Social trajectory and socio-spatial representation of urban space: The relation between social and cognitive structures

Pierre Dias [a, b, 1], Thierry Ramadier [b, *, 1]

[a] Centre d'Etudes de Populations, de Pauvreté et de Politiques Socio-économiques (CEPS / INSTEAD), 3 avenue de la Fonte, 4364 Esch-sur-Alzette, Luxembourg

[b] Laboratoire Sociétés, Acteurs, Gouvernement en Europe (SAGE), UMR 7363 CNRS, Université de Strasbourg, 5 allée du Général Rouvillois, 67000 Strasbourg, France

ABSTRACT

This study analyzed the representations of urban space based on the social representations paradigm. To highlight the social dimensions of spatial cognition processes, we examined how the social mobility of people living in the same neighborhood affects cognitive configurations of the city. Ninety-two residents living in single-family houses of a same neighborhood located in suburbs responded to questionnaires in their homes, using the technique of characterization, a tool developed to record social representations. After isolating four groups with different spatial representations, we described the position of these groups in the social structure. The results show that spatial representations depend on the social trajectory of individuals (which can be upward, downward or stable compared to the social status of the parents). We conclude that reference points, hierarchies between urban places and clusters in cognitive mapping must be analyzed in a social and relational/transactional perspective.

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1. Introduction

What role do social factors play in the cognitive construction of urban space representations? Should we content ourselves with assigning social differences to different individual experiences, as in some studies which argue that individuals with a privileged social background have broader representations than the less privileged because they have greater mobility (Appleyard, 1970; Didelon, 2011)? Or should we point to cultural differences by hypothesizing that social groups, through the environmental meanings and the social norms they carry, determine the processes and contents of representation (Bourg & Castel, 2011; Evans, 1980; Heft, 2013)? Finally, should we consider relations of power (Hubbard, 1996a; 1996b), and more specifically the individuals' social

position (De Montlibert, 1995), i.e., the force field that determines it (Lewin, 1936), in order to understand how representations of space are constructed? In other words, is there a 'social filter' of cognitive activity regarding the geographic space, or are we observing a socio-cognitive activity, to the extent that social representations can no longer be distinguished from spatial representations (Jodelet, 1982)?

1.1. From the cognitivist model to social cognition

The meanings of space are often approached without consideration of social factors, either as cognitive categories (Rosch, 1975) allowing for the identification of reference points (Couclelis, Golledge, Gale, & Tobler, 1987; Stevens & Coupe, 1978) in the hierarchical organization of space (Hirtle & Jonides, 1985), or as environmental preferences specific to individuals and their geographical (Gould & White, 1974) and embodied experiences (Tversky, 2005). However Jodelet (1982), who suggested introducing elements from the European psychosociological approach to social representations into the study of spatial representations, showed that environmental meanings and the relating spatial categories (in her case, Parisian quarters and arrondissements) are socio-historical constructs informed in part by the social and

* Corresponding author. Tel.: +33 3 68 85 63 02.
  E-mail addresses: p.dias@unistra.fr (P. Dias), thierry.ramadier@misha.fr (T. Ramadier).
  URL: http://www.sage.unistra.fr, http://www.sage.unistra.fr

[1] This work, developing still further the modes of nominative recognition (by rank or unique name), impels us to note that the alphabetical order in which the authors are listed indicates simply that this is a work where the authors contributed equally and in the same way, to stress the collective research that is the foundation of scientific activity.

architectural meanings of places. Thus, environmental psychology significantly contributed to the cognitivist debate on the relevance of analogical representations (thoughts as images) vs. the behaviorist view of representations based only on hierarchized conceptual categories (Pylyshyn, 1973). Yet, as Heft (2012) points out, this scholarly dichotomy between spatial and environmental cognition (Stockols, 1978) is not as clear-cut in ethnographic and cultural approaches. It would appear that it has been easier to introduce social factors into spatial cognition through the concept of culture (Heft, 2012; Jodelet, 1982; Rapoport, 1976), rather than through the concept of social structure.

To use the categories proposed by Doise (1982), social factors have been investigated at an ideological or interpersonal level rather than at a positional and relational level. The search for a relation between spatial cognition (Freundschuh & Kitchin, 1999; Kitchin & Blades, 2001) and environmental cognition (Haas, 2002; Jodelet, 2013) has more often relied on the content of meanings shared by a group (Heft, 2012) rather than on the structure of meanings (and the relating social structure) (Ramadier, 2010; Ramadier & Moser, 1998). However, advances in social cognition suggest that constructions of representations on the basis of social factors are not specific to distinct social groups and rather depend on the social structure (Lorenzi-Cioldi, 2002; Viaud, 2003). This article was designed to verify this hypothesis for the representation of urban space.

1.2. Social and cognitive structures

Jodelet's first proposals (1982) on socio-spatial cognition fit within the paradigm of social representations developed by Moscovici (1961). This psychosociological approach has been expanded in two main research avenues.

First, some scholars have developed tools to collect and analyze the contents of each social representation based on Jean Philippe's idea[2] (1903) of structuring a representation around a central core. This means that every social representation is approached as a hierarchized belief system composed of stable central elements shared within the group, and of a range of peripheral elements that protect the core by absorbing conflicts between the representation and reality (Abric, 1976). It is of particular relevance to this study that this social representations approach hypothesizes that a same set of representational elements can be structured differently from one social group to the next; social meanings as such are less important to our understanding of what differentiates a representation from another than the place of its meanings in the representational structure. Thus, the problem of diverse meanings for a single space, as pointed out by Lynch (1960), is turned into an asset. Applied to urban space, these methods allow us to move beyond the proposal made by Lee (1968, p. 244), who argued that 'the duality of physical and social neighbourhoods can be joined only by a phenomenological approach'. To our knowledge, this structural approach of the city representations has only been explored by Marchand (2005); the anthropological approach of social representations initiated by Denise Jodelet is more frequently adopted (Arruda, 2010; De Alba, 2004; Didelon, 2011; Haas & Levasseur, 2010; Priego & Jovchelovitch, 2010).

The second avenue of research is based on an idea introduced by Doise (1988), who argued that a social representation is constructed on the basis of group-to-group relationships. Doise claims that social representations are '[…] like principles that generate stances that relate to specific introductions into a range of social relationships' (Doise, 1986), as opposed to constructions developed solely within a group. By emphasizing the stance taken by individuals in their representations, the author recalls the importance of the "social position" concept developed by sociologists (Bourdieu, 1979). The concept accounts for both the social (or socioprofessional) status of a person and the stance taken by this person on other social statuses. Thus, individuals' social position depends on the social relationships associated with their social status. Individuals who share the same social status may therefore not always have the same social position. They do not occupy the same place in all relationships between social statuses (i.e., in the social structure or in the social space). For instance, in their research on social work, Rivard and Bigot (2000) show how changes in individual backgrounds and social trajectories can affect an entire occupational sector by introducing a competition between different types of professional practices within the sector, and also altering relations with other occupational sectors and institutions (Bertaux, Schléret, & Bernardi, 2000). To take an example that is closer to the matter at hand, Chamboredon & Lemaire (1970) have shown that spatial appropriation conflicts in a working-class neighborhood frequently occurred between those who expect no change in their social and residential conditions and those who have short-term social and residential mobility aspirations.

This take has yet to be applied to the city as an object of representation, or to any other geographical object regardless of its scale. Yet, when it comes to urban planning, it appears evident that a place is subject to material, functional and symbolic appropriations and that planning is informed by sometimes institutionalized social relationships (for instance within the participative workshops framework or public consultation processes). Likewise, spatial representations have social dimensions, including where the definition of group identities is concerned (Polic & Repovs, 2004); these aspects are often overlooked by scholars whose approach of geographical space focuses on the cognitive dimension.

The psychosociological approaches of social representations provide us with the conceptual and methodological tools to analyze the socio-cognitive structure of spatial representations through the prism of social relationships. This view of representations complements the one which focuses on the cultural and normative dimensions produced by inter-individual relationships within a group. This is an important complement insofar as it emphasizes rarely addressed questions:

- Can a social status be attributed to a spatial representation?
- Can the effects of the social structure be ruled out?
- Is the representation of urban space an accumulation of social experiences that reflects the various social groups to which we have belonged in the course of our social trajectory?

The general hypothesis formulated in this paper is that the homology between social and cognitive structures (Bourdieu, 1977; Durkheim & Mauss, 1903) evidenced in social cognition (Tafani & Bellon, 2001; Viaud, 2005) can be applied to urban space and its representation. The socio-spatial approach adopted here consists in studying the relations between geographical elements starting from the spatial categories attached to them.

- First, if spatial categories differ, spatial elements also differ from one representation to the next (Allen & Kirasic, 1985; Hirtle & Jonides, 1985; Huttenlocher, Hedges, & Ducan, 1991; Lansdale,

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[2] Philippe Jean, L'image mentale, Paris, Felix *Alcan, 1903*, p. 25: "Every image is made of two sets of distinct elements: the first elements make up the body of the image, the central core where it was prepared, where it was born, and through which it lives; they are its very nature. The other elements are like its clothes, accessories that have become necessary, that dress it, complete it, and prepare it for its role in this world of images in which it must circulate and act. It is thanks to the latter that it can easily take part in our mental operations and participate in the life of the mind."