Social Representations of Urban Spaces: A Comment on Mental Maps of Paris

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The study of socio-spatial representations[1] of Paris, carried out by Milgram and Jodelet in the mid-seventies, launched a line of inquiry whose contributions to Social Representation Theory (SRT) have borne fruit to this day. Since this study, geographical space has become an object of investigation in the field of social representation, giving rise to reflection on a range of topics: social memory anchored in space (Haas, 1999; 2004; Haas and Jodelet, 2007); the urban experiences of residents of large metropolitan areas that oscillate between a traditional historical past and a modernity that threatens the vestiges of the past (Rikou, 1997; de Alba, 2002); urban mobility (Abric and Morin, 1992); tourist images of visitors to the large European cities (de Rosa and D'Ambrosio, 2010); the social imaginaries that emerge in speech and cartographic maps of territories on different geographical scales (Arruda and Alba, 2007), to mention only a few examples.

This study, now a classic in the field of social and environmental psychology, presents solid methodology whose range of techniques has produced hugely valuable data for studying the city from a theoretical point of view, as well as for intervention or urban planning policies. It will continue to be a pivotal reference for studies of the contemporary city based on the

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[1] Jodelet (1982) coined the term socio-spatial representations to refer to social representations that different social subjects develop in reference to socially significant spaces.

subjectivity of its residents. Every time I read this work, I discover important elements for deliberation, and find their validity renewed as fast as dynamic urban complexes change.

The results of the study were published in institutional reports (Jodelet and Milgram, 1977). However, the work's most important diffusion came about via various publications by both authors (Milgram and Jodelet, 1976; Milgram, 1982; Jodelet, 1982). We will revisit the contributions of this extensive study here, not only for the domain of social representation, but also for urban studies in general. Before presenting the study, we will briefly present its theoretical context.

BACKGROUND

Scientific curiosity about how people create images of the space they inhabit is not a new topic. Since the early twentieth century, geographers such as Gulliver (1908) and Trowbridge (1913) have been interested in studying how people represented large scale environments internally (Pol, 2006; Evans, 1980). Nonetheless, the experimental study of mental maps would not begin until half-way through the twentieth century, in the field of cognitive psychology. Tolman (1948) used the term cognitive map to describe the way in which rats and, by analogy, humans behaved in the environment.

After Tolman's experiments, the study of cognitive maps was taken up again in the late fifties by Lynch (1960), the first author to use the concept of mental maps and the technique of sketching to study the representation that inhabitants formed of their city (Fischer, 1992). Although this work has been criticised for establishing a marked physical determinism of the images of the space, it should be recognized that it was original work that presented both an innovative methodology and a means of analysing the representation of urban space, and thus motivated a series of investigations into the city in different domains: urbanism, architecture, psychology, sociology, geography, etc. (Kitchin y Jackson, 1998).

Subsequently, with the development of the cognitive sciences, the concept of "cognitive maps" received systematized theoretical treatment (Downs & Stea, 1973; Downs, 1977). The formation of mental maps and their function are analysed as intra-individual cognitive processes, as ways of treating all sorts of information related to space. The studies developed from this standpoint have given rise to current environmental cognition.

SOCIO-SPATIAL REPRESENTATIONS OF PARIS: THEORETICAL AND METHODOLOGICAL CONTRIBUTIONS

Milgram and Jodelet (1976) carried out their study on representations of Paris in the context of this research field, but go one step further by considering the social, cultural and historical meanings of the city as factors that come into play in the formation of images of it.

One of the most important contributions in the 1976 article is the treatment of mental maps as social representations. The authors offer an original perspective on the images of the city that integrates social aspects of the representation in several senses: as a socio-cognitive construction of urban space, they consider the influence of interviewees' social resources when preparing their mental maps and note that the social structure of the city and its meanings are expressed in the images that it stimulates in its residents.

In 1982, the authors separately published reworked chapters of the Paris study in anthologies. Milgram (1982) reworked the 1976 version, adding certain criteria for considering cities as social representations: a) cities are products of society and constitute the primary form in which its activity has been expressed throughout its history; b) mental maps, as language, are cultural products, resulting from social interaction with the environment; c) mental maps are constructed by starting from social meanings.

Additionally, Milgram (1982) identifies an important question: are mental maps used only as individual cognitive tools or do they have wider social functions? The results of the Paris study, as well as the replication of the methodology in the case of New York, allow him to state that mental maps are more than cognitive tools for orientation in spatial behaviours, but make it possible to give sense and social meaning to a space with great historical and cultural complexity, such as a city.

Jodelet (1982) agreed with this conclusion, though arriving at it from another direction – through criticism of the overly vague and insufficiently systematic notion of space used in environmental psychology. For Jodelet, this discipline treats space as context, as environment, as a physical framework, in a general way without really theorising on the concept itself. Jodelet supports conceptions of space that include its social, cultural and normative aspects, such as Lewin's "space of life" (1936) or Barker's "behavioural setting" (1968).

The concept of "behavioural setting" is possibly less helpful when studying the representation and experience of the city in general than SRT, because it conceives the space as a set of socially and culturally defined micro-universes. SRT, in contrast, makes it possible

to consider a socially constructed image of the city as a whole, without needing to break it down into the fragments that are its specific spatial components.

Jodelet (1982) proposes that the space should be treated as a "social and historical reality" where the experience of urban life of active actors takes place. Here, we are no longer speaking of isolated individuals who only respond to environmental stimuli (the E-R schema), or intra-individual processes that function as guides in the space, without their social meaning being taken into account. Thus, Jodelet follows a transactionalist perspective of environmental psychology (Altman and Rogoff, 1987) in which the man-environment relationship is mediated by society (man-society-environment) and is considered a dialectic to the extent that man actively constructs his medium, granting him an identity and providing a historical, social and cultural reference framework.

Jodelet (1982) also focuses attention on the importance of Proshansky's (1978) concept of topographical identity to underline the fact that the space defines the man who occupies it insofar as he is a social and cultural being. It is clear that, for Jodelet, space as an object of study should take into consideration its meaningful and symbolic aspects, as in urban semiology (Choay, 1970; Ledrut, 1973).

Studying the social meanings of space, its symbolic cultural aspects, in addition to its development as the arena of collective action, justifies the use of SRT as a suitable theoretical framework for undertaking investigations of this type.

Another important achievement in Milgram and Jodelet's work (1976) is that the authors present a method for studying mental maps of the city in a clear and synthetic way, not just as regards techniques for gathering information, but also as regards strategies for their analysis[2].

INDIVIDUAL AND COLLECTIVE REPRESENTATIONS

The results of the survey of 218 residents carried out in different districts of Paris are presented at two levels of analysis. In the first place, Milgram and Jodelet (1976) present certain individual sketch maps and then the collective image that results from the analysis of the set of sketches. This approach makes it possible to observe such social elements as are

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[2] If a decision is to be made on whether to reprint of Milgram and Jodelet's research on Paris, it would be vital to include the questionnaire that the authors designed.

found in the personal maps, and the individual elements in the maps derived from the interviewed group.

Milgram and Jodelet (1976) do not analyse the maps in terms of objectification and anchoring processes from which social representations are formed (Moscovici, 1961); though the individual sketches indicate these processes clearly.

Evidently, the maps express personal experience of the space, but they also denote the subjects' social resources: as members of milieus or groups (students of the Jussieu Science Faculty, butcher, architect), as people ascribed to a generation or age group (the young include contemporary elements in their maps more often than the elderly), as long-term residents of socially defined city neighbourhoods (the 4th arrondissement housewife). Anchoring is also observed in the fact that subjects create their sketches using previous, socially shared knowledge of the city as their starting point, such as the hegemonic images from various media. Finally, collective maps make the importance of Paris's historical development evident in the construction of their representations, as urban memory manifested in current images and practices.

The map in itself attests to the process of objectification of the social representation to the extent that it is its materialized expression of its graphic or figurative dimension. The sketch map is not the mental map, but its schema that, given his abilities, the subject is able to draw. Far from being a group of unconnected, dis-united signs, the maps form structures where the elements are related to one another. In spite of distortions, omissions or additions, the map shows how each resident conceives his city. The sketch, thanks to its nature as free projection, allows the subject to express aspects of his representation of the space that could not be materialized in any other medium. They make it possible to observe the imaginary dimension of social representation, those archaic, utopian, mythical, fantastical and emotive elements linked to certain territories (Arruda & de Alba, 2007). For example, the mental map of an architect who participated in the Paris survey reflects the urban project that he would have liked to carry out, in a utopian way, to re-make Paris according to his more functional and modern taste.

The mental maps of Paris bring a characteristic problem of the development of cities into relief: the tension between the old city and the modern one, which in XXI century cities has become a tripartite tension between the old, the modern and the postmodern city.

MENTAL MAPS AND HISTORY OF THE CITY

Milgram and Jodelet (1976) observe collective representation by analysing what the set of subjects share. They suggest that what becomes relevant in a person's mind is not just what exists but what the community emphasizes. Based on the idea that the first thing sketched is the most relevant, the authors analyse the order in which elements are included in the sketches. The first aspect of Paris that subjects draw is its boundaries, frequently represented by the *Boulevard Périphérique*, somehow substituting the old city walls. Jodelet (1982) develops in greater detail the relationship between the evolution of the sketch and the historical evolution of the city, of the centre toward the periphery.

After the boundaries, the Seine is the second element that organizes the rest of the sketch of the city. For anyone who knows Paris, it seems obvious that the limits and the Seine would be the first elements in the map because they are important reference points in the city's structure, form and operation. However, from the individual psychological point of view, people would be expected to develop the map of their city, starting from more personal reference points, such as their houses or local neighbourhood, and places related to the subject's biography. This investigation demonstrates that in mental maps the social takes priority over the personal.

The distortions of the places included in the maps with respect to their form and true location surprised the authors. The most obvious thing being the way most of the subjects distort the Seine, drawing it straighter than it really is. They attribute this distortion to the difference between the experience of space when travelling around the city, when the curve is less clear, and the real curve of the Seine, visible from the air, but not very noticeable when on the river. However, this distortion could be interpreted as a need to establish geographical order in the representation, where the Seine constitutes the dividing line between north and south; alternatively as a way of expressing the conventional division that Parisians make between *rive gauche* and *rive droite*.

The third element sketched is the Ile de la Cité and Nôtre-Dame, confirming the relationship between the city's history and its mental representation, since the historical heart of the city coincides with the nucleus of its representation. This is another of the authors' important discoveries, because there are cities whose structure and operation have changed in such a way that finding a relationship between their historical origin and their socio-spatial representation would be unexpected. Milgram (1982) observes this in the case of New York,

but one might also mention Rio de Janeiro where the development of progressively more modern and impressive neighbourhoods along the coast has displaced the historical centre repeatedly. Mexico City is a similar case to Paris: its social representation is centred at the original site of the pre-Columbian city, upon which colonial and modern constructions were superimposed. Its financial centre has moved towards the west, but its symbolic centre has not moved down the centuries (Alba, 2004; Monnet, 1993).

THE EXPERIENCE OF THE CITY AND DOMINANT SOCIO-SPATIAL REPRESENTATIONS

For the authors, the frequency that places are drawn is an indicator of the contents that structure the image of Paris. The social representation of its inhabitants coincides with the image of the tourist city: the elements most frequently included in mental maps are the Seine, the Arc de Triomphe, Notre-Dame, the Eiffel Tower, etc.

It is important to note that the high variability of the places included, in addition to the persistence of inevitable places such as tourist sites, may be interpreted as a double game between personal experience of the space and the hegemonic representations of the city that seem to characterize the construction of the mental maps of Paris. Low frequency locations provide important information on the experience of the city that sustains individual subjects' representation of it. The fact that this is more personal does not mean that it is not social, for, if we interpret the maps as social representations, we start from the idea that these are constructed along social outlines of thought.

RELATIONSHIP BETWEEN THE ELEMENTS OF THE CITY: FERTILITY AND URBAN EMPTINESS

The authors analysed the "associative structure" that links places in the city. They assume that the city is more fertile terrain when its elements are interconnected in a kind of urban spider's web. The squares, streets and monuments can form a whole if perceived in related groups. The opposite would give the sensation of an "urban emptiness".

There is an underlying hypothesis in the search for relationships between urban elements which the authors do not make explicit: the city will be more "fertile" if its elements form related groups. But what is to be understood by fertility here? We may think that places

that have a strong presence as images attract significant numbers of people and therefore have a more intense productive spatial dynamic, given by interchange and social mobility, cultural activity, commercial and service trade, that is, a more attractive image that may expand to places near a particular monument, group of buildings, square, street or park. From the point of view of applied research, these results contribute to the design of urban interventions tending towards fomenting the connection between places of interest in certain areas to increase their "fertility".

Although Milgram and Jodelet (1976) asked interviewees to concentrate on geographical aspects, subjects included comments on the places suggested that invoke images associated with them, such as the guillotine in the Place de la Bastille, or meanings that go beyond merely graphic or visual expression. This allowed them to map the places most frequently included or given greater geographical interconnection, accompanied by spontaneously expressed comments. Current techniques for handling geographical data, such as Google Earth, Atlas-Ti or MaxQDA would have allowed the authors to map the specific places interviewees indicated in their mental maps, associating them with the list of comments made on each place and the socio-demographic characteristics of the interviewees.

RECOGNITION OF PARISIAN SCENES: EVIDENT AND HIDDEN URBAN AESTHETICS

To complement the city map drawn freely from memory, Milgram and Jodelet presented 40 pictures of Parisian scenes for the interviewees to identify, the purpose being to demonstrate that correct identification shows that that scene formed an active part of the representations of the interviewees' city, even when they did not include it in their maps.

Recognition rates go from 100% for the Arc de Triomphe to 4.5% for the Rue de Cambrai and the Place d'Israël. The authors interpret this wide range of variability in image recognition by using four categories: pictures recognized by almost all subjects correspond with scenarios that constitute the city's major *icons* at both national and international level; pictures where two spaces or monuments are *confused*, fusing two into one; those in which *class differences* or cultural level are revealed (for example, professionals recognized certain places more than manual workers). The authors underline the fact that urban icons function as integrative spaces for all social sectors in that they are recognized by all the interviewed groups, while others create social differences because they are only recognized by certain

sectors. Finally, there are *paradoxically unknown* scenarios, those that are unknown to city residents in spite of their noteworthy aesthetic features because they have not had enough publicity. The authors suggest that knowledge of such places does not so much depend on their intrinsic characteristics, but on the importance they are given in the socially created system of urban icons. Here again, we find results of the study that are directly applicable to urban policies aimed at the improvement of public spaces: to give visibility in the media to the urban aesthetic that can generate a positive or attractive image of the place where it is to be found. It is important to clarify that such aesthetic does not necessarily refer to architectural or landscape features, artistic or cultural expressions created by occupants of the space themselves may also be included, as in the case of street art.

HISTORY AND SOCIAL STRATIFICATION ON MENTAL MAPS OF PARIS

To analyse how much residents knew their city as a global territory, the authors provided subjects with a map with the city's 80 neighbourhoods included in 20 districts, for them to specify which ones they were more and less familiar with.

The authors obtain two remarkable results from the analysis of these maps. Firstly, they substantiate the influence of the city's historical imprint in the construction of spatial representations: the neighbourhoods around the Île de la Cité and the Latin Quarter are the best known ones. The old city walls would seem to delimit a centre well-known by all and a less well-known periphery. Secondly, they again find social class differences in familiarity with the city: labourers mention middle-class neighbourhoods as being less familiar and professionals indicate disadvantaged neighbourhoods as being less well-known.

This investigation indicates that social stratification of urban space is not just part of its economic dynamics as regards the cost of housing (rich/poor neighbourhoods), but also in the way that this is experienced and imagined by its residents. It seems clear that historical nuclei, important urban icons, those that endow the city with structure, are the most socially democratic and integrative spaces. Their residents' economic standing or lifestyle does not manage to obscure their iconic function. Spaces with lesser symbolic weight will be marked by the social differences of their residents.

The effect of Parisian social stratification can be clearly seen when Milgram and Jodelet ask their interviewees to select the neighbourhoods where they would or would not like to live, or sectors of the city associated with certain social groups. They note that Bretons,

Chinese or North Africans occupy well-defined areas. Similarly, the neighbourhoods thought of as the poorest match those that generate the greatest fear, associated with the North African population, such as the Goutte d'Or neighbourhood, where few would wish to live. Conversely, the preference for neighbourhoods as hypothetical places to live is marked by their historical connotation, as well as by the high socioeconomic level of certain sectors. The authors analyse the emotional meaning of places via the imaginary trips that Parisians mark on a map if they had to say good-bye the city. In spite of the enormous variability of routes related to personal lives, a group of streets and places that might be considered an emotional axis of the city appear: from the Arc de Triomphe to Île Saint-Louis and Île de la Cité.

MENTAL MAPS OF PARIS AND NEW YORK

Milgram (1982) compares the results of the Paris study with those obtained by replicating the same methodology in New York. While Paris is represented as a whole delimited by the *Boulevard Périphérique*, the representation of NY concentrates on Manhattan, without there being a consensus on what the city limits are. The different answers to the questionnaire show that the mental map of NY is mainly based on "conventional wisdom", rather than conforming to its urban reality or its history. The dominant social image of the city concentrated on the area of Manhattan reigns. Places that from the architectural point of view are beautiful or inspiring disappear from the representation if they are not in this area.

The NY study provides additional material for an instructive reflection on neighbourhoods that did not appear in the Paris research. This is because neighbourhoods in NY have a far more explicit social meaning, indicating economic, ethnic or racial differences among their inhabitants more clearly.

In NY, ethnicity is a principle of social classification and therefore the geographical differentiation of the city. It shows that mental maps are more than cognitive guides as they have important social functions. They mark attitudes towards people from bad neighbourhoods or renowned ones; they help in making decisions on the use or practices of urban territory.

For Milgram (1982), the neighbourhood is defined as a social construction based on the characteristics of its residents as much as its geographical components. Its limits can be defined as much by the change in type of resident as by a physical mark that serves as a symbol of transition from one neighbourhood to another.

This author also underlines the role that dominant social actors play in the city, such as those that have political, economic or media power, for imposing their social representations on those urban sectors where their interests lie. "Social representations help to define social order in the city, and the place of individuals in it" (Milgram, 1982: 309). Again, these results provide material for reflection as regards their application to both public or private investment decisions related to places that do or do not enjoy an attractive image.

TO GO BEYOND

Territory or space as an object of social representation has had important potential not only for the development of its theory or methods, but for its possible interconnection with other disciplines interested in these topics.

SRT makes it possible to study the city from different perspectives: urban experience, mental cartography, social and emotional geography, city models retained by social actors that affect cities' development (politicians, experts, civil organizations, the media, businessmen, etc.), conflicts of representations as regards the ideal or desirable city, etc.

Socio-spatial representations have opened up another important vein of study, that being the relationship between the experienced present and past of urban spaces, through concepts of social or collective memory and topographical identity. They have also contributed to the study of the imaginary dimension of Social Representations, its figurative aspect.

The various works on socio-spatial representations that are still being developed in several countries (Ph.D theses and research programmes: Arruda, 2010; Bomfim, 2010; de Alba, 2012; Glaveanu & Jovchelovitch, 2010, Haas & Levasseur, 2010; Jodelet, 2010, Priego & Jovchelovitch, 2010; Ramadier, 2010, etc.), on themes such as historical centres, medium-sized cities and megalopolises, national and continental territory, new methodologies on mental maps, testify to the great interest in the methods and practical applications that SRT has given rise to for the analysis of symbolic aspects of space. The application of this theory and the methods inspired by the socio-spatial representations of Paris in heterogeneous cultural contexts will continue to enrich the field of SRT, both as theory and practice. This theoretical development has included and will definitely continue to include socio-spatial representations of Paris as a pivotal reference.

REFERENCES

Abric, J.C. & Morin, M. (1990). Recherches psychosociales sur la mobilité urbaine et les voyages interurbains, *Cahiers internationaux de psychologie sociale*, 5, 11-35.

Altman, I. & Rogoff, B. (1987). World views in psychology : trait, interactional, organismic and transactional perspectives. In D. Stokols & I. Altman (Eds.), *Handbook of environmental psychology*. New York, Willey.

Arruda, A. (2010). Brésil du nord au sud: les cartes mentales et les représentations sociales. *10th International Conference on Social Representations*, Tunisia.

Arruda, A. & Alba, M. de (Eds.) (2007). *Espacios imaginarios y representaciones sociales. Aportes desde Latinoamérica.* Barcelona: Anthropos-Uami.

Barker, R. (1968). *Ecological Psychology*, Stanford: Stanford University Press.

Bomfim, Z. (2010). *Cidade e afetividades. Estima e construçao dos mapas afetivos de Barcelona e de Sao Paulo*, Fortaleza: Ediçoes UFC.

Choay, F. (1970). Remarques à propos de la sociologie urbain, *L'Architecture Aujourd'hui*, 153, 9-10.

Downs, R. M. (1977). *Maps in Mind: Reflections on Cognitive Mappings*, New York: Harper & Row.

Downs, R. & Stea, D. (Eds.) (1973). *Image and Environment. Cognitif mapping and spatial behavior*, Chicago: Aldin Publishers Co.

Evans, G. (1980). Environmental cognition, *Psychological Bulletin*, 88(2), 259-287.

De Alba, M. (2012). A methodological approach to the study of urban memory: narratives about Mexico City, *Forum: Qualitative Social Research*, www.qualitative-research.net (In press).

De Alba, M. (2002). *Les représentations socio-spatiales de la ville de Mexico. Expérience urbaine, images collectives et médiatiques d'une métropole géante*. PhD, Ecole des Hautes Etudes en Sciences Sociales, France.

De Alba, M. (2004). Mapas mentales de la ciudad de México: una aproximación psicosocial al estudio de las representaciones espaciales. *Revista de Estudios Demográficos y Urbanos*, 55(19).

De Rosa A. & D'Ambrosio, M. (2010). First-visitors in European Capitals: imagined and experienced places before and after their first visit, *10th International Conference on Social Representations*, Tunisia.

Fischer, G., (1992). *Psychologie sociale de l'environnement*. Toulouse: Privat

Gulliver, F.P. (1908). Orientation of maps. *Journal of Geography,* 7, 55-58.

Glaveanu, V. & Jovchelovitch, S. (2010), Exploring the world of Rumanian Children : a study
of children's representations in a school and child-care centre context. *10th
International Conference on Social Representations*, Tunisia.

Haas, V. (2004). Les cartes cognitives : un outil pour étudier la ville sous
ses dimensions socio-historiques et affectives, *Bulletin de Psychologie*,
474, 621-633.

Haas, V. (1997). *Mémoires, identités et représentations socio-spatiales d'une ville. Le cas de
Vichy*. PhD. Ecole des Hautes Etudes en Sciences Sociales, France.

Haas, V. & Jodelet, D. (2007). Pensée et mémoire sociales. In J.P. Pétard
(Ed.), *Psychologie Sociale* (pp. 111-160). Paris : Bréal.

Haas, V. & Levasseur, E. (2010). Quand la ville nous parle : représentations sociales et
mémoires collectives. *10th International Conference on Social Representations*,
Tunisia.

Jodelet, D. (2010). La memoria de los lugares urbanos, *Alteridades* 39: 81-89.

Jodelet, D. (1982). Les représentations socio-spatiales de la ville. In Derycke (Ed).
Conceptions de l'espace. Recherches pluridisciplinaires de l'Université Paris X (pp.
145-177). Nanterre.

Jodelet, D. & Milgram, S. (1977). *Cartes mentales et images sociales de Paris*. Paris.
D.G.R.S.T.

Kitchin, R. & Jackson, P. (1998). Editorial : Applying cognitive mapping research, *Journal of
Environmental Psychology*, 18, 219-221.

Ledrut, R. (1973). *Les images de la ville*, Paris, Anthropos.

Lewin, K. (1936). *Principles of topological psychology*, New York, Mac Graw-Hill.

Lynch, K. (1960). *The image of the city*, Cambridge, MIT Press.

Milgram, S. & Jodelet, D. (1976). Psychological maps of Paris. In Proshansky, Ittelson, Rivlin (Eds.)
Environmental psychology: people and their physical settings (pp. 104-124). New York, Holt
Rinehart and Winston.

Milgram, S. (1982). Cities as social representations. In Farr R. & Moscovici S. (Eds.), *Social
representations* (pp. 289-309). London, CUP.

Monnet, J. (1993). *La Ville et son double, La parabole de Mexico*. Paris, Nathan.

Moscovici, S. (1961). *La psychanalyse, son image et son public*. Paris, PUF.

Pol, E. (2006). Blueprints for a History of Environmental Psychology (I): From First Birth to American Transition, *Medio Ambiente y Comportamiento Humano*, 7(2), 95-113.

Priego, J. & Jovchelovitch, S. (2010), Children draw the public sphere: a study of children's representations of the public sphere in Mexico. *10th International Conference on Social Representations*, Tunisia.

Proshansky, H. (1978). The city and self-identity. *Environment and Behavior*, 10(2), 147-169.

Ramadier, T. (2010), Proposition méthodologique pour comparer les représentations sociales de l'espace urbain. *10th International Conference on Social Representations*, Tunisia.

Rikou, E. (1997). *Parcours des lieux urbains. Construction sociale et subjective de l'expérience urbaine à partir des récits de vie des jeunes habitants d'Athènes*. PhD, Ecole des Hautes Etudes en Sciences Sociales, France.

Tolman, E. (1948). Cognitive maps in rat and men, *Psychological Review*, 55, 189-208.

Trowbridge, C.C. (1913). On fundamental methods of orientation and imaginary maps. *Science, 38,* 888-897.

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