some examples of the aforementioned experiences are briefly examined here in light of the theoretical changes indicated, such as the meaning of places (for example, public space), the "atmosphere" or sensation perceived in symbolic interaction, and empathy ("putting oneself in another's shoes"), as a cognitive resource to understand the point of view of the inhabitant. Other conceptual expressions from phenomenology are addressed, such as "inter-corporeality", "world of life" and "production of meaning", which allude to the experience of directly perceiving the built works as a resource available to designers for future projects.

Then, how the phenomenological tradition permeated the architecture of the second half of the previous century is presented, to then present the results of the review of the concepts mentioned (empathy, *attunement*, world-of-life, *Stimmung*); all related to the ability to inhabit, that is, to give meaning to the places where one lives. It will be seen, in the end, that the topic developed in this work requires an interdisciplinary and humanistic approach, based on interpretative-comprehensive and phenomenological methodologies, which give preponderance to knowledge *a posteriori*, one that is obtained through experience.

Design, Meaning, and Everyday Life.

It should be recalled that between the 1950s and the 1970s, there were different events in urban and architectural design that can be considered evidence of the aforementioned changes. In his preface to the fourth edition of his seminal book, *Space, time and architecture* (1948), Sigfried Giedion claimed that a period where thought and sensitivity walked separately had been left behind and that he was trying to "(...) show how that rupture between thought and sensitivity occurred" (2009, p. 15).

One of the features that were defined in that New Tradition in architecture (Giedion, 2009; Norberg-Schulz, 2005) is the change in the conception of notions such as 'space' because, as said above, it ceased to be understood as a mere container of objects in the world, and began to be seen as a space full of qualitative (phenomenal) experiences and meanings. Thus, with postmodernism, the quality of architectural forms was emphasized: that of being signifiers, in reference to the semiological principles of language that distinguish between the signified and the signifier, inasmuch as they refer to different properties of linguistic signs. Later, the proposal that the signified in architecture is not limited to the visual, but also to the psycho-social, that is, to the actions and interactions that occur in the built space, where emotions, understood as constituent elements of social cognition, also occur, will be shown.

As for postmodernism, which began in the post-war historical period, and that took root during the 1970s, and flourished in the following decade, a difference has been pointed out (Otero-Pailos, 2010) between historicist and phenomenological architecture, under the argument that to investigate the intellectual content of history, as well as the historical significance of buildings, architects must use their own means through the physical experience before the buildings themselves. Indeed, several design theorists drew attention to the importance of experiencing personally, corporally, the built forms as instrumental to the design itself.

On the other hand, since Cartesian dualistic epistemology-psychology was incorporated into 17th-century European thought to better understand architecture in its semiological dimension (Pérez-Gómez, 2015, p. 219), this meant an intellectual judgment of the signified based exclusively on its visual qualities, as has happened with poststructuralist and deconstructivist philosophers and architects until today. However, here lies the problem of signified, as will be seen in the results of this work, which goes beyond the visual qualities of architecture to be placed in the social and symbolic interactions inherent in the Vitruvian *utilitas*. Thus, the signified and the sensitive experience seem inescapably linked, not only to the visual but to the corporal, kinesthetic, and socialized through communicative and symbolic interactions.

Phenomenological architecture, as a constructive, theoretical, and critical current of design, starts at the beginning of the second half of the 20th century, from the interest aroused mainly by thinkers such as Edmund Husserl, Martin Heidegger, Maurice Merleau-Ponty, and Gaston Bachelard (Pérez-Gómez, 2016; Otero-Pailos, 2010; Mallgrave, 2011; 2013; 2018).

Pérez-Gómez (2016) has pointed out the problem of meaning in the context of a "crisis of modern science", agreeing with other authors mentioned here in stating that "(...) the Cartesian model of knowledge fails to explain how feelings are shared in the everyday world, how our bodies express such feelings, to which, in turn, others respond" (Pérez-Gómez, 2016, p. 27). The author points out, in the introduction of his book

Attunement. Architectural Meaning after the crisis of Modern Science (2016) that, far from being merely secondary aspects of cognition, feelings, while affecting us emotionally, as neurosciences have shown, participate in human understanding and rational faculties.

In previous works, the authors have pointed out the importance of conceptual categories such as *inhabiting* and *spatiality*, employed in Human Geography and Social Sciences, in addition to Architecture. According to Norberg-Schulz, "...the recovery of the place as a specific 'here' that concentrates a world, presupposes a phenomenological attitude" (2005, p. 249).

This reveals the phenomenology of Merleau-Ponty, following Pérez-Gómez (2016), namely that in everyday life we are "already there" in a social context where our subjectivity is inter-subjective, whether from a non-reflexive habitual behavior to a state of intentional consciousness in that everyday world that is presented to the senses as a coherent whole and, at the same time, depends on our perceptual, intentional, and motor skills. It also shows that one knows oneself through others, through the physical presence of other bodies that also constitute a plane of significance. Returning to Merleau-Ponty, Pérez-Gómez uses the term "inter-corporality" to describe the sensation that "other people's intentions inhabit my body, and mine theirs" (2016, p. 27). For this reason, the expression "world of life" is so relevant in the phenomenological tradition, since it is in everyday life where feelings and emotions are shared collectively as an "atmosphere" with which we are collectively in tune (Pérez-Gómez, 2016, pp. 3, 28, 29, 93; 2015, pp. 228, 229; Mallgrave, 2018, p. 44).

Therefore, regarding the proposal advocated in this paper about what the available means for the designer to know the emotional life of the people are, the argument is that to understand the point of view of other people, one needs a kind of knowledge that is only learned, as was said, through experience, through action and social interaction, and, in particular, by feeling empathy, as will be developed in the next section of the text. And, according to Pérez-Gómez, urban architecture is, at the same time, a symbolic and significant plane where limits and habits are established, and where its buildings do not appear primarily as an object. but that are presented within the practical purposes or intentions of its inhabitants (2015, p. 228). (See also: Mallgrave and Goodman, 2011, p. 211; Mallgrave, 2013, pp. 62, 145).

As for the urban layout, buildings, and public spaces, it seems useful to recall the distinction made by the anthropologist Tim Ingold (cit. in Mallgrave, 2018, p. 51), from a perspective of the builder and another from the inhabitant, whereas for the former it matters more to plan and build housing which is adapted later by its future inhabitants, while the perspective of the inhabitant is posed the other way around: the home is something that emerges as part of the processes of life. Thus, the emphasis of the design activity no longer falls directly on the building's structure. but on the type of experiences and activities that take place inside (Mallgrave, 2018).

The Metaphors of Inhabiting

As was the case with architecture, several disciplines have been influenced by the phenomenology of Husserl and Merleau-Ponty, and by the existentialist philosophy of Heidegger, which configures new ways to approach the classical problems of philosophy, for example, the idea that the space is inhabited by assigning meanings, and that inhabiting is possible to the extent that the architecture, in a Vitruvian sense, considers as a whole both well-being and aesthetic forms (Pérez-Gómez, 2016; Sharr, 2018).

Heidegger and philosophical hermeneutics also have the idea that language is primarily poetic, that is to say, metaphorical, which is why Pérez-Gómez (2016, p. 11) is interested in the importance that the design of a poetic language acquires. But, as indicated above, meaning is no longer exclusive to the visual, or even verbal language. For this reason, the idea of the metaphors of inhabiting is addressed here, as already suggested by authors such as Kenneth Frampton (1999), Harry F. Mallgrave (2013), Pérez-Gómez (2015; 2016), and Pallasmaa (2011), among others. But the metaphor, "(...) more than a mere rhetorical or linguistic figure of speech, constitutes a human process by which we understand and structure one domain of experience into another of a different type" (Frampton, 1999, p. 21). From this perspective, the lived experience can in principle be understood as the "raw material" of the metaphor, and it is, in short, the way to understand Rasmussen's words: "It is not enough to see architecture; one has to experience it" (2014, p. 31).

In this sense, the word "experience" begins to make sense in the New Tradition, so it is fundamental to discern three ways in which it can be understood, according to Montaner: as the emphasis on the lived experience (the personal history of the subject, the experience of the users of the building space); as a cognitive process of perception through the stimulus of the senses; and as experimentation "(...) open and intentional towards the future" (2014, p. 27).

On the other hand, in the chapter, *The Atmosphere of Place*, from his book *From Object to Experience. The New Culture of Architectural Design*, Mallgrave (2018) addresses the difference in the meaning of concepts such as "space" and "place", recalling the efforts of authors such as Bruno Zevi, Kevin Lynch, Edward Hall, and others, to distinguish the importance of places and their meanings. In turn, said authors were influenced, as has already been mentioned, by philosophers such as Heidegger, Merleau-Ponty, Bachelard, and Bollnow, etc., from which Norberg-Schulz takes the basis for distinguishing between *architectural space* and *existential space*, consolidating the philosophical category of "experience" in the vocabulary of the New Tradition.

Peter Zumthor deliberately expressed that, when thinking about architecture, certain images emerged from his childhood and how he perceived the dimensions of the inhabited space then:

“(…) Sometimes I can almost feel a particular door handle in my hand, a piece of metal shaped like the back of a spoon. I used to take hold of it when I went into my aunt’s garden. That door handle still seems to me like a special sign of entry into a world of different moods and smells” (2017, p. 7)

However, it must be understood that the term “experience” also refers to social and symbolic interaction and, in that direction, the meanings of interaction do not occur exclusively at the level of discourse, not even of language itself, but images, embodied metaphors, visual icons, urban layouts, and other forms of signifying elements.

Thus, as for the experience, the “atmosphere of places” depends not only on the senses (sight, hearing, smell, etc.) through which the immediacy of inhabited places is perceived, but also refers to the intentionality of actions and interactions between people who are aware of them (Mallgrave, 2018, p. 44). As this author mentions, today there is a renewed interest in these conceptual categories coming from phenomenology, both in the neurosciences and in cognitive sciences, because of the new technologies to observe brain processes.

Inhabiting as a Production of Meaning

The expression “metaphors of inhabiting” was used above, certainly, as a way of alluding to the subjective life of people, so it is ideal to turn to Pérez-Gómez when he points out that emotions are not “merely subjective” experiences (2016, p. 27) but that, as perceptual experiences, they are linked to places and, therefore, configure a stage where actions and thought itself are organized.

In this paper, it is argued that perceptual experience is integrated into pragmatic, social, and cultural contexts, and that much of the semantic work (the formation of perceptual content) is favored by objects, structured situations, and everyday events. For example, when walking, not only a muscular force is exercised, but certain goals and intentions to do so are covered, in addition to the fact that gestures and attitudes of other people are found, which are imbued with meanings and usually constitute a vital structure of existence, or, following Merleau-Ponty, a “human order” (cit. in Mallgrave, 2011, p. 110) that is continuously created through culture, art, architecture, and language.

When referring to the question of meaning, one must add that of sense; the phrase “inhabiting as a production of meaning”, which starts this section, alludes to the human cognitive ability to assign meanings to the already mentioned world of life, that is, to the places where one lives and also to what others do and say. It is considered here that the meaning (of what social agents do and say, of a phrase, sentence or text, image, symbol, etc.) poses various challenges both in the social sciences and in philosophy and architecture. As a historical reference, it



Figure 1. Front paving of Juan de San Miguel, in Morelia, during an exhibition of offerings to celebrate the Day of the Dead. **1** Source: Images by F. J. Fuentes F.

Figure 2. Plaza de los Mártires, Morelia. **2** Source: Images by F. J. Fuentes F.



1, 2 "(...) The city is an instrument of metaphysical function, (...) structuring action and power, mobility and exchange, societal organizations and cultural structures, identity, and memory. (...) in such a way that the same set of geometric shapes or objects does not mean the same thing for different human collectives" (Pallasmaa, 2016, p. 47).



Figure 3. Cathedral of Morelia.³
Source: Images by F. J. Fuentes
F.

is important to review the distinction made by philosopher Wilhelm Dilthey, from which the route of the emergence of qualitative, or interpretative methodologies of Social Sciences can be followed, because while Natural Sciences (*Naturwissenschaften*) are based on the hypothetical-deductive model of the scientific method, the Sciences of the Spirit (*Geisteswissenschaften*) do so in the model of understanding, that is, in the production of meaning from the historical context.

In brief, social cognition, understood in principle as a production of meaning by the city's actors, turns out to be, equally, an epistemic tool for the activity of urban and architectural design. Knowing others does not seem to be only a cognitive process whose causes must be sought in the functions of the brain, but also in social and symbolic interactions and representations which, among various aspects of research, present the problem of meaning, that is, the meaning of what socio-urban actors do, say, or feel. Here, the term "empathy" has been taken as an example to address the problem of social cognition, namely, to raise the question of how to get to know others, the rest. Does one

³ "(...) The city is an instrument of metaphysical function, (...) structuring action and power, mobility and exchange, societal organizations and cultural structures, identity, and memory. (...) in such a way that the same set of geometric shapes or objects does not mean the same thing for different human collectives" (Pallasmaa, 2016, p. 47).

Figure 4. F Street. I. Madero. Mexico City. The built context as a significant factor in social actions and interactions. Source: Image by F. J. Fuentes F.



put oneself in the shoes of others to know about their emotions and feelings, or does one elaborate theories by handling concepts? (Figure 1, Figure 2 and Figure 3)

It seems clear that social cognition can be assumed as a type of metaphorical thinking, and this is fundamental for the understanding of the world, since only in this way the possibility of overcoming the system of language signs to the world of life, arises. It is, therefore, a primary condition in which humans are incarnated or “embodied” beings (Mallgrave, 2013, p. 57). According to Pérez-Gómez, the meaning of existence appears deeply rooted in human biology, where “(...) emotions - desire, etc. - are perceived as a purpose of our actions, in particular, when they are framed by architectural space” (2016, p. 226). As an aspect of the problem of the sensitive and emotional experiences to the building space, the topic of empathy has been of interest because of the recent discoveries in neuroscience on the role that “mirror neurons” play in the experience: the great importance of such cells, mirror in the empathic capacity of individuals, to recognize what others are doing, is a “neural pre-requisite” for the development of interaction and communication (Mallgrave, p. 2011; 2013; 2015; 2018).



On the other hand, from phenomenology, the word "empathy", *Einfühlung* (Mallgrave, 2018, pp. 45, 53, 68, 99), has resurfaced in different fields because of the technologies to monitor the brain that make it possible to examine the neurological processes that allow us to relate to others. In this context, the feeling of empathy can be understood as related to social cognition, that is, to how all humans learn to know others, and the rest. It is also worth highlighting the relevance of various qualitative or phenomenological experiences related to shapes, textures, volumes, voids, and, in synthesis, the different historical layers that are being added to historical cities. It is, to recall Gordon Cullen, a sum of visual perspectives, the position of the body among other bodies and objects, and architectural and psychological contents such as color, scale, style, materials, and proportions. Cullen thus employs a phenomenological vocabulary to highlight the hidden qualities of built and urban space. (Figure 4 and Figure 5)

Figure 5. Aqueduct of Morelia, and Paving of Antonio de San Miguel; in the background, the Fountain of the Tarascas. Source: Image of F. J. Fuentes F.

Following the approach that the urban-architectural design activity must take to support enactive knowledge through emotions such as empathy, to get to know the other, the inhabitants, and to apply that knowledge in future projects, it should be noted that, while one depends on the activity of a highly complex organ such as the brain, this is, in turn, engaged in a socio-architectural, ecological and cultural context, in which all people live. (Robinson & Pallasmaa, 2015; Pérez-Gómez, 2016; Gallagher, 2017; Gallagher & Zahavi, 2013; di Paolo, Cuffari & de Jaeger, 2018). Several theorists have proposed reviewing the role of the brain in the ability to experience feelings of empathy (or rejection) before certain places and before certain groups of people and "atmospheres" or spaces of

DISCUSSION

social and symbolic interaction. Additionally, it has been sought to unravel how “the immediacy of the surrounding world” is perceived, not only in the built forms and the urban layout, but also in the presence of other bodies (Mallgrave, 2013; 2015), as if it were a coherent whole, endowed with meanings.

Regarding the problem of the meaning of built forms, it was mentioned above that, due to a Cartesian dualistic vision, until the middle of the previous century, it was considered that these meanings were established from exclusively visual qualities. But the first conclusion from this research points out that meanings are socially constructed through the social and symbolic actions and interactions of the actors. It is in the inter-corporality and the encounter with others, as well as in the possibilities of action that are presented in public spaces, buildings, monuments, and the urban layout, that meaning is produced and meanings are constructed.

Getting to know others, what they think, feel, and imagine, and what they say and do, seems to be the challenge for designers, but also for social scientists, geographers, social psychologists, urban anthropologists, etc., facing the manifestations of culture in its semiotic dimension, whereas that dimension does not only happen at the level of language or writing, but rather in social interactions, in intersubjectivity and their imaginary and collective representations, in social and symbolic interactions, and in the inter-corporality, as noted in the phenomenology of Merleau-Ponty.

From this point of view, it may be understood that phenomenological architecture is also marked as critical in several ways, both by its break from the formal tradition of modernism, its theoretical reflection on the mental and emotional lives of people living in cities, and the knowledge that one can get on them, by which this current can be identified as one of the sources of the less examined postmodern architectural thought (see Otero-Pailos, 2010).

It is added here that phenomenological architecture is also a good example of interdisciplinary research based on the new conceptions of knowledge, society, and the mind, those of a phenomenological, hermeneutical (interpretative), and comprehensive nature. In this regard, it is necessary to highlight that the phenomenological cognitive sciences model should be understood from a critical discussion of the notions that have been extensively examined in the literature, such as the idea of scientific empiricism (the assumption that one objectively perceives real facts), and that the meanings of actions and social interactions are explained by neurochemical events that occur in the brain.

Since, at this point, it is essential to integrate different disciplinary levels, it must be emphasized that an interdisciplinary proposal requires a theoretical-epistemic approach that the different disciplines can share, instead of each of them working from theoretical approaches limited to their epistemic boundaries. The phenomenological tradition, inseparable

from hermeneutics and the comprehensive method of the Sciences of the Spirit, offers new ways of asking and responding to those old questions that will continue to permeate design schools: time-space (or interior-exterior), the meaning of built forms, and the qualitative experience of inhabiting cities.

When it is proposed that design specialists can learn to know others not only through statistical and predictive methods, but also through empiric ones, it is because there is the notion of knowledge that is obtained through experience: enactive knowledge. Bridging the gap between thought and emotion, between reason and feeling, as the architects who refused to sign the Charter of Athens, in 1943, wanted, has been a challenge in several disciplines and mentioned in this writing, mainly because human subjectivity - everything that one assumes to be "in the mind" or "in the head" of people - continues to challenge the foundations of Cartesian dualist thought, of Newtonian physics, and, in short, of the model of analytical philosophy. Instead, phenomenological architecture has shown that neurosciences and cognitive sciences can, at the same time, integrate an interpretative and comprehensive methodology that allows fully understanding the role of emotions and their meanings in inhabited space, therefore understanding how the built space influences people's daily lives.

While one depends on the activity of this highly complex organ, today it is clear that the brain is, in turn, engaged in a socio-architectural, ecological, and cultural context, in which all people live, as confirmed copiously in several proposals that today are associated with constructivism and new models of human cognition, such as the theories of situated cognition, of the embodied mind, and of enactive knowledge.

As it was laid out, a new way of understanding the space has led to a new conception of knowledge and, hence, during the second half of the last century, a qualitative methodology has emerged in the Social Sciences (Human Geography, Sociology, Phenomenology, Social Theory, Cultural and Urban Study), and also the interpretative, cultural, hermeneutical and phenomenological approaches, in scientific disciplines such as neuroscience and cognitive science, by which one can speak of new approaches or currents of integrative or interdisciplinary studies. It is in the latter case where studies on social cognition are found, where it is proposed that socio-urban agents or actors share cognitive models of an enactive nature, that is, they learn through practice, through action (Gallagher & Zahavi, 2013; Gallagher, 2017; Stewart, Gapenne & di Paolo, 2014; di Paolo, Cuffari & de Jaegher, 2018). This theoretical model of knowledge is also taken on by the new theories of Urban-Architectural Design (Robinson & Pallasmaa, 2015; Mallgrave & Goodman (2011); Mallgrave (2011, 2013, 2015, 2018), which also point out that interdisciplinary character; that integration between sciences and humanities.

From there lies the need for an interpretative theoretical-conceptual framework that promotes the development of housing projects that give primacy to phenomenal experiences and their meanings. The concepts of inter-

CONCLUSIONS

corporality, and social interaction, allow one to observe a new structure or new dynamic system that always goes beyond the intentions and actions of the individuals involved, and what developmental studies show is that all personal narratives originate in encounters with others, and incorporate in the subjects, part of their own life history, and this is reflected in said interaction.

BIBLIOGRAPHIC REFERENCES

Di Paolo, E. A., Cuffari, E. C. y de Jaegher, H. (2018). *Linguistic Bodies. The Continuity between Life and Language*. Cambridge: Massachusetts Institute of Technology Press.

Frampton, K. (1999). *Estudios sobre cultura tectónica. Poéticas de la construcción en la arquitectura de los siglos XIX y XX*. Madrid: Akal Ediciones.

Gallagher, S. (2017). *Enactivist Interventions*. Oxford: Oxford University Press.

Gallagher, S. y Zahavi D. (2013). *La mente fenomenológica*. México: Alianza Editorial.

Giedion, S. (2009). *Espacio, Tiempo y Arquitectura*. Barcelona: Reverté.

Mallgrave, H. F. (2011). *The architect's brain. Neuroscience, creativity and architecture*. Chichester: Wiley-Blackwell.

Mallgrave, H. F. (2013). *Architecture & Embodiment. The implications of the new sciences and Humanities for design*. Abingdon-New York: Routledge.

Mallgrave, H. F. (2015). "Know thyself": Or what designers can learn from the contemporary biological sciences. En Robinson S. y Pallasmaa, J., *Mind in Architecture. Neuroscience, embodiment, and the future of design* (pp. 9-31). Cambridge: Massachusetts Institute of Technology Press.

Mallgrave, H. F. (2018). *From Object to Experience. The New Culture of Architectural Design*. London: Bloomsbury Visual Arts.

Mallgrave, H. F. y Goodman, D. (2011). *An Introduction to Architectural Theory. 1968 to the present*. Chichester: Wiley-Blackwell.

Montaner, J. M. (2013). *Sistemas Arquitectónicos Contemporáneos*. Barcelona: Gustavo Gili.

Montaner, J. M. (2014). *Del diagrama a las experiencias, hacia una arquitectura de la acción*. Barcelona: Gustavo Gili.

Montaner, J. M. (2015). *La condición contemporánea de la arquitectura*. Barcelona-México: Gustavo Gili.

Norberg-Schulz, C. (2005). *Los Principios de la arquitectura moderna. Sobre la nueva tradición del siglo XX*. Barcelona: Reverte.

Otero-Pailos, J. (2010). *Architecture's Historical Turn. Phenomenology and the rise of the Postmodern*. Minneapolis: University of Minnesota Press.

Pallasmaa, J. (2011). *The Embodied Image. Imagination and Imagery in Architecture*. Chichester: John Wiley & Sons.

Pallasmaa, J. (2015). Body, Mind, and Imagination. The Mental Essence of Architecture. En Robinson, S. y Pallasmaa, J. (Eds.). *Mind in Architecture. Neuroscience, Embodiment and the Future of Design* (pp. 51-74). Cambridge: Massachusetts Institute of Technology Press.

Pallasmaa, J. (2016). *Habitar*. Barcelona: Gustavo Gili.

Pérez-Gómez, A. (2015). Mood and meaning in architecture. En Robinson, S. y Pallasmaa, J., *Mind in Architecture. Neuroscience, Embodiment, and the Future of Design* (pp. 219-235). Cambridge: Massachusetts Institute of Technology Press.

Pérez-Gómez, A. (2016). *Attunement. Architectural Meaning after the crisis of Modern Science*. Cambridge: Massachusetts Institute of Technology Press.

Rasmussen, S. E. (2014). *La experiencia de la Arquitectura. Sobre la percepción de nuestro entorno*. Barcelona: Ed. Reverté.

Robinson, S. y Pallasmaa, J. (Eds.) (2015). *Mind in Architecture. Neuroscience, Embodiment, and the Future of Design*. Cambridge: Massachusetts Institute of Technology Press.

Sharr, A. (2018). *La cabaña de Heidegger*. Barcelona: Gustavo Gili.

Stewart, J., Gapenne, O. y Di Paolo, E. (Eds.) (2014). *Enaction. Toward a New Paradigm for Cognitive Science*. Cambridge: Massachusetts Institute of Technology Press.

Zumthor, P. (2017). *Pensar la Arquitectura*. Barcelona: Gustavo Gili.