Objective References in Urban Contexts and Psychological Subjectivation Processes: A Semiotic Interplay

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ABSTRACT: How do the processes of subjectivation and self-modulation take place in view of the constitutive elements of the objective living space? From an interactionist, dialogical and integrative perspective, this study aims to identify indicators of the objectification-subjectification relationship in individuals through their relationship with the city where they live. The concepts of mental map, perceived environment, existential territory, and synergistic relationality help shed light on the issue, which are dynamized by the principle of semiotics. With this theoretical foundation, and by using cognitive-affective mapping associated with narratives as a research method, it is assumed that indicators of human subjectivities and self-regulation processes can be accessed and analysed. By means of a case study (taken from a larger body of research), in which sketches and narratives produced by an individual are studied in their graphic and symbolic aspects, we intend to understand processes such as meaning production, affective-emotional dimension as a selector and references organizer, sense of belonging, indicators of self-regulation, ways of expressing the significant sensations experienced in the environment, socio-cultural negotiations. In fact, people develop a close connection of places and spaces with their own identity, behaving in consonance with this subjective dynamic, which has strong implications for many interpersonal areas.

KEYWORDS: Affective-emotional references, Living place, Perceived environment, Psychological subjectivities, Semiotics.

I. INTRODUCTION

When someone sees for the first time the coloring book *The Magical City* by award-winning illustrator Lizzie Mary Cullen[1], he or she can think something like this: "Awesome…! I can build the city just as I like, using my favorite colors and creating the urban atmosphere in my own way". The announced purpose of such book is "exploring the hidden magic of cities".

Fig. 1: "Magical City" – A coloring book by Lizzie Mary Cullen. An illustration from this book.

Certainly, cities have a king of magic. This "magic" is supported by an interesting interplay between urban environments and people who live in there: People build cities; meanwhile, cities build people. This interplay is colored by affective-emotional experiences and semiotic processes. Then, *The Magical City* metaphor is useful to illustrate the thesis to be explored throughout this paper: affective-emotional experiences in urban contexts engender definitions and redefinitions in psychological meanings, which in turn influence people's behavior and self-regulation processes.

"Magical City – A coloring book by Lizzie Mary Cullen". *YouTube*. Web. 21 Apr. 2016. Available at www.youtube.com/watch?v=Lu3wV3iNDOk .

An initial point towards the fully comprehension of this complex set of phenomena is understand that cities have characteristics that do not enclose in their buildings, because what people experience within the cities makes them vivid and dynamic. Thus, there is a dialogical relation between a city and each of its inhabitants, as explored by Italo Calvino in his formidable book *Invisible Cities*[2]. According to him, "Cities, like dreams, are made of desires and fears, even if the thread of their discourse is secret, their rules are absurd, their perspectives deceitful, and everything conceals something else." (Calvino 1974). The purpose of this paper is to explore some innovative connections, in a transdisciplinary approach, in which subjectivities and self-regulation processes are analyzed in relation to elements experienced in urban contexts.

II. WHAT IS UNDER CONSIDERATION HERE?

"Desires and fears" built cities similarly bricks and mortar layers. Therefore, although geographical elements are essential to give a city its urban constitution – like bridges, squares, roads, boulevards, houses, edifices, malls, and car traffic – such structural elements no longer configure a city in a broader sense. Beyond urban labyrinths people walk and drive, "these forms carry meanings and senses" as conceived by Gomes (2008); or, in other words, contain fragments of individual and collective memory, as "an intricate discourse of fluid meanings, constantly changing", in which a city has to redefine itself continually. Succinctly speaking, any city includes also people's subjective aspects in its configuration.

In this sense, people's perceptions of how a city is configured, their perceptions of mobility at the space, and their arrangements of meaningful references in the urban environment shape *mental maps*, which have an important role to place and replace people, and giving them orientation about possible movements in a specific spatial conformation. Though, these mental maps are constructed from a subjective perspective. From an experienced environment is possible to identify certain elements, which are particularly relevant to someone for any contextual reason; this 'portion of space' operationally useful for a person is plenty of meaningful references, being labelled as *perceived environment*. The perceived environment is very important to the construction of their spatial knowledge. When people walk, drive, take a bus or the subway for going to work, they need to have a "travel plan" (Golledge, Stimson 1997), including a projective movement from an origin to a destination. This is required even when people walk through the neighborhood, ride a bicycle, or stroll in a park for entertainment – presuming the existence of a mental map. According to Golledge and Stimson, the activation of this cognitive-affective map can elaborate a "movement imagery" and select a mode of travel. Consequently, the travelled paths by people in urban contexts gradually delineate such mental maps; and, inversely, these mental maps enable people experiencing again and again such environments, defining and redefining their personal significances.

And precisely because their personal meanings come into play, i.e. from the countless and multiple stimuli around them, people "select" some that attract the most attention (to the detriment of others), which gain significance because they affect their needs and interests. This creates biases and even "distortions", which are often mistaken for perception problems. Arnheim (1989, 2005) discusses this supposed problem of perception, theorizing about it from the point of view of the Gestalt psychology applied to the field of Arts. It is well known that the innovative way in which an object is sculpted or represented in a painting, or a scene is portrayed pictorially or in literature, which so often departs from its "real" appearance, has already been the target of sharp criticism so many times over the centuries. But even so, this human ability to reinterpret the world has shaped the evolution of artistic styles in all areas. According to Arnheim, this is because there is an "extrinsic space", which controls the relationships between object systems and provides reference standards for their perceptual characteristics. But there is also an "intrinsic space", which arises from each individual's experience with these external references, an experience guided by their subjectivity, in which aspects of personal sensitivity determine the "tone" of perception, as well as differences in scales and perspectives.

One of the curious and fascinating things about this set of processes is that, on the one hand, the human subjectivity largely determines our mode of perception; on the other, the elements perceived from the world feed our subjectivity, in continuous feedback. This is an interplay between objective references and psychological subjectivation, which establishes each *perceived environment* mentioned above.That significant experiences with the human perceived environment generate particular feelings of *existential territory*. For the humanistic geographer Ferreira (2000), the concept of *place* has now emerged encompassing an objective and a subjective

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[2] *Invisible Cities* is the English version translated by Willian Weaver in 1974 from the original Italian Calvino's book *Le Città Invisibili*.

Dimension. Supported by a phenomenological perspective, the emergent new conception of *place in relation to the subjectivation processes of who lives in that place* is an expression of a holistic and inter-relational framework. Thus, considering that associations of objective elements in a city (specific reference points) with subjective significant meanings connected affective-emotionally have a relevant psychological value to people, it is necessary to analyze how different forms of subjective territories' appropriation and related feelings of "being home", of security, are defined.

Indeed, collective feelings of existential territory are the base of community affiliation and social organization. Then, places can be interpreted as integrated and generative fields, capable of engendering attachment's feelings and, at the same time, being dynamically affected by people's movements. Seamon (2015) denominates it as *synergistic relationality*, because "the parts of which are only parts as they both sustain and are sustained by the constitution and dynamism of the particular place as a whole" (p. 19). Understand as fully as possible the feelings of pleasantness and belonging, related to processes of identification, attachment, place occupation as "own place" – as well as the opposite, when feelings of displacement and strangeness lead to conflicts and insecurity – is required for a broader view of life in urban contexts. Unfortunately, some postmodern tendencies and many actions in contemporary and globalized world disregard or even extinguish the importance of places. As explained by Ferreira (2000), "globalization and its consequent dissolution of boundaries tend to reduce the significance of places, and homogenize landscapes" (p. 69). Then, it is not difficult to notice the existing tension between a dialogical approach, in which both people and environment are valuable and interconnected, and, on the other hand, a position in which subjectivity is more and more reduced, aiming standardized sceneries.

Assuming that the supposition of mutual relationality is not only more accurate to describe the world, but also it brings a much more exciting and dynamic reality to live in, it is necessary to concern that personal appropriation of objective references in a city encompasses *semiotic* processes. This is probably another curious aspect of the relationship between aspects of the external environment and their transmutation into internal references. According to Santaella (2007), semiotic processes are necessary to translate an object of perception into a judgment of perception, or rather to interpose an interpretative layer between consciousness and what is perceived. The universe of cartoons offers substantial variety of allegories to illustrate some aspects of semiotic transformation. Perhaps that sounds a little crazy, but preserving due proportions, mental processes have much in common with the semiotic transformation experienced by Jake ("the Dog") and Finn ("the Human"), protagonists in the animated televisive series "Adventure Time"[3].

Fig. 2: Finn and Jake, protagonists in the animated televisive series "Adventure Time"[4].

Certainly, Princess Bubblegum (the scientist in Candy Kingdom, also who wants to rule everything over there), Marceline (the Vampire Queen) and the Ice King represent, in a very special way, some features of our relations with the world – and, why not say – with ourselves. What about Prismo (a two-dimensional wish-granting entity) and the Cosmic Owl, then?! Prismo, while leading Finn and Jake to transmute dimensions, acts like our minds, in which the inputs captured from the environment by our five basic senses are transformed into thoughts, emotions, feelings, projections to the future, reminiscences from past, imagination and creativity. A very fertile

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[3] The American animated television series *Adventure Time* was created by Pendleton Ward, directed by Larry Leichliter, Patrick McHale & Cole Snachez (creative directors), and Nick Jennings (art director). The Season 1 was on air on April 2010.
[4] Image retrieved from https://thedirect.com/article/adventure-time-2023-spin-off-finn-jake-return .

Psychic world is nurtured by the semiotic processes, an interplay between objective ("external") and subjective ("internal") references. Probably we experience some part of "adventure time" every single day, even if not at conscious level – or being less aware of this phenomenon than the excessively rationalistic traditional science would like to admit.This is because, just as in cartoons and artistic productions, everyday human life is made up of various perceptions of the world, which are continually transformed semiotically to make up each subjectivity - and in this way, one of the reasons why each of the (currently) eight billion people in the world has a particular subjectivity becomes clear, no other is exactly the same, because it is shaped by infinite combinations of perceptions with their respective semiotic transmutations, which are accompanied by imagery and linguistic *narratives* that support them and are directly related to each individual's sense of "self". Or to put it another way, judgments of perception are organized in personal narratives, plenty of symbolic resources, which are closely related with people's *identity*.

Therefore, semiotic mediating devices – signs of various forms that operate in dynamic configurations – represent and catalyze the processes of human acting, feeling, and thinking, setting up conditions for the future, which Valsiner (2016) designates *forward-oriented semiosis*. Hence, objective references become subjective references with the help of semiotic processes, which integrate people's identity creating personal narratives: it is precisely what makes the people's experience in a specific place so personal and so meaningful. Presumably, people create narratives about themselves in their signifying processes of subjectivation with the support of elements experienced in urban contexts as well. Diverse research studies explore narratives and further representative possibilities in order to understand identity processes with help of particular contextualized practices in specific places and groups. Bradbury and Miller (2010), for instance, work developmentally with South African youth. One hundred isiZulu-speaking adolescents take part annually of a multifaceted program, involving a community in the city of Durban. Participants are invited to reflect about their places, their identities, and the range of possible paths their lives could follow, through a range of different activities. Multiple modes of the arts (music and dance workshops, for example) are vehicles for exploring their subjectivities. Brod and Mazzarino (2015), in their turn, defend that people become aware of the urban environment through "social practices that form what will be called *identitary places*." (p. 65). The referred authors also discuss how portions of public space are defined by their significance and cultural position, being formed from singular and subjective coding-decoding processes, which are understood from social relations, fixed and non-fixed aspects, flows, and speeches.

Besides narratives, subjective references can be also captured by means *affective maps*. 'Affective map' is a research technique in which people draw sketches including personal relevant references. Some interdisciplinary research contexts have developed a double method to gather evidences about relations between objective and subjective references: *affective maps* accompanied by *narratives*. This innovative resource demonstrates, according to Vetorassi (2014), "how memories reveal themselves and transport to a piece of paper representations in form of drawings and speeches" (p. 155), comprising an illustrated verbal story. Their application is an opportunity to access a very close connection between objective elements of the urban context and personal perceptions about this dynamic, including individual interpretations of symbolic and cultural resources, besides identity feelings, related to the self-image and connections with others.

III. A CASE STUDY
As announced in the introductory part of this paper, the aim is to bring to light some psychological processes of subjectivation and, in this case, using external elements from urban environments as a context. By using cognitive-affective mapping associated to narratives, indicators of human subjectivation and self-regulation processes can be accessed and analyzed. In reference to this method, a qualitative study was conducted by Loos-Sant'Ana[5] aiming at addressing relevant psychological and closely associated interrelational elements, such as: people's perceptions concerning places and spaces in urban contexts, building their own perceived environments; construction of meanings; semiotic transformation; narratives and discursive positions; as well as some sociocultural negotiations. The researcher asked the participants to sketch two different representations of

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[5] The aforementioned data collection was part of the post-doc studies of this paper's first author, carried out at Psychology Institute, University of Brasília (UnB), Brazil. Empirical data were collected from 24 research subjects, inhabitants from two Brazilian cities: Curitiba (Southern Brazil) and Brasília (Administrative Capital, in the central region of the country). The two cities are about 1300 km apart. Many different attributes characterize both cities, including people habits, city configuration, weather, etc. The research shortly mentioned here was discussed in a study group at university; moreover, papers about this research are still being written. All ethical precautions were duly taken into account during the study.

Paths taken daily or frequently at the city, to work or for entertainment. Narratives were constructed afterwards, based on the sketches, in which participants explained verbally how and why the chosen paths are relevant, and Pointing out the more significant places. By means of a dialogical interaction with the researcher they shared their impressions and stories about their productions.Aspects concerning to the dynamic relationship that people create with the place where they live emerge during the production of these sketches and in the related narratives. Relevant elements in this thematic are: appropriation of the territory and of available symbolic resources, participants' usual movement within the city, feelings of belonging or emotional distance, affective markers, perceptions about the urban context dynamics, and how participants represent their connection to the environment, including the dispositional arrangement of references on the sketches. Such expressions are plenty of semiotics, even by the way participants choose to represent the information that is relevant to them in the sketches. As mentioned earlier, this is precisely what makes the experience in a specific space so personal and so meaningful. For this reason, a study case is specially appropriated to share this type of results.From the data collection, one of the cases could be worthy of presentation here: the Livia's case[6]. Of course, considering the goals and constraints of this paper, the scope of demonstration here is limited; therefore, the case is only briefly presented.

The Case: Livia is a 35 year-old woman who was born and raised in downtown Curitiba (Southern Brazil). She has been living for 20 years now in a small town in the Curitiba metropolitan area, where she works as a hairdresser in her own beauty salon. Her hairdressing salon is run in the lower floor of her residence. She graduated from high school, and attended several specialized beauty courses (hairdressing, skin care, makeup) afterwards. She is married and has an 18-year-old daughter. She built three sketches, the first two are reproduced below. The first sketch represents her place of residence – including her hairdressing salon (the bigger and more detailed construction) and surroundings, in which her mother's house, the bus terminal and the supermarket appear in pink. The second sketch depicts her usual way to go to significant places in the city, especially a self-service restaurant (yellow) and a hairdressing salon of a professional colleague (pink). Other references were placed, but not highlighted.

Fig. 3: First Livia's sketch: Her place of residence and surroundings.
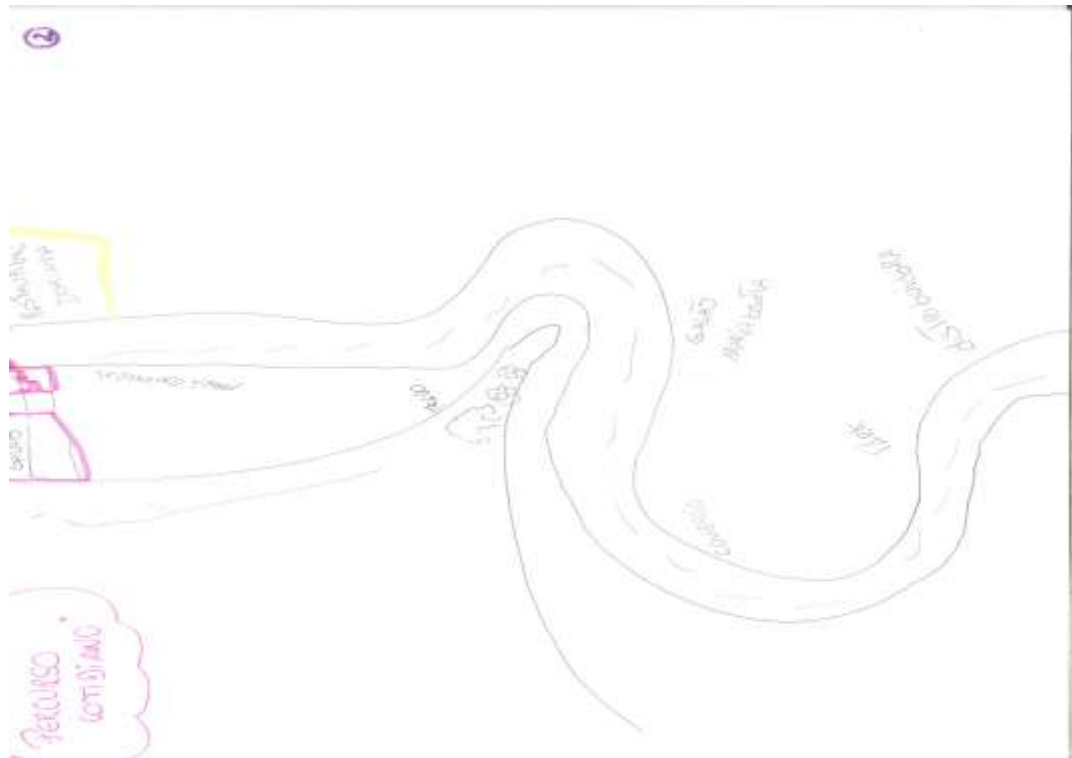
[6] The name "Livia" is fictitious.

Fig. 4: Second Livia's sketch: Usual way to go to significant places in the city.

Some interpretations of Livia's case will be discussed in the light of a multiparadigmatic perspective, as follows.

Referenced Analysis : According to Thagard (2010), cognitive-affective maps can represent relevant elements, such as a goal, action, event, person, place, organization, or general idea. Each concept has an associated emotional value, which can be favorable, unfavorable, or neutral. Lloyd (2000), however, thinks that the expression "map" does not appropriately reflect the dynamical way in which humans store and organize significant references. This is because mental images are not merely a copy of the world "outside" from us – rather, they interact with it.Therefore, sketches or "mental drafts" depict characteristics of spatiality related to the physical reality as it is perceived (the individual knowledge and geographical experience) but are susceptible to dynamicity of time and abstraction: past episodes, as remembered; future events, as imagined; fictitious and hypothetical processes; and even how they can be symbolized (Peuquet, 2002).Because of this methodological issue, a good option is to pair maps to narratives, as defended by Vetorassi (2014):

> […] "affective maps" have been used as a resource to show how memories reveal themselves and how they are transported to the paper in drawings and speeches by the verbal story. Their application is described as a very close connection between memory and identity feelings, in the sense of self-images and relationship with others. Since identity is evaluated by others every day, this can be disputed in social, political, cultural and intergroup conflicts in work relations. (p. 155).

The subjectivation processes also demand active interpretation and articulation of ourselves in stories and texts. The present work agrees with this position, since defends the existence of an interplay between objective references (the elements of the "real world") and our own dispositions (both affective and cognitive) to interpret them and make them meaningful. In this sense, the semiotic mediating devices come into play – signs of various forms that operate in dynamic configurations and catalyze the processes of human acting, feeling, and thinking – as defended by Valsiner (2016). They can help to explain the configuration presented in Livia's sketch. As we can see at the images above, Livia's sketches show some of her spatial references from the immediate environment. There are indicators that semiotic regulation appears in diverse levels. For example, Livia gives major importance to her own house and hairdressing salon, drawing them in a bigger proportion than the other items, while also providing detailed descriptions and vivid colors.

Across Livia's house on the sketch, she depicted a speed bump. It is worth mentioning that within all possibilities of details composing a street, Livia chose only *that* speed bump (in all three sketches). Obviously, this particular speed bump has a special meaning. When asked for the reason, Livia explained:

> *Because this speed bump is striking…! [laughs]… Everybody who passes makes a short stop and looks at the salon… It is a commercial strategy… [laughs]… People have to brake because of the speed bump, and then suddenly find out: 'Look, there is a hairdresser here…!' [laughs]…*

This is just an example within Livia's narrative in which it is possible to observe that a city and its physical, geographical elements no longer configure merely "a city". That speed bump is not a "mere speed bump" anymore, but rather a "commercial strategy", in her words. By incorporating such elements as part of its own identity, a city changes its status to "living city", as people develop a close relationship between space and identity construction, being aware of the urban environment through social practices that form what will be called identitary places. This is exactly the point of Ferreira (2000): the concept of *place* has now emerged encompassing an objective and a subjective dimension, leading to a feeling of territory, of home, of security – by the way, the base of community affiliation and social organization.

We may also observe the sinuosity of the streets on Livia's sketch. The streets in this region are not actually as she depicted. As she explained in her narrative, the sinuosity describes the movement done when she is walking over there. According to her, she walks a little bit and suddenly sees someone she knows at the other side of the street. She crosses the street and meets the known person. Back to her own way, Livia sees someone else, a friend or a neighbor. She crosses the street once more and talks to her friend. "*I often do this… these zig-zag movements when I am walking on the street…*" – she said, pointing to the sinuous streets of her sketch.

Such "distortions" are frequent and take part of the semiotic transformation from the objective to the subjective range. As already said, this is an old issue in the field of Arts. In psychological and interpersonal processes, it is likewise a hard question. After all, everyone has a personal – phenomenological – view of the world he or she lives in. As Vetorassi (2014) asks: what is true or false in a particular trajectory? And, even more importantly: why do we not experience with a ludic spirit, in a funny way, the places we live and the construction of our being in this interplay, enjoying the possibilities that semiotics provides?!Many additional aspects might be analyzed in Livia's case as well. Further relevant points about the semiotic interplay between objective and subjective aspects can be extracted from the extensive aforementioned data collected to this research.

IV. CONCLUSION

Concerning the relationship between psychological processes and urban contexts, since semiotic processes have a transformative potential, they can modulate people's attitudes towards the city. This occurs due to the self-regulation processes, which define and redefine people's psychological meanings, and consequently, people's behavior. The activation of the decision-making process as response to the environment, with different choice behaviors is involved, what implies consecutive effects on the city itself. Affective-emotional states also influence the mood and the social experiences one has in specific places and spaces, actively contributing to the interplay between what people "receive" from the city and what they are doing to provide to a friendly atmosphere in a city. Finally, by reason of this kind of self-regulation the personal construction of intentions, perspectives, and opportunities in urban environments is variable. A sense of territory and a positive an affective-emotional disposition implies engagement, motivation, and positive expectations towards the diverse possibilities to experience in a city. It is possible to comprehend that an assertive and self-confident behavior, besides the willingness to contribute to the agreeableness of the place where people live, can provide opportunities to be successfully explored; while depreciative and anxious attitudes towards the place where one lives, followed by negative mood, can convert challenges into troubles and unhappiness, sometimes seen as overwhelmingly impossible of solution and harmonization.

In conclusion, subjectivation and identity processes can be examined in relation to elements experienced in urban contexts. Subjectivity is closely related to identity construction, which has strong implications to many interpersonal areas. From the viewpoint of people who live in cities, it is reasonable to accept that they have their personal and collective subjectivities influenced by the urban contexts where they live. In fact, people seem to develop a close connection of places and spaces with their own identity, behaving in consonance with the dynamic connection cultivated day-by-day in their living place.

The usual movement they do within the city, feelings they develop of belonging to their places or, inversely, of emotional distance, as well as the dispositional arrangement of meaningful references and representations of their connection to the city, are effective indicators of the quality of their relationship with the urban environment. Throughout this paper it was intended to demonstrate that people build cities; but, at the same time, people have their personal subjectivities built by the cities where they live, plenty of desires and fears, rules and secrets – as mentioned by Calvino. Strictly speaking, if a place does not have personal significance to anyone, then it becomes a *non-place*, as called by the modern French anthropologist Marc Augé.

ACKNOWLEDGEMENTS

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