

The experiential walk diary. Mapping urban experience combining architecture and psychology

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Abstract

The “experiential” walks represent a varied and sound approach applied in different disciplines to collect knowledge about urban contexts, paying attention both to their physical and social features. Due to the inherently interdisciplinary nature of such practices and their study objects, they represent a preferential method for developing a dialogue between urban design and social sciences. This paper contributes to this dialogue by presenting a procedure and an assessment tool designed to highlight the link between cities’ environmental and psychosocial features. The method was applied in Milan in the framework of the activities of the international project *CNRS International Research Group (GDRI) ‘Translating Ambiances’* (2014 – 2017). The results’ analysis highlights some key elements of the shared perception of the Garibaldi-Repubblica area in Milan, offering a qualitative-quantitative representation of the participants’ experience. We suggest different applicative uses for the proposed method, which allows obtaining comparable data from different contexts and types of participants.

Introduction

The urban practices of ‘experiential walk’, which includes several types of walks such as sound walks, smell walks, commented walks, and the ‘experiential walk diary’ here proposed, is particularly useful for studying the social and urban context starting from people’s observations in motion (Thibaud, 2001; Thibaud, 2013; Piga, 2017; Radicchi, 2017; Piga, Siret, & Thibaud, 2021). The phenomenology of the urban environment and its immaterial (e.g., Thibaud, 2011; Pallasmaa, 2014) and emotional meanings (*place identity*) (e.g., Twigger-Ross et al. 2003), connect the disciplines of urban design and planning with those of environmental psychology (Boffi & Rainisio, 2017). This paper aims at contributing to this fruitful dialogue by proposing an interdisciplinary methodological approach based on a qualitative-quantitative tool designed *ad hoc* by the authors.

The pilot case study, here presented, has been applied in Milan within the framework of the international project *CNRS International Research Group (GDRI) ‘Translating Ambiances’* (2014–2017). The International Ambiance Network promoted the GDRI, which deals with the sensory domain with an interdisciplinary perspective and a specific focus on architectural and urban ambiances. The GDRI group aimed at investigating the idea of the translation of ambiances in four central perspectives: linguistic, for clarifying the concept of am-

biance; disciplinary, by exploring scientific bridges between different domains; in terms of senses, by experimenting with multimodal forms of expression; concerning the profession, for exploring *modus operandi*. Our contribution is transversal to the last three objectives of the research. The proposed methodology, i.e., the ‘experiential walk diary’, investigated the ambiances of places, intended as “the physical atmosphere processed through human senses, culture and personal experience” (Piga & Morello, 2015, p. 8). The method was applied to the Garibaldi-Repubblica area, precisely on the Porta Nuova district, a large-scale redevelopment urban area (approximately 30 hectares) (Arcidiacono & Piga, 2008), nowadays almost wholly transformed. The pilot was the first experimental application aiming to demonstrate the methodology applicability in practice, but the method is relevant for different territorial contexts.

The paper is structured in three main parts: the theoretical background, the methodology developed by the authors, the case study application. Conclusions and future works close the contribution.

Theoretical background

An interdisciplinary phenomenological approach to the city

The call for an interdisciplinary approach to urban design is crucial to take advantage of a large amount of knowledge gathered by different disciplines dealing with urban dynamics at various scales. This implies the need to assume a holistic perspective, expanding the approach both transversally (i.e., including other disciplines) and longitudinally (i.e., reasoning on an extended temporal scale) to cities’ development. Indeed, scholars suggest the urgency of reconnecting the design of physical features both with its psychosocial dimension and its evolution over time. In such regard, Romice et al. (2017) suggest a conceptual framework addressing the notion of ‘socio-spatial design’, which emphasizes the importance of assuming the scale of human experience as the reference for interpreting the city as a socio-spatial system; they highlight how professionals, operating in the actual processes taking place in real contexts, only occasionally adopt such perspective, even though some attempts of integration between design and social sciences are experimented in research (Piga, 2017; Piga, 2018; Fumagalli et al., 2020). Regarding the temporal dimension, Dempsey and Burton (2012) point out how urban and landscape planning are largely focused on place-making to ensure high-quality public spaces in cities worldwide (Roberts, 2009); yet, the following management on the long-term, i.e., place-keeping, traditionally has not the same priority, resulting in damage for public spaces and frustrat-

ing the initial efforts.

Such increased attention towards human experience is a crucial factor for an urban design capable of genuinely improving the inhabitants’ quality of life, i.e., human-centered design. As pointed out by many authors, far from being modeled as a sum of discrete interactions between the individual mind and space, the daily urban experience is mainly characterized by (emotional) immersivity, wholeness, and social/collective representations (e.g., Ittelson, 1973; Boffi & Rainisio, 2017). This framework is even more significant, considering that the contemporary city has further accentuated its historical characteristics of dynamism, multiplication of social and ethnic diversity, production of (analogical and digital) community narratives. The sensory and emotional components of places are also increasingly present in architects and Real Estate developers’ decision-making processes, who are nowadays oriented towards designing cultural and communicative hubs, characterized by permeability and social attraction, rather than ‘simple’ buildings (Piga et al., 2019). This ‘immaterial side’ of the city builds an ideal bridge between the phenomenological approaches in urban design sciences and environmental psychology. In both disciplines, the ‘being in place’ topic has been addressed for a long time through a profitable exchange of theoretical contents.

A fruitful notion describing such immaterial relationships of people with the environment can be found in research dealing with ‘ambiance’. Even if there are several definitions of ambiance by different disciplines and authors, we refer to the ambiance as a situated experience. It is possible to conceive it as the atmosphere experienced by a person when interacting with an environment (Ulrich, 1983; Piga & Morello, 2015) and the entirety of plural aspects of the space (Thibaud, 2002a). Such a concept is not seen as a purely abstract impression of people, it is instead considered as situated perception (Thibaud, 2002b): it is referred to as a specific physical space, including all those social meanings that transform it into a place (Tuan, 1977). It is between the subjective and the objective since it is related to the environment itself and a person’s experience in that environment in a specific moment. From this definition, we can assume that in any human/environment interface lies an ambiance (Thibaud, 2011). Due to its multifaceted nature, the concept of ambiance is investigated in many different disciplines (Amphoux et al., 2004), including architecture, urban planning, and environmental psychology. According to the theoretical

perspectives and the heuristic goals of each discipline, many different tools have been developed to investigate it (Piga et al., 2016). The psychological perspective offers different constructs and measurement tools that allow a more accurate assessment, even if they do not entirely cover the broader ambiance concept's different shades.

In the psychological literature, the emotional aspects connected to the cityscape have been studied from various complementary perspectives. On the one hand, the main frameworks on the emotions' structure (e.g., Russell, 1980; Plutchik, 1980) have been applied to urban space and its features, supporting identifying the main pillars of place-related emotionality. For the individual affective state assessment, as a reaction to atmospheric aspects, a well-established model is proposed by Mehrabian and Russell (1974); this describes three different emotional states as a reaction to environmental conditions. Depending on their qualities, those emotional states result in two types of behaviors: approach (desire to remain and explore the environment interacting with other people) or avoidance (leave the environment ignoring the others). According to later studies Russell (Russell & Pratt, 1980; Russell & Lanius, 1984), it is possible to precisely establish the emotional positioning that people attribute to themselves in a specific place by referring to two main axes, namely pleasantness-unpleasantness and activation-deactivation, and two secondary ones (tension-relaxation and boredom-excitement).

On the other hand, many models have been proposed to deepen place evaluation as a cognitive process. Some of those focused on pan-human recurrences on an evolutionary basis (Orians, 1986; Appleton, 1975), while others bring the topic back to subjectivity and environment-behavior transactions. Among the latter, the primary model is the one advanced by Kaplan & Kaplan (1989), which places the environmental preference at the point of balance from understanding and exploration, from our capacity of reading and mapping a place and its ability to surprise us and push us to further exploration and knowledge. This hypothesis is particularly significant since it relies on the momentary characteristics of the subject-environment dyad, such as a gestaltic process in which specific variations coming both from the person and the place can lead to perceived changes in their balancing and thus in the subjective emotional state. Another meaningful approach is the one that has been developed around the concepts of place identity and

place attachment. According to Proshansky et al. (1983), place identity could be defined as "*a sub-structure of the self-identity of the person consisting of, broadly conceived, cognitions about the physical world in which the individual lives. These cognitions represent memories, ideals, feelings, attitudes, values, preferences, meanings, and conceptions of behavior and experience which relate to the variety and complexity of physical settings that define the day-to-day existence of every human being*" (Proshansky et al., 1983, p.59). It is thus stated the existence of an inextricable link between the place and the development of individual identity, and it is assumed that the place represents one of the main points of reference for the subjective narratives about everyone's personal history. In this regard, according to Twigger-Ross et al. (2003) and Knez (2005), place identity consists of four processes: (i) place-related distinctiveness (distinguish myself from others on the basis of territorial belonging); (ii) place-related continuity (my territorial belonging is consistent with the past and with my ethical values); (iii) place related self-esteem (my territorial belonging makes me feel self-confident); (iv) place-related self-efficacy (the place where I belong is an adequate and supportive context for what I want to do).

As a consequence, human beings are supposed to continuously experience forms of place attachment at different intensities and scales (Altman & Low, 1992; Lewicka, 2011) during their life; this has been found being significantly connected to other socio-environmental factors, like civic participation, environmental conservation, residential satisfaction (e.g., Manzo & Perkins, 2006; Devine-Wright, 2009). Noteworthy, the feelings of attachment are also connected to the perceived quality of the environment, and can also occur in the case of unfamiliar environments, if they are able to recall the quality attributed to other more familiar environments or elicit a robust aesthetic pleasure/social commitment (Feldman, 1990; Brown & Raymond, 2007). Moreover, like with the attachment to other people, a sudden loss of the places where we belong can produce stressful and mourning syndromes (Fried, 2000).

Starting from the interdisciplinary theoretical framework discussed above, our paper presents a new research methodology for investigating the urban experience in motion, and that could be applied to various contexts. The method combined the architectural perspective with the psychological one for better describing the connection between the environment and the situated streams of personal emotions. The approach is intended as an

urban design tool, i.e., an analytical means that allow depicting the intangible aspects of places, i.e., the relationship between the environment and people's urban experiences.

Methodological approach

The method is conceived to be adaptable to different targets. Its main scientific goal is to reach, through the experiential walk modality (Piga, 2021), a first recognition of the local emotional landscape, triggering at the same time its punctual reconnection with on-site specific environmental features. The methodology consists of a standard procedure and a new tool (the experiential walk diary). This whole methodology has an eminently exploratory character, i.e., it can be used in the initial stages of a research or co-design process in a specific area, in order to: (i) collect preliminary data on the shared imaginary of the place under consideration; (ii) encourage the development of a more structured group discussion, or inform the design of a more focused analysis; (iii) mobilize the target through the exploratory dimension and movement, also favoring mutual knowledge and an essential exchange of opinions; (iv) in the case of experts, facilitate an interdisciplinary encounter based on an open platform, which draws inspiration from different disciplines.

Procedure and tool

The experimental procedure was developed asking each participant to have an individual free walk (30 minutes) through the area under investigation (see below) starting from its central square, paying attention to the place's multisensory aspects and its atmosphere. At the end of this tour, they were asked to report their impressions through the experiential walk diary.

The diary was organized following a logical path, from a more open compiling to more structured questions, divided into three steps: (i) Free collection of thoughts and impressions about the place, in textual or graphic form (ii) Collection of data regarding the psychological experience in space. In detail, mixed methods were used to intercept the complexity of the entire place-related emotional picture. They consisted of: (a) free collection of adjectives concerning the place; (b) closed questions with semantic differentials based on pairs of oppositional adjectives, designed based on the main topics which emerged from the theoretical review described above. The in-depth topics were: remarkability/

ordinariness, the prevalence of positive/negative feelings and perceived emotional attuning with the local ambiance, aesthetic pleasure and thought stimulation, perceived affinity with local groups, and space impact characteristics on the interactions within the group of participants. In summary, the topics refer to the three main dimensions of an urban space's psychological experience: emotional, cognitive, and social.

- (iii) The collection of textual or graphic data regarding the environmental features mainly oriented the participants in answering the question about their psychological experience.

In summary, our methodology allows a starting free observation, and a re-elaboration in terms of numerical quantification based on psychological variables, and a subsequent reconnection of this latter with the architectural/urban dimension. As such, it leads to a preliminary network analysis of the experience lived in a specific space, as it formally connects spatial features (i.e., materials, shapes, landmarks) with the feelings experienced by the participants.

Participants and experimental context

The Porta Nuova project, i.e., the case study application, is located in the center of Milan (Italy). The area was abandoned since the 1950s, even if it was the focus of several redevelopment strategies. Indeed, it is located in a strategic part of the city near the Garibaldi train station in Milan. The first Integrated Intervention Program (PII) in the area was approved in July 2004 to create a new urban centrality. The total permissible floor area is over 229,000 m² and the public use area is 312,114 m² (107,748 m² are the new park "The Library of Trees"). Excluding the Pirelli building (127m high) by Gio Ponti, Pier Luigi Nervi, and colleagues, built between 1959-1960, the Porta Nuova urban transformation was the first one of the city with high-rise build-

ings. This includes buildings between 100 and 200 meters high: for the first time the city of Milan passed from a horizontal skyline to a vertical one (for more information regarding the Porta Nuova urban transformation, see: Arcidiacono & Piga, 2008). To test the cumulative impacts of the urban projects and their experiential outcomes before construction, the 'Laboratorio di Simulazione Urbana Fausto Curti' developed several simulations, including experiential ones (Arcidiacono & Piga, 2008; Piga et al., 2011; Piga et al., 2012; Piga, 2015; Piga & Morello, 2015; Piga, 2018). The 'experiential walk diary' is part of the research process developed by labsimurb, in this phase aiming at post-monitoring the urban transformation's real outcomes. This research can inform decision-makers and the potential urban process development while confirming the effectiveness of the experiential simulations' predictability. The experiential walk's specific focus was the 'Gae Aulenti' square, in the middle of the Pelli Clarke Pelli Architects project. Edaw and Gehl Architects designed the open area. It is important to notice that the 'Library of Trees' park, designed by Inside Outside, was not built at the time (it was inaugurated one year later, on Oct 2018). Fourteen researchers from different disciplines (architecture, sociology, language, geography, politics, art) participated in the experiment. Results, analyzed by the psychologists Marco Boffi and Nicola Rainisio (authors of the paper), were collectively presented and discussed after the experiential walk took place (Fig. 1).

Results and Discussion

The quantitative data analysis highlights a significant differentiation between the three experiential dimensions (emotional, cognitive, social) taken into consideration. The area was perceived as being medium-highly stimulating from a cognitive point of view (*m.* 4.42 on 7 points Likert scale), in particular as regards its remarkability (or not ordinariness, *m.* 5.21) and ability to generate reflec-

tions (*m.* 4.77), even if a vision significantly positive does not accompany this (*m.* 3.58 on a positive/negative continuum, *m.* 4.08 on aesthetic pleasure). Those latter results could be easily explained in the light of perceived difficulties in establishing an emotional attuning with the place (*m.* 3.69) and feeling appeal to the people who were present there (*m.* 3.77). It is possible to observe that participants, i.e., researchers are mainly attracted by the topics of reflection that the place can stimulate, whether they have a positive or negative taste, rather than feeling emotionally involved or attuned. This specific state of mind can be better understood by referring to the other data collected, which bring to light the hidden dimension underlying the reported scores on psychological variables. Two main imaginaries indeed emerge from the analysis of the adjectives associated with the place. The first identifies the Porta Nuova area as a classic model of the neoliberal space, in which the marketing and sales function dominates, the flows of people are rigidly addressed to specific sets of actions through the spatial forms, the whole space is highly privatized, increasing digitization of both social relations and the places in which they occur could be highlighted. The participants gave a particular focus to their perception of artificiality, with specific references both to the building materials and the desertification of spontaneous activities. Not surprisingly, the second central theme, strictly connected to the first one, highlights the sense of separateness of the place, concerning the surrounding area (as it is located on a small artificial hill) and the social and urban characters of the historic Milan. This not only declined in negative, as some emphasize that the place can also be seen as an 'oasis', as it is separated from the city's usual chaos and wholly pedestrianized. As we noticed above, a key point of the experiential walk diary is to reconnect imaginaries and psychological dimensions through specific questions on spatial features. In the case of Porta Nuova, the shared difficul-



Figure 1 – On the left image, researchers are filling the experiential walk diary on-site; on the right image, researchers discuss the outcomes of the diaries' analysis.

ty of establishing an emotional connection with the place and the described imaginaries can be referred to some well-defined architectural and design elements: (i) a total absence of green areas (at the time of the experiential walk); (ii) a perceived sterility of construction materials, with references to their minerality and the predominance of the grey color; (iii) aesthetic genericity of the built space; (iv) design of the layout of the buildings and paths that accentuate the sense of self-enclosure and the perception of an obligatory flow of entry and exit; (v) Absence of street furniture and other affordances that can encourage the permanence in the place and the development of autonomous activities other than those foreseen and outside the purely commercial spaces; (vi) Poor presence of architectural elements of heat protection, which causes the impracticability of some portions of the space at certain hours of the day and in the hottest seasons. These first results show that the ‘experiential walk diary’ can be an exploratory tool in the initial steps of the co-design processes. Indeed, it can favor a rapid emergence of both the general framework of specific place experience, namely its ambiance, and some specific architectural elements on which it is a priority to start a dialogue with citizens, public administrations, and developers in the context of a virtuous (re)planning process.

Conclusions and future works

The gained results cannot be easily generalized since they reflect the experience in a specific moment, e.g., the ‘Library of Trees’ was under construction, and the weather condition of the walk was a sunny one. This is coherent with the methodology, which aims to study people’s experiences in place, in other words, a situated experience in time and space. Nevertheless, a repetition of the study in several moments of the years or with different conditions (atmospheric, building site development, and similar) can enable to gain a more comprehensive picture and to investigate the evolution of places. Of course, it is of particular interest to compare the pre- and post-urban transformation appraisal to evaluate the rate of the perceived benefits by the final users. To improve the reliability of outcomes is essential to include different types of targets in the walk and compare results. So far, the survey was done with academics, but a broader audience will lead to more comprehensive results that lead to a more in-depth analytical insight that informs the design process. Of course, the optimal design solution is often the one that allows a well-balanced benefit for its users in a sustainable perspective

Notes

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