

SPATIAL BEHAVIOUR AND THE SOCIO-SPATIAL RECOGNITION

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ABSTRACT:

The paper explores the relation between the real and the mental space of the inhabitants. The understanding of the interaction between the inhabitants and their houses relies upon the direct observation of the practices of the users and the interpretation of their spatial behaviours shown by the routes they choose in everyday activities. The results show that this study requires the understanding of the relationships between the spatial behaviour of inhabitants and their socio-physical recognition. We were also able to highlight the strategies and the forms of adaptation raised during the fulfilment of the action plans of the inhabitant.

INTRODUCTION:

I start this article with a quote that attracted my attention. It's actually said by Gustave-Nicolas FISHER and I translated it.

“The living space is invested by a sensory, emotional, tactile, visual, and social experience which produces a set of meanings and charge cultural values. The architectural space becomes a language that communicates a message to its occupants and its functions. Space always tells a personal and social history.”¹

The house is not only a material object, but also a place for practices and visual and physical appropriations. From this complexity arouses a real operation of reading, analysis and interpretation. The understanding of the interaction between the inhabitants and their houses relies upon the direct observation of these practices of the user and the interpretation of the appropriations.

Through this paper, we discuss the relationship between the inhabitants' behaviour and the socio-spatial recognition.

We try to answer the following question:

What is the relationship of the occupant with all the elements that belong to the part of the building where he lives concretely and its immediate environment?

MATERIALS AND METHODS:

CORPUS STUDY:

It is not a conventional corpus, but a set of case sufficiently differentiated, the main reference is made, however, with respect to two main criteria: first, relating to types of houses, and second, on the people who live there.

Our housing corpus is structured with respect to their positions in different tissues of the city (old urban area called "Medina" / new urban fabric) and their internal spatial organization.

The four types of houses which constitute our corpus study differ by the presence, the transformation or absence of the house's patio.

We tried to observe the daily practices of eighteen women (we refer to them by F1, F2, F3 ... F12) in their domestic spaces. All these women were born in El Jem, are very attached to their city and have a remarkable sociability and friendliness. They are certainly of different status but all are qualified to provide information relating to the social and cultural structure of El Jem.

METHODOLOGY:

To better make our research we relied on some key concepts from famous authors like: Alain Renier on the *conformation and configuration, the process of semiosis*, Bill Hillier on *architectural determinism*, Paul Ricœur on *the third space*, Josep Muntanola on *space-time cosmic - built*, Bakhtin on the *chronotope* ...

We proceeded in a semiotic approach and ethno-methodology domestic living spaces.

METHODOLOGICAL TOOLS:

Concerning methodology, and in order to answer our questions, we used several methodological tools : tools of data collection (observation of practical activities , interviews, survey photos ...) and data analysis tools (semiotic approach , Gestalt theory...) .

To treat these collected data, we dealt with the space of everyday life, considering **the semiotic of "significant practices "² of the occupants**, and taking note of the **temporal and spatial behaviour** of the users.

To do this, we chose to analyze a program that raises the notion of movement and course: it's about the action program "to receive a cousin or a close friend."

The semiotic approach highlights the inherent syntagmatic organization of architectural space.

We asked the "method of significant segmentation of space"³ to highlight the "relevant segments" for each spatiotemporal configuration. These segments are built on the narrative of an action being fulfilled.

By analogy to the segmentation of a text, the segmentation of space is a division manifested in spatial sequences, an operation that is performed on the syntagmatic axis. Following the development of syntagmatic chains, we tried to discern the remarkable and “noticed” elements in order to identify and demonstrate the existence of **significant constellations** forming the support of the action.

The routes and spatial behaviours of observed women lead us to make a concrete significant "differentiation" of the whole dwelling space.

We used the theory of form called "**Gestalt theory**" and **survey photographs**. We also relied on **interview survey**, since some elements considered remarkable by the actors are of phenomenal order and cannot be identified in the photographs.

The sequences of pictures are our medium through which the interviewees actually distinguish what is figure what makes the background.

RESULTS:

FRAGMENT / SEGMENT / TEMPORALIZED PLACE:

Some fragments spaces studied and relevant segments acquire **significant values** for varying period and limited time.

The acquisition value occurs in a “**temporalized**” **place** defined according to spatio-temporal features for action that takes place there.

CONFIGURATIONS ASSEMBLY / RECOGNITION:

At each place of assembly or reception there is a temporal thickness and an exchange between the woman who receives and the guest. Social encounter (between the woman who welcomes and the received) gives meaning to the architectural and surrounding space. Configurations of gathering places and of topical reception place are the "significant substance"⁴ of architectural space experience. By "Topical place" we mean the place of performance of action, is not only space of reference but also of "recognition" to a specific time of use.

Then we can confirm that we are facing a situation of **socio-spatial recognition**.

The recognition result of a correlation between physical meeting and social event.

MEETING PLACES / HOUSING TYPES:

The intersection of results retained following the work of segmentation and tracking of gathering places let us confirm that the probability of gathering is greater for houses with patios than homes without patio.

CONSTELLATIONS OF RELEVANT ELEMENTS:

Based on the sequences of photos related to various action programs, we distinguish between, on the one hand, all the **fragmental** elements that belong to the initial orthogonal conformation of architectural space, on the other hand, the only **relevant elements** that are

significant practical uses of the place. Some fragments of the space are sometimes classified as figures, sometimes as backgrounds.

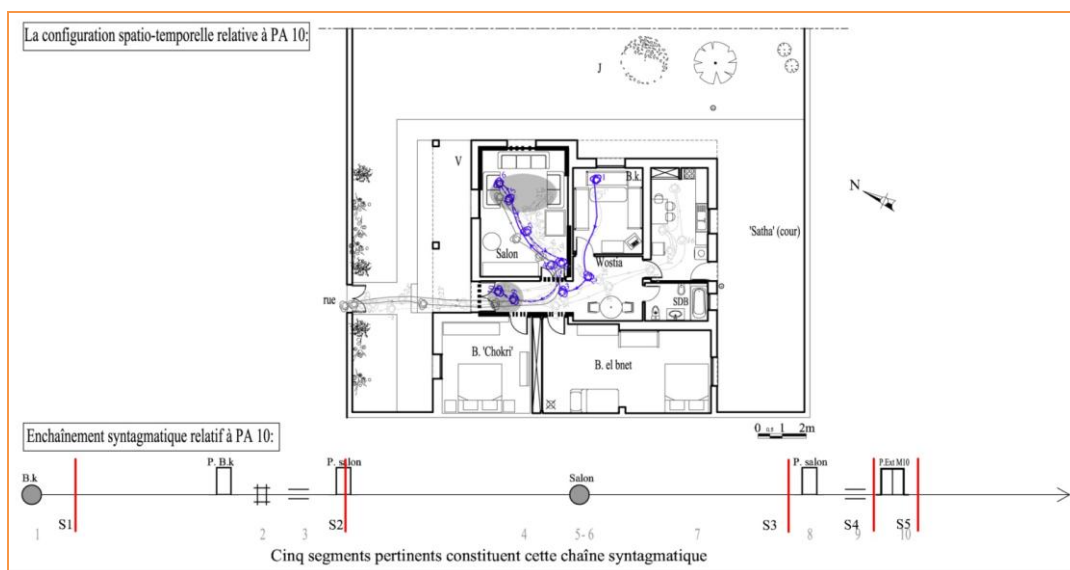
This is explained by the fact that the constellations are renewed throughout the route taken by the actor observed.

Dynamic of remarkable elements corresponds to the dynamic of the spatial behaviour of the user.

The comparison between different constellations mentally constructed also informed us about the degree of richness of route, that depends on the number of relevant elements identified by the social actor, and their phenomenological qualities.



1- The richest route: 15 segments and 41 relevant elements



2- The poorest route: 5 segments and 9 relevant elements

Some women have made us a distinction between positive and negative relevant elements.

PA	SEG	Topic places	Gathering places	relevant element	Positive relevant elements	Negative relevant elements
PA1	9	1	2	26	26	0
PA2	5	2	4	12	11	1
PA2'	9	2	3	28	25	3
PA3	9	1	4	35	17	18
PA4	10	1	4	22	21	1
PA4'	10	2	6	24	24	0
PA5	8	1	3	35	21	14
PA6	15	2	4	41	37	4
PA7	7	1	4	20	20	0
PA8	8	2	4	18	14	4
PA9	5	2	4	17	17	0
PA9'	9	2	5	35	33	2
PA6'	9	1	3	25	23	2
PA10	5	1	2	9	9	0
PA10'	9	1	3	23	19	4
PA11	9	2	3	14	14	0
PA12	10	1	4	24	24	0
PA12'	10	2	4	27	23	4

3- Relevant elements / Action program

As shown in the summary table, we note that the richer is the syntagmatic chain related to the receiving program (in relevant segments) the greater is the number of relevant elements.

This proportionality demonstrates that the interaction between the real space and mental space is more important when the course is complex.

The stronger is the relationship between these spaces, the more the actor needs spatial cues. These represent the attachment points of the action space.

Accordingly, we conclude that the structure of the performance is richer in segments and relevant elements when there is a strong fitness that is established between the action and architecture.

DISCUSSION:

The results of our research show that the remarkable elements are interacting with people observed and form the real global space of their action. The results indicate that the richness of the structure of course emanates from an agreement between the action and its spatial context.

RECEPTION PLACES / POLYPHONIC DIMENSION:

"Reception place" and "exterior doors' thresholds " have acquired a "polyphonic" dimension since they were spotted by two women welcoming living in the same house , as common meeting places and social interaction .

We borrow the concept of "**polyphony**" of literature, transposing the story to the route.

GATHERING PLACES / "SYNESTHETIC" EXPERIENCE:

All women in the corpus are socially recognized in places of gathering.

We noted architectural spaces capable of being inhabited by " synesthetic " experience, where the inherent perception to the inhabitant is associated with a multimodal sensory experience , that's to say , an experience that combines sight, hearing , touch, gestures, communication.

For example, the reception place was spotted in full by 7 women. (F1, F2, F2 , F8 , F9 , F11 F9'et) . Whole place is benchmark: there is a "condensation of meaning ."

Condensation of the meanings results of the performance quality, the architectural space quality and the quality of social encounter.

SOCIO -SPATIAL CHRONOTOPE:

Sixteen women in our corpus consider the threshold as a reference and meeting place for discussion and gathering: The thresholds are not only "temporalized" places , but also examples of **socio -spatial chronotope**⁵ characterizing the receiving program ;

By transposing the definition of " creative chronotope " of Mickaël Bakhtin (who defines it in his book: " *The Dialogic Imagination* " as link between physical time -space and space -time of a work of art) to architecture, " creative chronotope " is a tool that can detect if the encounter between the woman and her welcoming guest is of cultural richness or not.

Josep Muntanola THORNBERG and Magda CARULLA state (in their articles "Bakhtin, architectonics and architecture") there is an agreement between on the one hand , the definition of a work of art as a new "creative chronotope " capable of produce a new "context", and on the other hand , the hermeneutic analysis of Paul RICŒUR on "meaningful action"⁶ since it corresponds to a historical and geographical context .⁷

According to Paul RICŒUR, if "action" wants to reach its richest and most meaningful sense, it must fit into a cultural and socio- physical context. Thus, it can be fixed, takes a social dimension and consequently acquires an intersubjective and dialogic power.

The results of our work indicate that women detained maintained their rituals by adaption to socio-spatial-temporal context (adaptation by simplifying the course, adaptation by substitution of the course by a more suitable one and adaptation by relocation of functions). Consequently, there is a balance between behaviour and spatial recognition of social actors.

Adaptation is a dynamic process that depends on the structure of space and culture of the meeting. Socio-physical recognition is suitable to a richer architectural productivity.

The discovery of the relationship between the course and recognition has enabled us to reveal the dialogic relationship between real space and mental space. These two relationships having cultural structure.

CONCLUSION:

In conclusion, we confirm our assumptions. Domestic space lived is full of values and meanings. All elements indicated by the social actor in movement form his constellations, which succeed sequence by sequence, throughout the course. These significant items carry a positive or negative value, depending on the sensory experience of the user.

SCOPE OF THE METHODOLOGY:

The methodology we used can be useful for analyzing the impact of emerging new architecture, which tends to neglect more, socio-cultural and psychological dimensions of users.

PROSPECTS FOR OUR RESEARCH:

We can consider that the constellations and noticed remarkable elements may in turn be studied as second-order conformations.

Other interesting topics for further research suggest themselves as:

- the concept of polyphony applied to architecture
- synesthetic experience
- socio-spatial chronotope

¹ G-N. FISCHER, *Psychosociologie des espaces*, University of René Descartes, DESSY of the Environment, February 1996, p. 11. url:
http://t.gobert.free.fr/cariboost_files/fisher_psysocio_espaces.pdf

²“Significant practices” is a term borrowed from Prof. Alain RENIER

³ A. RENIER, « D'une sémiotique de l'espace architectural à une sémiotique des lieux de l'habitat », in *Architecture, Littérature et Espaces : espace du texte/espace des lieux*, Société française des Architectes, Université Paris VIII et Université de Limoges, 2004.

⁴ A. RENIER, *Valeur et valence : La dynamique des configurations de lieux à l'origine de la valence des espaces habités*, 2004, p. 2.

⁵ When an item is identified by different actors, for a limited time, he acquired a symbolic value and can be described as socio-spatial chronotope (defined by Bakhtin as a link between physical and social space-time).

⁶ P. RICŒUR, *Du texte à l'action : Essai d'herméneutique II*, Paris: Seuil, p. 184-195.

⁷ J. Muntañola THORNBERG M. WILL CARULLA, "Bakhtin, architectonics and architecture", *XIV International Congress on Bakhtin*, Bolonia, July 2011, p. 4.

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