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The rehabilitation of urban space and Affectivity: an Environmental Psychology study about residents of the

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ABSTRACT

This article deals with Affectivity and the rehabilitation of urban space, based on the feelings and emotions of residents from the Historic Center of Fortaleza, Ceará, who live in the vicinity of the Riacho Pajeú (a creek). The data used in this study was gathered from a database for the research entitled "Affectivity study of residents from Downtown Fortaleza in relation to the Housing Rehabilitation Plan for the Downtown Area". From an interdisciplinary perspective, we started off by discussing urban intervention concepts for the downtown area of Fortaleza contained in the Saboya Ribeiro plan (1947), the Hélio Modesto plan (1963) and the Housing Rehabilitation Plan for the Downtown Area (2009). Then, from the standpoint of Environmental Psychology, we worked with the concepts of Affectivity and appropriation of space. These constructs, developed by Social Psychology and Environmental Psychology, respectively, supplied us with the elements to understand the construction processes for the meanings resulting from the person-environment relationship. Ideas to renovate the downtown area of Fortaleza began to emerge in the mid 1960s when the phenomena of urban expansion and disorder literally foreshadowed the explosion of the city's social and urban structure in the following decades. The collection and analysis of the data was based on instruments that generate Affective Maps, a method developed by Bomfim (2010) which enabled us to capture the feelings and emotions of the study subjects in their day-to-day relationship with the urban environment. The results of the person-environment interaction study, with a focus on Affectivity, raised issues related to the feelings and emotions of residents living in the vicinity of the Riacho Pajeú, which indicate the need for interdisciplinary research which includes Environmental Psychology, especially in the urban planning diagnosis stage.

Keywords: Urbanism; Environmental Psychology; Interdisciplinarity; Affectivity.

No scientific object of study seems to require collaboration between so many disciplines as the city. The need to add new epistemologies and knowledge to the ancient architectural *savoir faire* of conceiving and producing spaces has accompanied the course of the historical development of the sciences.

In proposing an interdisciplinary dialog between Environmental Psychology and the techniques for the reading of urban space arising from urbanism, we had in mind the troubled historical-cultural process that engendered the current multidisciplinary network(s) of Urban Planning.

Bresciani (2002) highlights a series of socio-cultural and political factors that definitively determined the way we approached and intervened in urban space.

Some of these factors would be instrumental for projecting the cities of the future at the time the industrial revolution was approaching. The discovery of blood circulation by Harvey in 1628, for example, inspired builders and reformers to start conceiving of the city as a system of veins and arteries in which movement within the city was meant to enable the greatest possible free flow of people and goods, in addition to providing ample oxygen consumption (Sennett, 2010; Bresciani, 2002).

The works of Adam Smith on economics, especially “The Wealth of Nations” (1776), bear within them the seeds that would become part of the ideological framework for aesthetic and philanthropic conceptions of poverty, which were highly propagated in the nineteenth century. Philanthropists and literati contributed decisively to a more comprehensive understanding of urban problems, placing the social question, for the first time, as a backdrop for the obstacles encountered in the industrial city.

Concerned with the exponential growth of poverty, the practice of philanthropy was grounded on the scientific notion that poverty was not by divine intent or something inserted into the natural order of the world. These researchers provided increasingly detailed strategic input for those wishing to intervene in the urban environment.

Highly influential novelists such as Balzac, Victor Hugo, Emile Zola and Charles Dickens were major collaborators of the philanthropists. Joining forces with journalists and social researchers of the era, they supplied important elements for the formulation of social issues. The origins of what is now understood as civic responsibility arose from the close link between *popular culture* (author’s emphasis) and philanthropic investigations (Bresciani, 2002).

Historical and cultural conditions, therefore, determine the extent to which knowledge about cities may or may not be amalgamated into the discourse and interventionist activities that engender transformations in urban and social structure. The positivist and confident atmosphere in nineteenth century Europe made it possible to incorporate, to a certain extent, practically all the scientific discoveries of the era into the knowledge base of urban sanitation.

This widespread sense of optimism in technology and scientific discoveries would last until the beginning of the Second World War, at which time modern urbanism would assume the status of a science with respect to the city, although there was already controversy about the four functional principles (live, work, recreate and circulate) set forth in the Athens Charter. Historian, sociologist and contributor to the modern movement, Mumford pondered on the political, educational and cultural functions of the city and considered the omission of these functions as the greatest defect of everyday urban planning (Rodriguez and Segre, 2008).

After the Second World War, the functionalist principles and themes of modern urbanism were consolidated, even though they were strongly questioned by the new generation which composed the CIAM¹ (Rodriguez and Segre, 2008), and to this day they have inspired the concepts of urban zoning.

Amid the criticism of the functionalist concept embraced by modern urbanism, the vitalistic approach by Jane Jacobs is worth noting. The author argues that the built environment can impinge upon the human psyche with the power of aggression or with the capacity to promote integration – a relationship that had not yet been sufficiently considered in the 1960s (Choay, 2005). “The ruthless, oversimplified pseudo-city planning and pseudo-city design we get today is a form of ‘unbuilding’ cities” (Jacobs, 2009, p. 454).

Jacobs (2009) advocated the diversified use of cities, as this alone would provide the essential foundation for the economy, social vitality and urban magnetism. Another innovative aspect of her conceptions of the city has to do with the involvement of local residents in the planning process, an idea that would only take root here in Brazil in the 1990s, resulting from the pressure of social movements for urban reform.

At practically the same time as the publication of Jacob's famous work, Kevin Lynch developed his psychological-behavioral approach based on the syntax of urban morphology as a factor reflected in human behavior. Abandoning the idea of planning as an a priori model for intervention, Lynch was seeking after, from the standpoint of city dwellers – in a posteriori condition – a methodology based on experimental psychology and questionnaires, which would engender an interchange of dialog between city users and urban planners (Choay, 2005).

Environmental Psychology would also emerge out of the deep contradictions established in the late capitalism of the postwar period. The ease with which durable consumer goods could be purchased in the 1950s triggered industrial production on a scale never seen before. This had deep repercussions on the balance of ecological processes, especially in urban areas, since cities were also invaded by huge populations coming from the countryside in search of better opportunities. To paraphrase Leff (2006), it is within this productive context

1. International Modern Architecture Congresses

that Environmental Psychology arose as a symptom of Western productive rationalization.

Our goal in this article is to discuss **Affectivity** and the rehabilitation of urban space, based on the feelings and emotions of residents from the Historic Center of Fortaleza, Ceará – specifically those living in the vicinity of the Riacho Pajeú (a creek which crosses the entire city).

The article is divided into three parts: a brief history of some of the plans that were proposed for Fortaleza in the twentieth century, whose urban precepts for the Downtown area included intervention in the Riacho Pajeú area; concepts and categories of Environmental Psychology, along with the technical parameters we used within urbanism for the socio-environmental assessment of the area; the way in which we articulate this collaboration, the findings of our research and, lastly, the conclusion.

Plans for Fortaleza and the symbolic recovery of the Riacho Pajeú

Until the mid-nineteenth century, there was a clear intent to expand the city to the east, beyond the Riacho Pajeú, which until then had imposed limits on Fortaleza's growth.

The difficulties of crossing over the Riacho Pajeú in the Downtown area were finally resolved by an adjustment proposed by engineer Adolpho Herbster, in 1875, which increased the grid of the old zone to include the southeast part of the city, where the topography did not present any impediments to the city's expansion (Castro, 1994).

The system of boulevards designed by Herbster, which up until today enshrouds the historic center, overcame the obstacles to the plans for expanding the city, which grew on the basis of cotton exports.

The "Exact Plan of the Capital", the first to be formulated by Herbster, in 1859, gives an indication of what the environmental conditions of the creek were like, when it was still free from urban interventions. In an attempt to represent the ecological system (Costa, 2009), it can be noted that the plan also includes access roads to the city, the names of public places and the registration of all existing public and private facilities [Figure 1].

Between 1931 and 1932, the street layout proposed by Herbster for the east sector can already be seen in the "Cadastral Map for the City of Fortaleza" (Fernandes, 2004) and a large part of the creek is already channeled underneath roads and city blocks, only flowing openly in areas where no construction exists.

Until practically the 1970s, there are few historical records that show the envi-

ronmental transformations which the creek underwent. We can logically infer that the problems in the vicinity of the Pajeú, as a whole, must have started to get worse during the intense occupation of the east sector of the city, which occurred during the 1940s and 1950s (Ponte, 1993).

The 1930s constituted a milestone in the urban expansion of Fortaleza. In addition to the area designated by Herbster, in 1875, being totally occupied, an uncontrolled growth can be noted along the axes connecting the capital with the interior of the state. Further aggravating the situation, the drought of 1932 intensified the influx of migrants to Fortaleza (Fernandes, 2004).

With the worsening of the agrarian situation, waves of rural workers also migrated to Fortaleza and started occupying the coastal strip and dunes, areas which were neglected by people from the higher income brackets. These social segments survived by fishing or working in industry, commerce or services. On the other hand, the higher income sectors, in an effort to escape proximity to the slums and the annoyance of living near industries, began to migrate from Jacarecanga to the sector east of the Riacho Pajeú.

Aldeota was a long sandy stretch at the time and its occupation by the wealthier classes initiated the process (in the 1930s) of the spatial differentiation and residential segregation of Fortaleza (Ponte, 1993; Costa, 2009).

In light of this expansion which portended a disorderly type of urban development, city authorities, under the command of Raimundo Girão, hired the urbanist Nestor de Figueiredo who would formulate, in 1933, the “Renovation and Extension Plan of Fortaleza”. This plan included the first zoning proposal for the city of Fortaleza and was prepared under the aegis of the modern urbanism propagated by Le Corbusier (Costa, 2009).

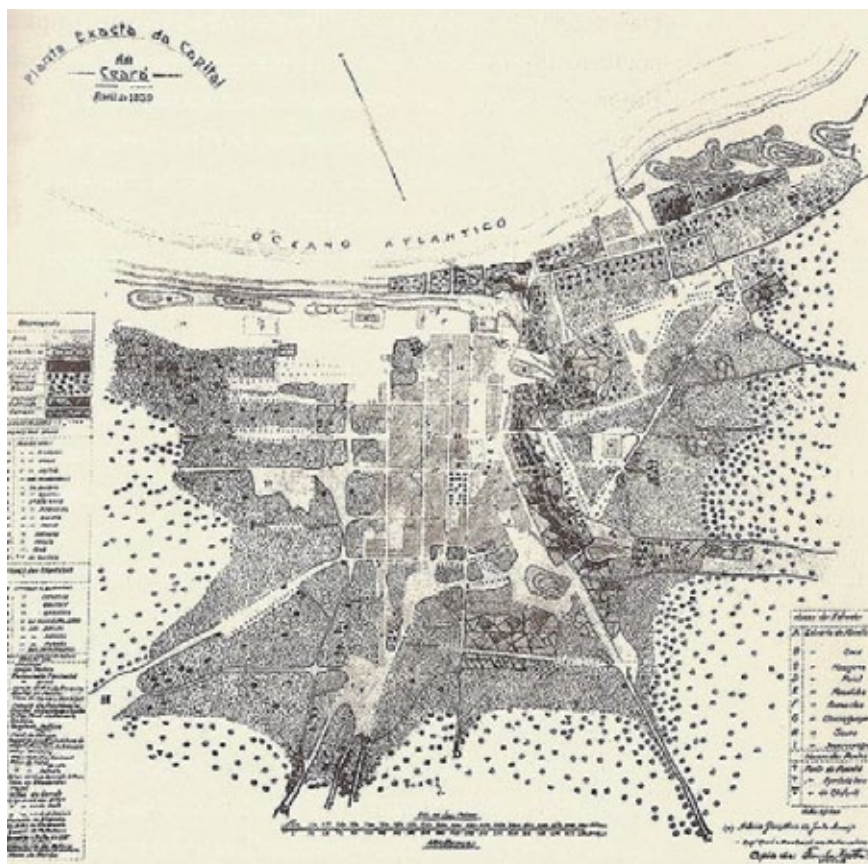
After the Nestor de Figueiredo Plan, six other urban proposals were formulated for the city: the “Master Plan for the Renovation and Extension of the City of Fortaleza”, authored by engineer and urban planner Saboya Ribeiro, drafted in 1947; the “Master Plan for the City of Fortaleza”, prepared by urban planner Hélio Modesto in 1963; the “Integrated Development Plan for the Metropolitan Region of Fortaleza” (PLANDIRF) put together by the consortium SERETE S.A., S.S. Consultoria and Jorge Wilhelm Arquitetos Associados, between 1969 and 1971; the “Physical Master Plan” of 1975, prepared under the auspices of CODEF (Urban Development Coordination of Fortaleza); the “Master Plan for the Urban Development of Fortaleza (PDDU-FOR) of 1996 (Fernandes, 2004); and the “Housing Rehabilitation Plan for the Downtown Area of Fortaleza”, provided for by the “Participatory Master Plan of Fortaleza” (PDP-FOR) since 2009.

Some of these plans, especially those formulated by Saboya Ribeiro (1947) and Hélio Modesto (1963), proposed a series of initiatives – in response to the process of obsolescence of the structure, depreciation and consequent abandonment of the downtown area of Fortaleza – aimed at recovering this region, which is symbolic in terms of the city’s identity, and adjusting it to the new

Figure 1

Exact Plan of the City of Fortaleza and Suburbs

Source: available at: <www.pt.wikipedia.org/wiki/fortaleza>



conditions of urban development in its respective contexts. Among various intervention guidelines for the downtown area, each plan proposed the urban and environmental regeneration of the Riacho Pajeú, in view of its scenic, urban and symbolic potential as a factor for refurbishing the downtown zone of the city (Sales, 1996).

Urbanist Saboya Ribeiro argued that the city should promote the filling in of empty urban spaces, since this measure would help optimize displacements and the systematic arrangement of urban expansion. In his diagnosis of the poor condition of paved roads and public transport to the detriment of the ever-increasing use of automobiles, Ribeiro considered the road system structure to be the backbone of the Master Plan.

The insertion of the Pajeú area into the city's economic circuit, based on its connection with the downtown commercial center, investments in landscaping and the idea of creating a civic center, constituted a proposal to modernize the city, aimed primarily at optimizing flows of traffic and land use (Fernandes, 2004).

Sixteen years later, these ideas were more extensively explored in the Hélio Modesto Plan (1963), which allocated areas for the private sector in the vicin-

ity of the large administrative civic center which would enhance the sustainability of the latter and make the city's downtown area more dynamic through the implementation of commercial facilities and services, such as hotels, office buildings, theaters and multifamily dwellings.

The environmental preservation of the creek and its banks were also significant concerns in Modesto's plan. In advocating the use of the area for public purposes, he promoted the removal of inappropriate activities and also proposed establishing a scenic road following the creek bed as a means of demarcating the environmental preservation boundaries and curbing initiatives on the part of the private sector to appropriate this land (Fernandes, 2004).

Both the Saboya Ribeiro (1947) and Hélio Modesto (1963) plans fall within the historical period of Brazilian urban planning that Villaça (1999) refers to as the *urbanism* phase.

All the urban theories formulated by the utopian socialists (Owen or Fourier) and the technocrats, such as Ebenezer Howard, Le Corbusier, Agache, Doxiadis, or by the Charter of Athens, which promoted the ideology of the master plan, were based on the belief that the key to solving so-called "urban problems" lay in science (scientific diagnosis and prognosis) and technique (the master plan) (Villaça, 1999, p. 187).

Current proposals for recovering the Historic Center

Current rehabilitation policies, which are very different from urban renewal proposals for historic sites, trumpeting the "just-for-show" strategic planning model, consist of a process of recovery and repossession, by citizens, of already consolidated areas of the city. These initiatives rely on a series of actions that can ensure the sustainable use of these consolidated areas in order to provide real estate to meet the growing demand for housing in the country. Urban rehabilitation policies should, therefore, promote diversity of uses and activities focusing on urban, social and economic development, through the reuse of vacant buildings as well as empty or abandoned, underused or unsanitary areas, in addition to improving infrastructure, facilities and urban services (Rolnik; Botler, 2005).

The Housing Rehabilitation Plan for the Downtown Area of Fortaleza (2009) revives the idea of recovering the Riacho Pajeú area, forty-six years after the proposals made by Hélio Modesto. The longstanding lack of interest in the Riacho Pajeú and the concentration of inappropriate activities, such as wholesale trade, are among the main reasons for the environmental degradation of the old Fortaleza downtown area. The plan argues that the substantial concentration of facilities and public spaces, as well as the possibilities that exist to connect it with the most significant sectors of the city, not to mention the insti-

tutional and symbolic role of the area, represent important elements in the rehabilitation process of the city's downtown district. To this end, we propose the following guidelines:

- Explore and improve the different connections between the sectors in order to open up routes for pedestrians to enjoy the built and natural landscape. These routes need to be reformed and adapted, mainly by providing better trafficability conditions through improved paving and sidewalks;
- Create a set of empty spaces that are available to the public along the banks of the Riacho Pajeú, in order to reincorporate it into the landscape of the city;
- Recover the existing open spaces, parks and public facilities, integrating them into the proposed circuit;
- Establish housing assistance initiatives with respect to:
 - a) Urban development and regularization of the Poço da Draga slum (where the Pajeú empties into the sea);
 - b) Identification of empty or underused buildings with greater potential for reuse;
 - c) Identification and creation of a program to provide assistance for improving the existing slums in the sector.

According to the Plan, the future goal of these guidelines is the establishment of a sector with a clear identity comprised of natural, architectural and historical elements. This identity would be shared by residents and visitors, whether through contemplative leisure or the diversified use of its restored public spaces open to the general public².

There is no doubt that, in the realm of communication, the level achieved in the participatory plans was unprecedented, not only for the history of urban planning in Brazil. The inclusive process in its elaboration represents only a small portion of the great promises contained in this new phase of Brazilian urban planning that signal profound social change, especially in the field of city management.

A different and collaborative look

Aragonés and Américo (2010), scholars of the history and theories of Environmental Psychology have defined this young field of study as follows: "(...) a discipline that studies the reciprocal relationships between people's behavior and the socio-physical environment, both natural and built" (Aragonés and Américo, 2010, p. 24).

2. Housing Rehabilitation Plan for the Downtown Area of Fortaleza (2009) product 12

Before specifically delving into the research we conducted with residents from the Downtown area, it is necessary to understand some of the basic principles of Environmental Psychology. We'll focus on at least three of them that characterize the specifics of our research:

- It studies the relationship between behavior and the environment, looking at it from a holistic perspective, i.e., the way people experience it in everyday life; thus, more attention is paid to the relationship between the elements as units of analysis than their components separately.
- Research is primarily conducted through fieldwork in the natural environment and with an eclectic methodology, adapted to the nature of the variables, using, according to the situation, selective designs with a qualitative or quantitative focus, quasi-experimental designs and, to a lesser extent, experimental designs.
- There are many disciplines interested in the study of the relationship between people and the environment, which enables a broad participation of Environmental Psychology within the interdisciplinary field. Thus, there are often numerous contributions, concepts and laws from other disciplines, such as Geography, Biology, Architecture, Urbanism, etc. (Aragonés and Américo, 2010).

A concept that holds a special place in Environmental Psychology is **Appropriation**. According to Korosec (apud Pol, 1996), the term *Appropriation* is used to refer to a complex process that is defined by some of the aspects presented below:

- Every *Appropriation* is a process, a temporal phenomenon. Therefore, the changes of the individual would have to be considered over time, not only the changes of object, or space.
- *Appropriation* is a dynamic process of the individual's interaction (internalized, subjective experience) with his or her external environment.

In everyday practice, the creation of a collective space, historically, has a dual origin: the social and spontaneous creation of new spaces on the part of the user population and the intentional planning or action of those who have power over transformations of the environment (Pol; Valera, 1996).

The construct that both define by *Symbolism a Priori* is justified each time the government modifies the quality of the space with the intention of confirming or assigning new meanings for its users. However, the content or importance of these changes that the public agent deems as structural for the quality of life of citizens can, to the contrary – if it is a disastrous intervention from the cultural point of view – be ignored and even rejected by the population. On the other hand, there are spatial configurations considered anodyne, often viewed with suspicion from an outsider's perspective, which arouse feelings of belonging and deep cultural identity on the part of their users. In these relationships of belonging, relative to one's surroundings, where time is essential for the build-

ing of identity with the place (Proshanski *apud* Pol, 1996), authentic appropriations of space take place. Pol and Valera (1994) gave the name *Symbolism a Posteriori* to this type of symbolic appropriation of space.

Here, we use the concept of *Appropriation* of place for the direct relevance that this theme evokes in issues involving urban intervention. We noticed in our research, the extent to which most downtown residents find their homes to be an ultimate refuge from the problems to which they are subjected in the neighborhood.

The qualitative part of the research identified, quite frequently, a feeling of symbolic identification with the locale, but conditions of lack of security [Figure 2], noted by residents, suggest that this identification is not very likely to develop into what Pol (1996) identifies as an action-transformation situation³ with respect to the surroundings.

Vicinity of the Pajeú: feelings and scales

The social psychology of Vygotski, which is historical-cultural in nature, provided the theoretical framework that guided us in our recent research using Environmental Psychology. This epistemological proposal oriented us in the investigation of the affective processes involving the person-environment relationship of Downtown residents with the area where they live. This theory is widely accepted in Environmental Psychology.

Human behavior, for a given physical context, is enduring, consistent in time and from situation to situation; therefore, characteristic patterns of behavior can be detected for that particular physical context (Ittelson et al. apud Soczka, 2005, p. 65).

Based on this theory, we established the hypothesis that the socio-environmental heterogeneity of the Historic Center creates qualitative differences with respect to the behavior and emotions of its residents.

The concept of Affectivity, developed by Sawaia (2004), is taken from Social Psychology and defined by the author as the emotional tonality and color that pervades human existence and is presented as: 1) Feelings: moderate reactions of pleasure and displeasure, which are not tied to specific objects. 2) Emotion: an affective phenomenon that is intense, brief and focused on phenomena that disrupt the normal flow of behavior.

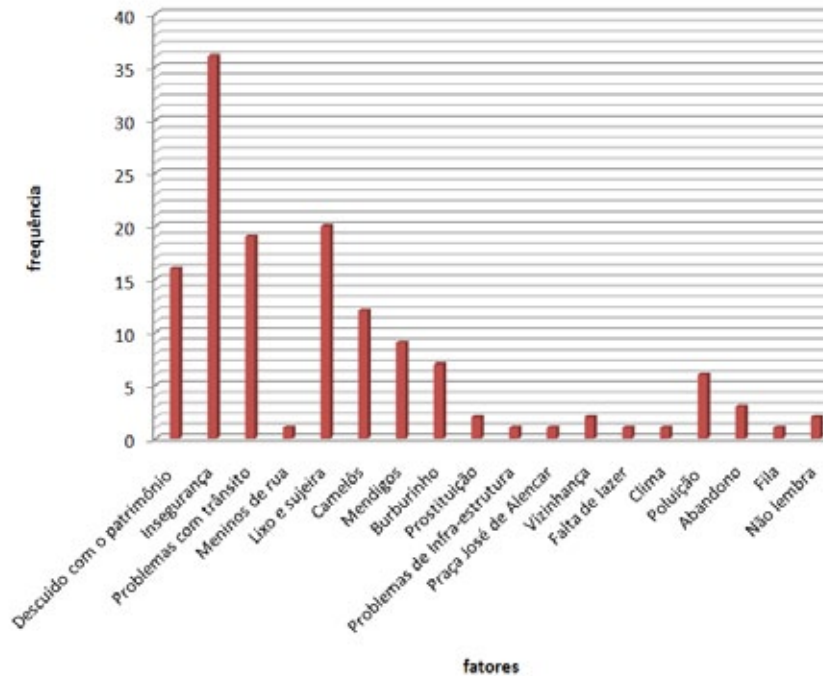
This construct, inspired from the cultural historical theory of Vygotsky, the ontology of Spinoza and the theory of feelings by German philosopher Agnes Heller, oriented the thesis of Bomfim (2010) on the Affectivity of students from São Paulo and Barcelona. This research resulted in the development of instruments

3. This component is directly related to explicit territorial behavior, in other words, it can be expressed by the most elemental behavior of marking off territory or through a more complex territorial occupation. Humans can acquire high levels of sophistication when they design or transform an object, space or reality, whether directly or remotely. Pol (1996)

Figure 2

Graph which shows what individuals do not like about Downtown

Source: Author's database (2012)



that generate Affective Maps. This methodology follows a script that endeavors to capture feelings and emotions through a series of questions that seek to integrate the cognitive and affective aspects experienced by the subjects in their social and physical interactions with space.

The analysis from this instrument results in the formulation of a synthesis [Figure 3] of the significant parts recorded in: a) drawings; b) their meanings (expressed by the individuals themselves); c) the feelings that the drawing arouses; d) synthesis (in six words) of the drawing, meanings and aroused feelings; e) and lastly the metaphor. All these stages are tasks that the individuals in the study are assigned to do. The researcher comes in at the end with an analysis of the meaning.

In conducting the pre-test to establish the affective categories of the Likert scale (the part that permits a statistical analysis to complement the research), we were able to identify – through the answers – six affective images, namely: **Belonging, Contrast, Attraction, Destruction, Pleasantness and Lack of Security.**

Each of these images represents a set of specific values that refers to how the individual perceives, understands and feels the space of their experiences.

The image of **Belonging** is generated by feelings of friendship, love, knowledge, respect, etc. In the image of **Contrast**, the feelings and perceptions are contradictory and sometimes mutually exclusive: happiness, thief, religion, pollution, etc. With the image of **Attraction**, certain perceptions of usefulness stand out,

such as convenience, proximity, time-saving, shops, etc. The image of *Destruction* is perhaps one of the most expressive feelings with respect to feelings: anger, indignation, disgust, sadness are among the most repeated. The **Pleasantness** image is usually is linked to physical perceptions of a place, such as tranquility, well-being, ventilation, presence of green. The **Lack of Security** image is linked to feelings and perceptions of fear, violence, assaults, abandonment, etc.

Identification	Drawing	Significance	Quality	Feeling	Metaphor	Meaning
Code	Structural: Lynch Cognitive Maps (roads, landmarks, nodes, edges and districts)	Explanation of the drawing given by the individual him/herself.	Attributes of the drawing and of the Downtown as indicated by the respondent.	Affective expression of the respondent to the drawing and Downtown.	Comparison by the respondent of the Downtown with something else, for the purpose of creating metaphors.	Interpretation by the researcher based on the relationship of the qualities, feelings and metaphors attributed to the Downtown.
Gender						
Age	Metaphorical: drawing that expresses the individual's mood or feeling via an analogy.					
Household income						
Employment situation						
Time living there						
Type of dwelling						
Education						

Figure 2

Model of the Affective Map used in the research

Source: Author's database (2012)

The final result of the Affective Maps [Figure 3], located in the box “meaning”, points to one of the affective images.

By *Esteem of Place*, Bomfim (2010) refers to the result of perceptions, representations, worldviews and other forms of social categories generated by the feelings and emotions of the subjects in their experience of places.

However, the analysis which reveals or indicates *Esteem of Place* of the individual resulted in information that we cross-referenced with another field study, in this case conducted through a socio-environmental diagnosis of the city's historic center.

In terms of interdisciplinary collaboration with the Affective Maps, the technical analyses that defined the socio-environmental characteristics of each area were just as important as registering the emotions and feelings of the subjects in the places where they lived.

The field research resulted in a diagnosis that divided, methodologically, the downtown into four regions [Figure 4] – according to residential use – with relatively distinct socio-environmental characteristics.

Within the overall urban scale of the Downtown, these areas represent sub-scales with specific urban and social features which are basically differentiated by the diversity of land uses and dynamics of the road system.

Figura 3

Mapa Afetivo de sujeito residente no Entorno 1 (entorno do Pajeú)

Fonte: Banco de dados do autor (2012)



The downtown, represented by a mall, is linked to the image of **Belonging** where there are feelings of affection, friendship, tradition, nature and safety, arousing affection in the subject for the downtown and the neighbors who help him.

INDIVIDUAL	STRUCTURE	SIGNIFICANCE	QUALITY	FEELING	METAPHOR
N – 1ME1C Sexo Masculino Idade 40 anos Renda Familiar + de 5 salários mínimos Situação Laboral Autônomo Tempo de Moradia 07 anos Tipologia da moradia Residência Unifamiliar Grau de Instrução Superior incompleto	Metaphorical The heart symbol surrounding the neighborhood block and vicinity where the person lives.	A block with people who care and live near almost everything they need.	Affection, care, friendship, tradition, nature and safety.	Affection for Downtown and the neighbors who help us.	Mall.

Figure 3

Affective Map of a resident in Area 1 (vicinity of the Pajeú)

Source: Author's database (2012)

After completing the socio-environmental diagnosis, we proceeded to correlate the data and characteristics of the areas with the results obtained in the analysis of the Affective Maps.

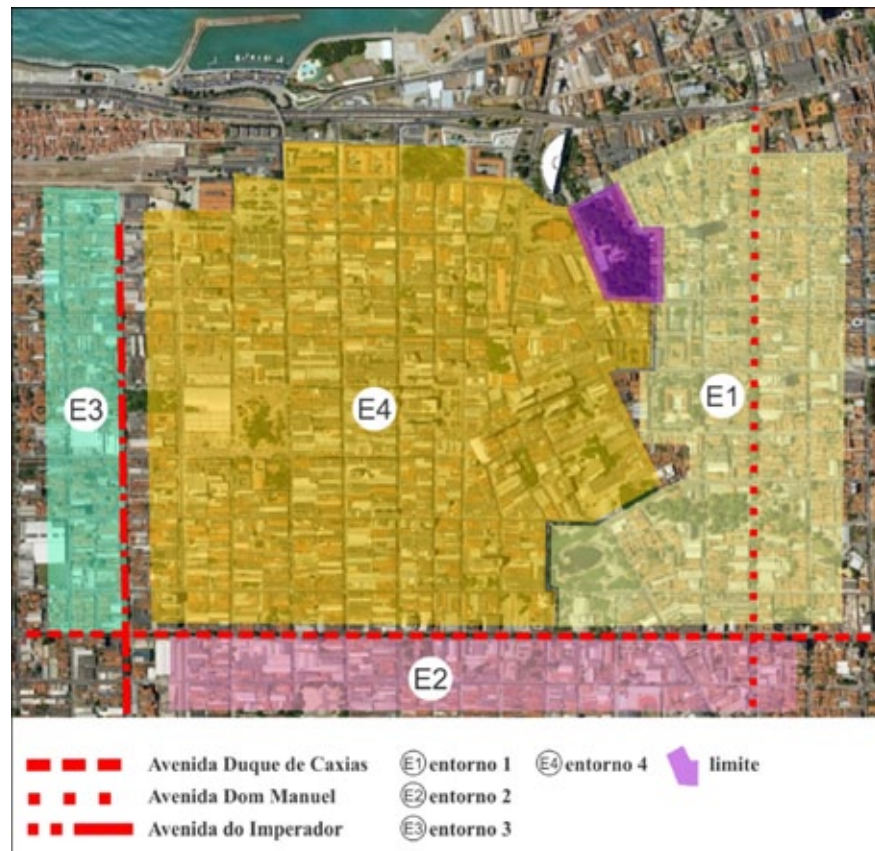
The qualitative analysis of the Pajeú area, like all the other areas of the downtown, revealed a negative *Esteem of Place*. However, it was the only sector in which the six affective categories were registered, confirming the heterogeneous properties of its socio-urban and environmental structure.

Unlike other areas where the image of **Destruction** clearly stands out above all the others, the relative balance among the images of **Belonging** (2), **Contrast**

Figure 4

Areas of the historical center

Source: Author's database (2012)



(4) and **Destruction** (3) are indicative of a different situation in this area. Historically inappropriate uses of the area, such as for wholesale trade, constitutes one of the factors that strongly generates negative images, due to the confusion it has been causing for many years in the area.

However, the statistical analysis that complemented the Affective Maps indicated a significant correlation between the Pajeú area and the images of **Belonging** [Figure 5] and **Pleasantness** which, to a certain extent, confirms the unique advantage – as perceived by residents – of living in an area that provides, in addition to amenities related to consumption, an opportunity to enjoy historical and cultural symbols, as well as parks and squares, which in some measure, explains the significant correlation with the image of **Pleasantness** [Figure 6].

As can be seen in the symbols below [Figure 7], we used some elements designed by Lynch (1997) to depict the urban syntax. In our case, these elements were partly identified and perceived by the subjects in their daily rounds and partly recorded by the author during the process of conducting the socio-environmental diagnosis of the vicinities.

Figure 5

Age range versus level of belonging ratio
 Source: Author's database (2012)

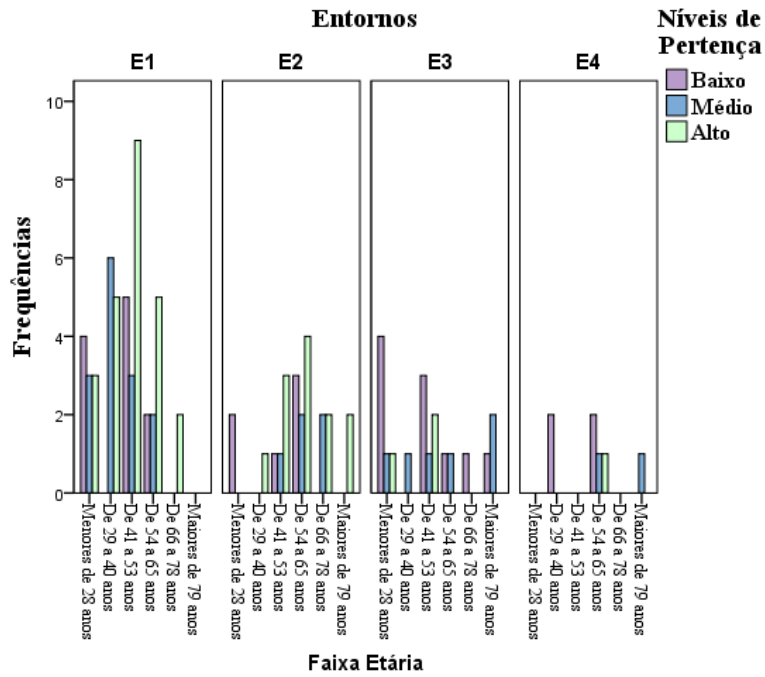
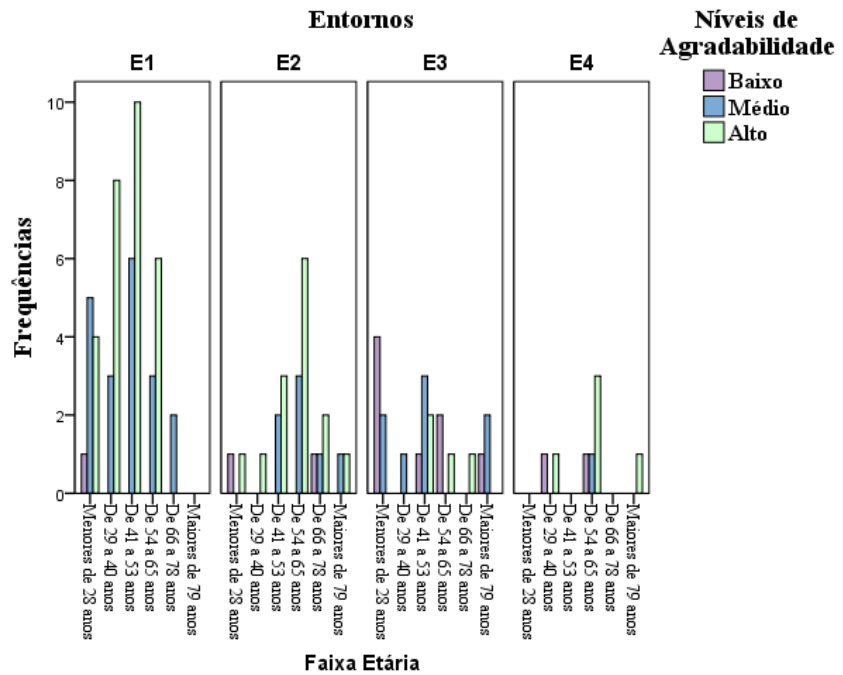


Figure 6

Age range versus pleasantness level ratio
 Source: Author's database (2012)



Final Considerations

Figure 7

Vicinity of the Pajeú
Source: Author's database

The results of the person-environment interaction study, with a focus on *Affectivity*, detected issues related to the feelings and emotions of residents living in the Riacho Pajeú vicinity, which indicate the need for interdisciplinary research that includes Environmental Psychology, especially in the urban planning diagnosis stage.



As the study unfolded, it was noted that a federal law exists that requires public participation in the drafting process of rehabilitation plans. However, with respect to the participatory model, the planning still lacks approaches and methods which include other dimensions of human experience, especially those that are developed in (and with) space. We looked at the spontaneous processes of *Appropriation* of space which may or may not generate an urban identity with respect to the area, as well as the highly important symbolic exchanges which tie individuals to the area, especially those who own property in the downtown and, lastly, the involvement with the area which results in building affective relationships with it. These issues are important for the inhabitants of the city and were identified in our research.

The possibility of feasibly working to build a more just and pluralistic city entails the exercise of citizenship in which the improvement of the participatory approach indicates or suggests that other models or dimensions of social action are needed.

We hope that through this article we have contributed toward further reflections on this possibility.

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