Abstract

This essay proposes a new approach to cognition that presupposes the change of the investigator/observer attitude regarding the studied environment – as an embodied observer – suggesting a way of making it effective in the analysis of performance of the urban environment. Emphasizing phenomenological – including social and cultural – aspects of built environment, this reflection, inspired in the concepts of enactive cognition by Francisco Varela, Evan Thompson & Eleanor Rosch and empathy proposed by Evan Thompson, aims to substantiate and structure the methodology developed for a doctoral research in two different downtown historic areas of Rio de Janeiro and San Diego. The application of instruments and methods developed for the phenomenological evaluation of quality of place - will contribute to urban design, in the sense of aggregating to the technical and objective view a wider understanding on how attributes of design and comprehension of the human experience can transform and qualify built environment.

Key words: enactive cognition, empathy, environmental performance, quality of place.

Introduction

Understanding of contemporary metropolitan phenomenon has been supported by concepts that have become references, especially since criticism and revision attempts of the Modern Movement and its unitary theories and dogma has intensified. Interdisciplinary concepts extracted from phenomenology, urban anthropology, ethnography and philosophy, amongst other related disciplines, become complimentary in the analysis of the city and its architecture.

This article attempts to incorporate a philosophical-phenomenological approach to our architectural view of the contemporary city examining the issues and relationships between the urban tissue, its architectural objects and the actors who make it a diversified, complex, dynamic and lively organism. As architects and urban planners, we give priority to the creation of an adequate built environment, vital and responsive to human needs, not only in physical form but also to the psychosocial aspects inherent to the quality of place.

In this way, the research group ProLUGAR¹ (UFRJ) – inspired by the enactive approach of cognition proposed by Francisco Varela, Evan Thompson & Eleanor Rosch – adopted the designation of experiential cognition to characterize the observations that include man-environment interaction and his living experience, enriching and giving new meaning to the sense of place. Experiential cognition points to a methodology that incorporates consciousness and lived experience to action. In addition, the concept of empathy defined by Evan Thompson refers to the indissoluble and subjective relationship that occurs in the interaction man-environment-other where individuals, through verbal or non-verbal language understand and learn the experiences of others without undergoing the experience themselves.

ProLUGAR is developing a method designated embodied observation believing that only by understanding the essential aspects of the conscious experience of place will we be able to understand it as an urban phenomenon. The unbreakable and reciprocal mind-body-environment-other interaction must be the main instrument for explaining our experience.

¹ Artigo publicado nos Anais da Architecture + Phenomenology International Conference, Haifa, Israel. 2007
gained and lived in the city. This conscious, attentive and open approach by the researcher on the phenomenological place – through embodied observation – is the key and principal tool that must permeate all other instruments and methodology used for the evaluation of its quality and to the analysis on how culture and social interaction contribute to shape and create places.

The main objective of this doctoral study is to apply this methodology to two case studies of revitalized urban centers: the Corridor Cultural Project, the first attempt to revitalize the historic center of Rio de Janeiro, Brazil, and secondly the American experience in the redevelopment of Downtown San Diego, United States. Despite very different realities and experiences, the implementation of both plans integrated joint actions by public administration, the community and the private sector at distinct levels during the process. This article focus on public places of these historic centers, namely: Lavradio Street in Rio de Janeiro, and Gaslamp Quarter in San Diego.

The comparative study and verification of the effectiveness of the original plans using cognitive and phenomenological analysis will validate the methodology of experiential cognition for evaluating quality of place.

The New Approach of Enactive Cognition

Classical phenomenology according to (a) Hegel, treats science as conscious experience and (b) Husserl, is the intuitive experience of phenomena, which appeals to consciousness as an intentional object. In this sense, phenomenology includes subjectivity and culture because it is a form of thinking or consciousness. Merleau-Ponty proposed a return to this experiential world that pre-dates science and knowledge.

The transit between cognitive sciences and human experience is not a novelty. The proposed cognitive approach goes back to the European phenomenological tradition based on Husserl and Merleau-Ponty that separates or distinguishes the objective body – observed and analyzed as a scientific object or a physical structure - from the living body – that is felt through perception and supports perceptive action. Phenomenological reflexion on the origins of cognition starts with the assumption of circularity, inseparability and continuity between the world and subject. In this way, we perceive the environment – or world – that we live in, not as an external uniform container, but as a medium shaped by our senses and bodies in movement. According to Husserl, “all perception is kinesthetically motivated” with the kinesthetic system corresponding to different types of appearances including visual, tactile, audible etc.

The enactive approach questions the prevailing cognitive sciences assumption that “cognition consists in the representation of a world that is independent of our perceptive and cognitive capabilities by a cognitive system that exists independently to the world”. The world is brought into effect through the connection and articulation of events and incidents that are timely and spatially simultaneous, as well as through the possibilities activated in each given situation.

The interconnection of our perceptive and motor capabilities and their relationship with the environment reveals consciousness as a way of being-in-the world; consciousness cannot be understood separately from the body, which lets us engage with and live in the world. “The mind does not internally represent an independent external world, but rather enacts a meaningful world through embodied action.”

In the enactive approach the central theme is that cognitive science and phenomenology can be linked reciprocally because it uses phenomenology to explain cognitive science and vice versa.

According to Evan Thompson, the enactive approach is linked to phenomenological philosophy because both maintain that cognition supports a constitutive relationship to its objects. The cognitive being’s world is a relational enacted domain brought forth by that being’s autonomous agency and mode of coupling with the environment. To belong to the
world – or being-in-the-world – means that “our primary way of relating to things is neither purely sensory or reflexive, nor cognitive, or intellectual, but rather bodily and skilful”.  

To be understood by the existential approach to phenomenology, 

“the idea is that the cognitive being’s world – whatever that being is able to experience, know and practically handle – is conditioned by that being’s form or structure. Such constitution on the part of our subjectivity or being-in-the-world is not subjectively apparent to us in everyday life, but requires systematic analysis – scientific and phenomenological – to disclose”.

**Experiencial Cognition and Embodied Observation**

Inspired by the enactive approach to cognition, the Research Group ProLUGAR began to use the heading *Experiential Cognition* on observations that embody the man-environment interactions in his living experience (habitation, work, consumption, entertainment etc). In addition to characterizing the application of the enactive approach and empathy in the performance evaluation of the built environment, the Embodied Observation – a term adopted for the application of Experiential Cognition in fieldwork – enriches and gives new meanings to the understanding of place.

Experiential Cognition becomes a fundamental pillar and an alternative route to evaluate the quality of urban environment, because it allows the observer to incorporate his own personal experience to the reports and observations. In this way, we abandon the idea that the evaluation validity should necessarily assume a world that is shaped by pre-determined norms and performance patterns overriding any subjective or emotionally created inferences. Thus the explanation of a certain experience or lived observation is based on the observers *enaction*, which, when added to environmental experience, allows one to integrate spontaneous and reflexive dimensions and emotions felt in their interaction with the environment. Conscious of these subjective dimensions, the embodied observers are capable of producing better, more interesting and richer evaluations.

Experiential Cognition attempts to transpose enactive cognition to the study of the built environment in use and to “embody” the enaction of humans in their lived experience in the environment. ProLUGAR’s studies related to the quality of urban life seek to consider the human experience as inseparable from the environment, be it in the city, the suburb, the street, a building or in a simple bedroom.

The phenomenological observer’s eye becomes the main observation ‘tool’ and his experience should be lived and analyzed with respect to many aspects, always incorporating emotional reactions present in all human activities. The inseparable and reciprocal interaction of mind-body-environment becomes the main reflexive attitude. Attentive and conscious observation must be used in absolute harmony with the other sensorimotor capacities and with the entire cultural and historical background of the observers and of the subjects involved in the observation. This view becomes the central question of the *embodied observation* of the phenomenological place, and of the explanation of the conscious and lived experience in the built environment.

The central focus of this work is to understand daily human experience and its interaction with the environment. If, on one hand, the investigator or architect’s view is relevant because of distinct acquired skills to distinguish aspects that generally other users do not notice, on the other hand, it must be clear that this view is complimentary to the lived experience. This view must be open and alert to perceived stimuli and to the emotions that emerge from the observer’s enaction and interaction. According to Merleau-Ponty, all and every subject has a body, mind and brain forming a unique, inseparable and autonomous whole; in addition, the observer’s enaction is also inseparable from the inanimate and animate objects as well as the natural and built environment that surrounds him. He interacts empathetically with the other surrounding subjects and this interaction becomes a single system of autonomous elements intrinsically linked to each other. The experience in this interaction will be
simultaneously perceptive and full of the body's and mind's reactions in unity with the world.

In the phenomenological research, it is fundamental to understand the environmental experience of others and specific procedures are necessary to understand place in the broadest possible way. It is important to seek out, or unveil, the opinions and emotions of those people who use and interact with the place – which is not always easy to achieve. People have images, perceptions and sentiments about the places they frequent and use but often these are un-embodied and unconscious actions.

In this sense, empathy favors the comprehension of the real observers’ experience meaning, and allows that their points of views and experiences get closer mutually, helping in the recognition of their worlds. The person-to-person interviews can be powerful, moving, and even threatening experiences. The interviewer’s sensibility and feeling will be important as a standing point or moving forward in the conversation.

The task of urban environment observers is to understand accurately others experiences, without having gone through that experience themselves. Through empathy it is possible to understand and incorporate the user’s environmental readings to their own environmental observations. Experiential cognition and empathy value the interaction interviewer-interviewee and favor the apprehension of psychological shades, colors and subjectivities that usually escape in the traditional interviews. Based on phenomenology, the researchers must have in mind that the lived experience by the interviewee/user – captured by cognitive empathy – does not indicate in advance the result of the investigation; it is complementary to the embodied observations.

The concepts introduced in this study are permeated at the same time by a generalized and attentive look over the heterogeneous and fragmented contemporary city and its diverse actors. They may contribute to a better understanding of its public places, despite recognizing the numerous limitations and questions that may arise for each step or movement taken during the observation process.

The concept of public space considers its relation to a new global era and to the increasing web society created by high-speed technology in communications. The transformations of public life and public realm in the twentieth century generated much criticism and reaction to the produced and privatized public spaces, represented by shopping malls and, especially, by Disneyland. Regarding these trends and pursuing a more realistic and precise definition of this paradoxical concept, the study sought for the cultural differences of public spaces in the diverse and dichotomist settings of the two case studies. In this sense, the views of both the researcher and of the users and dwellers of the public places are our main phenomenological research tool.

Other aspects related to life, culture, ideas, thoughts and human values should also be incorporated aiming the amplification and enrichening of the phenomenological approach and the applicability of these concepts in the understanding the significance of some urban phenomena.

**Contextualization of the Case Studies**

The application of conceptual schemes of experiential cognition and embodied observation is being tested in two case studies of historic public places of Rio de Janeiro and San Diego. It focused on planning and design redevelopment processes carried out by government together with private sector and community participation. The idea was to evaluate if the goals of the processes were successful by understanding how the population responded to and felt about it.

Despite the similar physical characteristics between Rio de Janeiro and San Diego – fair and equitable climate; topography marked by mountains, canyons and valleys; presence of water represented by the bay that limits both city centers – it is important to point out the contextual, cultural, social and economic differences between the cities. Rio is the second largest municipality in Brazil with nearly six million people located in the context of a third
world country with enormous social and economic problems. In contrast San Diego, with a population of 1.25 million is located on the west coast of the USA; the area with highest cost of living in the richest country in the world. The center of Rio covers an area of 573.21 Ha with a population of 39135 (2000 census) in a very dense urban setting whereas downtown San Diego covers an area of 586.81 Ha with a population of 26150 scattered in eight downtown districts.

The revitalization processes in both centers started at early 1980s when opposition to modernist ideas arised. Critics sought a return to the traditional city and its basic elements – the street, the square, the block and above all the recovery of a sense of community and identity of place, lost with the modern movement.

In Rio, a city almost 500 years old, the 'Cultural Corridor Project' was planned with the aim of revitalizing historic areas and sets of buildings remanescents from the colonial, republican and eclectic periods – many decayed and/or abandoned, and in danger of being demolished and substituted by modern functional buildings or empty areas.

Conceived by the City Council, amid the political opening process, with support from the private sector and the local communities involved the first move of the project was to alter the downtown urban guidelines and regulations protecting the old urban pattern in a hitherto untouched historic setting. A multidisciplinary commission was established – including intellectuals and people involved in the city’s cultural life – and a technical office set up, responsible for information, control and analysis of all the projects in the area.

Important incentives for recovering buildings and the urban environment were: a) tax exemptions for the owners remodeled their exteriors; b) programming and management of events and cultural activities; c) editing and releasing information about the project.

Museums, cultural centers and theatres were remodeled or built in different parts of the historic center. A net of walkable streets was created linking these centers that attracted new visitors for leisure and entertainment. Bars, restaurants and nightclubs came along with the cultural facilities, occupying the remodeled buildings. The expansion of public places uses, earlier limited to office working hours, transformed the city life.

Remodeling and redesign of streets, sidewalks and public spaces followed the renovation of buildings in a process that regained to the public boulevards, squares and pedestrian streets in areas occupied by heavy traffic crossings, parking lots and bus terminals. The consequences of this integrated process went well beyond the local level, and have spread and stimulated revitalization of neighboring historic areas – as it happened in Lavradio Street – or downtown areas in other Brazilian cities. Cultural Corridor influenced directly its revitalization process, although not integrating the project area.

Lavradio Street – a noble residential area in the 19th Century with many theaters and cultural
life — was until recently a decayed and unvalued area where antique dealers owned and occupied most of the run down historic buildings. They founded a commercial association and decided to remodel their old buildings using the Cultural Corridor Project principles and design guidelines. They also promoted music and cultural activities in the antique shops and streets and since 1997 a street antiques fair occupies the sidewalks every first Saturday of the month. When the municipality, pressured by the owners and dealers, finally started remodeling and re-urbanizing streets and sidewalks — including public illumination and street furniture —, the idea was already a success and attracted a captive public and new costumers.

San Diego is a young city compared to Rio de Janeiro — its urban development began in the second half of the XIX century. It had a relative urban consolidation in 1950, but afterwards has sprawled into fragmented and distant neighborhoods caused by the rapid residential and commercial growth of the suburbs. This led to decay and abandon of the central area — leaving only government offices, low-income workers and Navy buildings and warehouses to survive in decayed buildings surrounded by empty demolished blocks and parking lots.

The only area that survived with certain vitality was the Gaslamp — a red light district with brothels, massage parlors, bars, cheap hotels and strip clubs frequented by sailors docking in the city. The owners of these old but still preserved buildings together with the local government — both conscious of their historic value — started a process to protect and preserve the historic city blocks that resisted modernistic demolition and vehicle imperialism.

In the 1970s the government started the first planning initiative to revitalize the downtown area. The elected mayor’s campaign program emphasized its redefinition as an important regional center encouraging commercial activity, creating jobs and repopulating the central area by residential use and linkages with nearby suburbs with a transit system.

The belief that the anchor for the revitalization process was the construction of a shopping mall demanded the ‘cleaning’ of the adjacent Gaslamp District, along with the construction of a new convention center, residential condominiums and implementing the transit system. Horton Plaza, a post-modern shopping center took thirteen years to complete and is considered nowadays one of the main tourist attractions of Downtown.

The creation of a redevelopment agency (CCDC) to attract residential and commercial activities and the hiring of Kevin Lynch and Donald Appleyard to elaborate a regional study also had a marked effect on San Diego’s downtown planning and revitalization. In spite of all the effort, re-occupation was slow over the following decades. At the turn of the millennium, a speculative real estate boom led to the construction of many post-modern residential
buildings and office towers. The number of tourists also increased significantly due to the expansion of the convention center, the new baseball stadium and the cruise industry growth. Since 2002, residential use has accelerated with new and diversified groups of residents.

The Gaslamp Quarter has evolved from a 'forbidden' district to a tourist and entertainment area with bars, restaurants, clubs, coffee shops and ground level exclusive shops in historic and new buildings. Gaslamp streets – other main tourist attraction of San Diego – are now crowded with local users, baseball fans, crowds of tourists and conventioneers who frequent the many sidewalk cafes and bars in the area.

Embodied Observation as a Phenomenological Tool

Following this brief contextualization of the two case studies, we return our focus on urban public space and the aspects related to its meaning, identity, significance and subjective responses by its users.

Experiential cognition transcends the traditional approach of scientific rationality, neutrality, and observation at a distance. In this way, it allows the observer to assume, interact and enact consciously in a more embodied way with his/her feelings and emotions, increasing its skills of observing-in-action the intersubjective experience of observation. Both observer and user assume active and participative roles on the qualitative research building.

With this non-objective direction in mind, we present the preliminary proceedings used in the research in progress. They incorporate the cognitive experience in the observation of the two places, described previously. Some of the instruments and methods traditionally used in quality of place evaluation – physical surveys, semi-structured interviews, mental mappings and direct observation – are in this study re-signified by the embodied observation attitude, they gain a new phenomenological meaning related to and focused on the experiential-cognitive approach.

The embodied observation, which permeates the entire process of investigation, enables the identification of aspects not only related to context and to physical characteristics of the environment, but also to the experience itself in the place: on how each place influences the observer’s actions and how his attention gives meaning and sense to the understanding of that place. Differently of the presupposition of a neutral and distant observer analyzing an independent and separated environment, as an actor in the process and a screenwriter in explaining the experience observed, he becomes conscious of the reciprocal man-environment influences, stimuli and sensations for the comprehension of its meaning.
The preparation of the embodied observer demands that his/her body and mind must be free of the daily concerns and other anxieties. The observer should find a quiet place before starting the observation process. To fulfill an attentive observation, when mind and body are sufficiently emptied and relaxed the attention must be aware of the events while they happen and, as much as possible be involved by the environment’s atmosphere before initiating the embodied observations, walks to a drift, interviews or any other instrument or method.

The walks to a drift technique enables the investigator to glance sensations and emotions produced in the experience of observing. When carrying out an aimless walk, the observer deprived of prior conceptions or prior representations of the place must be able to recognize the environment and deconstruct traditional representations of cultural values increasing his sensibility and attention on the events that occur around him.

In the first contacts carried out in the two areas, these procedures were determinant on defining the cutouts of Lavradio Street and Gaslamp Quarter. We became aware primarily of the physical characteristics and formal architectonic and urban structures, but after submerging in the experience, we were able also to pay attention to more subtle impressions and subjective events that would pass by without notice.

The experience of Lavradio Street was not only interesting but also revealing. The subjective data that emerged from the observer’s perception, emotions and sensations interacting with the urban environment and its users were crucial for the comprehension of its outcomes.

The walks to a drift and the embodied observations carried out for two months – in different moments of the day and the week – produced reports that brought to light aspects related to its morphology and formal structure. However, most of all, they made it clear the ambiguities and paradoxes of a place transformed by recent urban interventions and the appropriation and uses by the population. To clarify and better explain these findings parts of the embodied observation reports follow:

“There is a paradoxical aspect in this street, because, if on one side of the street the old set of buildings remains, on the other, it holds a strong presence of the modern heritage. The street pattern remains untouched but some of the old houses in the left side were modified or demolished, leaving only fragments of history. The place was rehabilitated to daily and cultural uses, at least in part, because the duality new-old predominates creating a sensation of ambiguity as of being in a gate between past and future, old and new. Every single aspect between Lavradio Street and the great orthogonal Chile Avenue become dichotomic.”

“It feels more relaxing, more like home, in comparison with the other parts of old downtown. Antique shop dealers, attendants, and costumers seem less concerned with the time that passes by.”

“The crowds occupy the street, standing or sitting on the tables set by the bars and cafes on the sidewalks. The live Brazilian music singer and the dancers attracted everyone who was passing by. Many started dancing along while others just watched with a smile in their faces as if imersed in a momentary reverie.”
The integrated actions of private sector, government and community had a positive outcome in the case of Lavradio Street.

In San Diego, we applied the same procedures and they proved helpful in deepening the comprehension of the Gaslamp phenomenon through different points of views: the embodied observer’s impressions and records of the walks to a drift and the users’ experience apprehended through empathy.

“Walking around Gaslamp Quarter we notice old and well-preserved historic buildings transformed into nightclubs, restaurants and cafes, with sitting areas on the sidewalks. However it is still morning and they are empty as well as the streets, with only few workers and beggars around, perhaps because it is early or perhaps there is not much to do here besides eating, dining or drinking.”

“It is interesting how the design of a new building tried to incorporate the guidelines of the older ones. Its proportions, its volume, its multi-faceted facades and its openings and elements were mostly alike the old buildings on the other side of the street, but even though had a very contemporary look. It is a shopping mall in the middle of downtown.”

“It was morning in downtown. I had never seen the streets of Gaslamp so crowded with baseball fans before lunchtime filling the cafes and restaurants’ patios. Hundreds of people and families came from other neighborhoods anxious for the last game of the season. However, they did not seem to pay much attention to the surroundings, the buildings or the place. They were enjoying the place, walking around while waiting for the game to start. I could sense some excitement on many of them for being there for the first time.”

The informal and semi-structured interviews with open questions permitted the verbal out-coming of lived experiences of the respondents. To date, we carried out interviews only in San Diego and the results point to a rich source of information about the process of expansion of the central zone. Many of the questions that arose while only observing the area could be answered by the empathically interaction with the dwellers and users of Gaslamp.

Partial results indicate that the new, exciting life style of Downtown San Diego together with availability and proximity of commerce, services and entertainment, attracted the newcomers, especially in Gaslamp Quarter. Seventy-five percent of the interviewees considered it as the most important place of the central area. Walkability in the renewed streets and city blocks was considered as a positive feature, making it convenient to go about daily business without leaving downtown. Streets were found the most important public spaces, followed by the wish for more community parks for use by children. Young mothers wanting to bring up their children in Downtown believe that there will be population growth in the area in the medium term.
Concluding reflexions

The study of the two public places in Rio and San Diego from the point of view of experiential cognition - inspired on the enactive approach and on phenomenology - is providing useful and should provide a better understanding of human experience structurally coupled to the urban place.

The first impressions of the walks to a drift carried out by the embodied observer delineated a picture of the places later verbalized and validated by the users in the interviews. The perceptive and cognitive experiences and the phenomenological attitude of embodied observation substantiate an important contribution to the studies of quality of place, not restricted to the formal, functional and objective aspects, but to the ones demanding a deeper knowledge on the daily experience lived in the place.

The case of Lavradio Street, its forms of conception, evolution and outcome, in an integrated process that linked comercial, urbanistic, and cultural issues, and most of all the community interaction, have transformed and revitalized an old neighborhood and its surroundings. Culture, society and profit worked together in balance – maintaining the old uses and dwellers while attracting a new public – for the vitality of the place. It resumes the spirit of the Cultural Corridor Project in placemaking.

Gaslamp Quarter in San Diego was distinctly a consequence of market and profit. The ‘cleaning’ of the area and the architectonic and urban interventions resulted in a new place where old structures lost their significance and became just containers for new commercial uses. Still, in the the user’s point of view, it is an important symbol for Downtown San Diego and its relative vitality is due to this transformation, otherwise they would not be attracted by the forbidden and unsafe place it used to be. Moreover, the population’s demands include more plazas or public places, cultural venues, and services for residents, which lack in the area. Nevertheless, they are proud of it and sustain a positive opinion in general. The sense of identity grows as the process continues.

Profit and the market were the promoters in San Diego, and urban vitality seems to be a consequence. In Rio, culture played an important role in the sense of the revitalization process, while profit turned out to be a consequence.

Analogically to the natural drift of the living organism evolution the outcomes of the process that occurred in the living cities resulted of objective actions and subjective patterns working together in a new and meaningful way. Human experience and a not pre-established cultural environment provided us with new pathways that opened while we walked and the research developed. Experiential cognition consisted of enacting or producing a world through a viable history of structural coupling between the embodied observers, the places and the users.

While the research evolves, it is possible to recognize that our condition as observers makes us more and more embodied to the observation, to the interaction, to the analysis and finally to the evaluation of the place, aggregating the cultural and social values of human experience – which may not be underestimated – to the academic discourse.

Biography

Denise de Alcantara (1962) Brazilian, Architect Ms, doctorate candidate of the Graduate Program in Architecture of the Federal University of Rio de Janeiro; researcher of the research group Design and Quality of Place (ProLUGAR); 2006 Visiting Scholar at San Diego State University conducting research on Downtown Revitalization; currently Lecturer at Federal University of Rio de Janeiro.

Paulo Afonso Rheingantz (1951) Brazilian, Architect, PhD, professor of architectural design in the School of Architecture and Urbanism of the Federal University of Rio de Janeiro; coordinator of the research group Design and Quality of Place (ProLUGAR) developing research and consulting related to the applications of cognition in the men-built environment interactions. Co-editor of the book Projeto
do Lugar and co-coordinator of “Projetar 2005 – II International Seminar on Teaching and Research of Architectural Design”

Endnotes

1 Quality of Place and Landscape - Research group certified by CNPq and linked to the Graduate Program in Architecture of the School of Architecture at Federal University of Rio de Janeiro <www.fau.ufrj.br/prolugar>


5 Varela et al. A Mente Incorporada, p.17


8 Ibid, p. 410

9 Ibid, p. 408


19 See Jacobs, J. Morte e Vida de Grandes Cidades. (São Paulo: Martins Fontes, 2000); Venturi, R. Complexidade e Contradição em Arquitetura. (São Paulo: Martins Fontes, 1995); Lynch, K. La Buena forma de la ciudad (Barcelona: Gustavo Gill, 1985)

20 The Ancient Rio Street Fair was first organized in 1997, when the first buildings were remodeled.

21 Centre City Development Corporation – created in 1975.

22 APPLEYARD, Donald; LYNCH, Kevin. Temporary Paradise? – a Look at the Special Landscape of The San Diego Region (Cambridge: Massachusetts Institute of Technology, 1974)

23 In 2006, more than 20 new developments are in design phase or being built in all Downtown districts.

24 The estimated growth in relation to the 2000 census is of 20%.