

The boundaries of streets across time, in Saharan space

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Abstract

The way to draw a clear limits, the art of operating and to foil the passages, reports of the cultural expression mode which reflects the architecture of Saharan oasis: holder of the identity signs equally to traditional knowledge, including the famous frontiers of the public space.

“If the oasien lived a rational life insofar as he understood the components: his agriculture, his tools, his clothes”, it is not the same matter for today. From the oasis to the city, in this urbanized space, the extent of the offset between the image that offers the former spatial organisation (which reflects the daily real image of those we call Saharans), as well as the current growth theatre (which imports its models from the occidental countries, far to accommodate with the Saharan context), it is quite detectable. These spatial dynamics witnesses pertinent transmutations which operates on homes settlements in the Sahara, but also on public spaces including roads, more on the formal plan then the intrinsic practices.

Consequently, it is necessary today to wonder about the demarcation lines of roads we have inherited. Forthwith, these frontiers and limits rarely follows a linear traces to allow to discern two extended. At first glance, they alter, corrupt, and tangle giving birth to metaphors. Whence the difficulty to construct, in a clearer way the streets spaces thus define them.

This study is descriptive and explanatory of the limits symptoms to the level of the traditional inhabited space in the Sahara by a diachronic reading.

Keywords

Boundaries, Streets, Sahara, Oasis, City.



1. Introduction

Being everywhere and at all scales, the question of limit is quite extensive since it may be a spatial, temporal or social boundary; just as emotional borders seem to take an equally important consideration as physical and topographical boundaries.

Now, all agree that the limit implies an inside and an outside, nevertheless, it never ceases to be reinvented and reformulated in architecture (until contestation) or even to refer to other confines in philosophy: every door brings up a philosophy (the knowable and the unknowable, the finite and the infinite, order and chaos, measurement and incommensurability, continuity and discontinuity). Situations of boundaries are critical situations in dissociable from transformations, from transgressions (Foucault).

2. Boundaries, limits and thresholds

Since the dawn of time, man has expressed the need to define a physical or symbolic "boundary" to mark his territory, and secure it. It then marks a difference, a "boundary" between its 'inside' and the 'outside' by a visible or imaginary line.

Kant conceives boundaries in connection with the notion of limits.

For even if they both extend across borders, boundaries are considered as negative boundaries (Kant), at the moment when the boundaries represent positive boundaries to distinguish one space from another that is contiguous to it. "In all limits ... there is something positive, since the limits of the knowable always give rise to thought" Kant.

The threshold constitutes "a form of rupture, of displacement of perception." Nikolaus Hirsch. More than a demarcation line, these transition keys can squarely create a space, or arrange access. "Simultaneously, they are considered part of a limit and they can be perceived as an obstacle. The threshold phenomenon feeds on spatial ambivalence". Siedle,

Recognized as separating hinges between two contiguous zones, the boundaries make it possible to distinguish one side from the other, an interior from an exterior, or even

a top from a bottom. Limits are simultaneously openings "The limit is not what something ceases, but, as the Greeks have observed; it is from what something begins to be" (Martin Heidegger, 1958). However, the boundaries mark the beginning and / or end of an extent, the passage from one place to another, and therefore an intermediate situation. However, this notion of passage expresses relations, not necessarily physical transitions, which are effected implicitly or explicitly.

3. Treatment of boundaries in the Saharan area

The vernacular establishment in the Sahara is hardly the result of chance, since it reflects society in its customs and customs, adjusted to the conditions of time and place. The model produced recently: "the ksar", administers a specific organization that maintains complex causal relationships, as well as logic of organization dictated by the hierarchical social structure. Hence the hierarchy in all the systems that make up the built structure, the limits of which (successively from the urban scale to the architectural scale). Hence the hierarchy in all the systems that make up the built structure, the limits of which (successively from the urban scale to the architectural scale).

3.1. Limit by natural environment

3.1.1. Limit by nature (water, vegetation and sand dunes)

The architecture of the oasis space conceives at the outset establishments confusing external nature with sheltered habitat (interior), in order to make the in dissociable human society and natural environment evident, and to deal at the same time with the limits which regulate relations with the world outside.

Since the transition from the oasis to the Europeanized village, the formal attributes of the establishment in the Sahara are changing. "The city, in its organic elements, moves. Its main part moves outwards, with respect to the nucleus of formation " (Poet, M, 1979: p107). In this new production, we see that agricultural space is fading away, and instead of limiting the city,

it is rather limited on both sides by urbanized spaces. From now on, the city is developing in all directions and without specific borders.

3.1.2. Limit per slope

In spite of the infinite extent, in spite of the supreme aridity, this earth is inhabited by life. The societies struggling for survival, became lords in the transformation of the Saharan reliefs into oases; endowing them with architectural exceptionalities.

Being located in zones at risk, as bordering on the wadi (water: a condition sine qua none of survival in the Sahara), the morphology of the ksar tries each time to adapt to the local natural environment. Therefore, in order to avoid catastrophic floods, the traditional ecological know-how imposes to settle on a sloping relief rising the wadi.

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3.2. Limit by walls

It must be borne in mind that the precincts of the ksar as a boundary of inhabited space were imposed by the concern for defense against external attacks. It is a physical barrier that prevents intrusion. The rampart limits the enclosed interior space, allowing the reading of the characteristics of this territory. As an element of landscape reading, this limit contributes to the

composition of the landscape; favoring by its color, the coherence and the integration of the building to the natural environment.

The spectacular growth of the city calls into question the traditional attitudes towards the notion of limit, and consequently imposes new modes of thought. Today, it is no longer a question of locking the city in a wall as a traditional operation. Yet, as Marcel Roncayolo notes, “the walls persist in the minds even when they are materially destroyed.”

The dynamics of the city leads to the systematic rejection of boundaries, since it is less defined as a finite unity than as a place that brings together beings with their dreams, ambitions and dailies. The rampart becomes thus, an element of the history proper to a given epoch.

3.3. Limits by the streets or how do the boundaries fit the street?

From the inhabited space are organized directional ruptures and successive thresholds. Ruptures, changes in direction, crossing sensually strong with loss of orientation, create an impression of obstacles for foreigners.

The sharing of inhabited space in the Sahara is generally done in districts delimited by main streets. The succession of streets and narrow streets, designated by droub, subdivides the whole into groups of families which it delimits by neighborhood. Each derb distributes houses belonging to the same family and takes the name of this family accordingly.

3.3.1. The streets of the boundaries, filtering

The dark and sinuous depth is a particularly necessary value in the design of the streets, to organize visual ruptures from the outside of the fabric, and to counteract any strangeness access to this ksourian micro-space. The limit is here marked by the dark color contrary to the contemporary work of Sou Fujimoto where the limit is created by light; see Figure 1.

This boundary processing between inside and out shapes a filter. This is an ability to set limits while promoting passages.

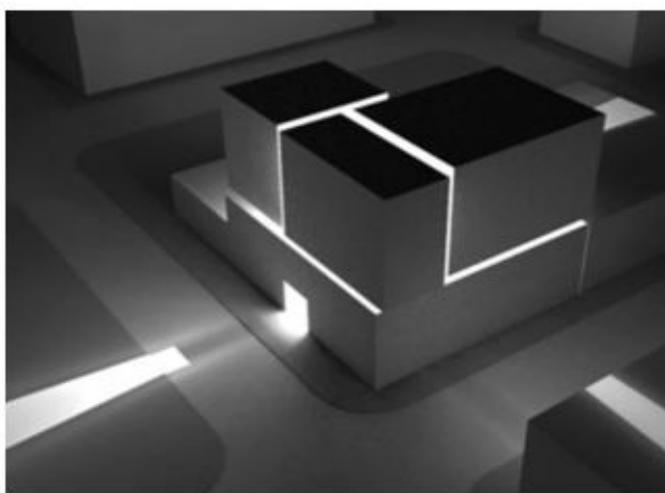


Figure 1. Filtering limits by light Work of Sou Fujimoto Ksar of Kenadsa.

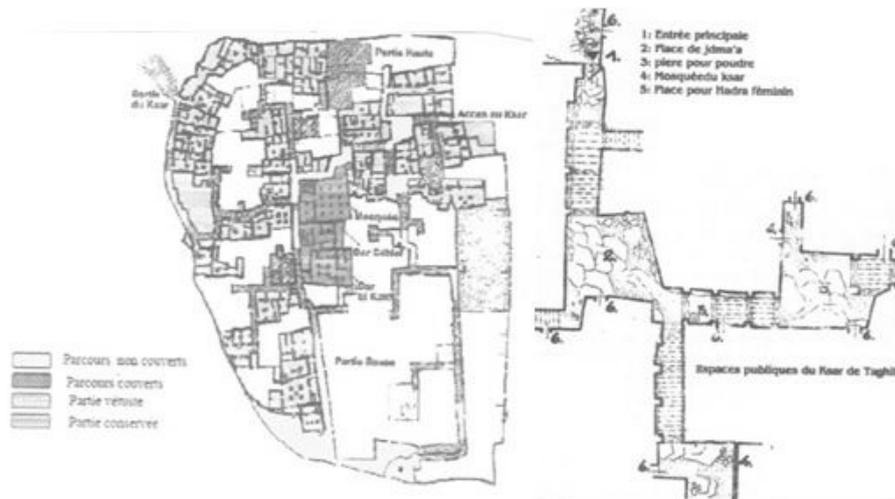


Figure 2. The limits preserve the intimacy of the houses but allow the communication between inhabitants.

3.3.2. The streets of the limits guaranteeing privacy

The walls of the streets indicate in the first place the boundaries of a private space. Sign the change of status from public to private. Behind these blind walls are the lives of the common families. Robert Frost (1874-1963) in “The repair of the wall” informs us that “good walls make good neighbors”.

As a transit point, these dividing lines allow the communication between inhabitants, especially in the halts (places) see. “The borders reinforce the social relations. »J. B. Jackson

The chicane entry (skifa) for the house, as well as the gateway to the city, is rather intermediate moments (thresholds). Kahn in *Hermès* passes, or the ambiguities of communication comment: “At the crossroads, at the gates of cities and houses, at the locks, he occupies the boundary of the place, the frontier of the domains, and takes place where one meets the change: strophaios, it not only pivots the door on its hinges, but also the man on that dividing line, helping him to switch from within to outside”. (Kahn, 1978)

3.3.3. The streets: limits by continuity

By their constant heights, their uniform local materials drawn from nature; and their unique and harmonious color, the walls that limit the streets contribute to the homogeneity of the whole. Even the color of the earth that clothes the soil contributes to the unity of the whole

(which is a limit by the unification of color. This ensures continuity along the hierarchical streets in spite of the repetitive mazes, and consequently preserves the sense of security of the inhabitants.

The design of the inhabited space in the Sahara, naturally conceived by the inhabitants themselves and almost lost in the city today, see Figure 3 and legibly sought after in contemporary architecture.

3.4 The boundaries of streets

In the past, the walls of the streets were blind throughout their length. There was no opening on the surface, since the houses were introverted (only the central patio lit up and ventilated the rooms that were organized around it. But, if necessary, the inhabitant conceived very small very high openings, so as to obdurate the sight of passers-by. Thus, and in order that people do not exhaust them by borrowing them, it was a question of sometimes constructing built-in benches. The access doors to the houses were low imposing the lowering of people, in this case of sight. These



Figure 3. Boundary by continuity in a contemporary work.

breakthroughs were alternately dark and then clear, this is a way of activating the passerby in some very narrow sections, and excluding strangers.

The mazes that followed the streets knew how to thwart the violent sand winds.

To favor the intimacy of inhabited space, to exclude the access of strangeness, to outwit severe climatic parameters, are all parameters that no longer find their place in contemporary fabrics. Which plague the Western models, and ignore the climate and the local culture.

4. Conclusion

The limits are inseparable from the formal system they envelop, and are meant to restrict depth and infinity. In the Saharan oases, the formal system is perfectly unitary and homogeneous. It defines a harmonious relationship with the natural environment that limits it. The boundary which the latter constitutes is a kind of familiarity, of amiability, the sign of recognition of the environment.

The frontier made by the separative rampart of inhabited space is one of the bases of the grammar of societies to set limits from the outside.

The boundaries of the streets, as far as they divide the entities, prove to be connecting structures; as far as they stop, allow the passage, it surpasses it if necessary.

Thus, the paradox of the limit of the streets, notwithstanding its role as a barrier by the play of light and darkness, by the narrowness of its dimension, by the sinuosity of its layout, ... it remains transitional (it is surpassed if needed). "Every border exists only to be crossed" Edouard Glissant.

In the oasis culture, the perception of the streets as a boundary between inside and outside, guaranteeing the intimacy of inhabited space (thresholds not to be exceeded), fades in the Europeanized city, and become

tracks open to all, in response to an urbanism imported from elsewhere where the construction of interminable limits such as the fences of residential cities whose simplistic objective is to separate the spaces. "We build too many walls and not enough bridges" (Isaac Newton).

References

Ancel, J. (1938). *Géographie des frontières*, Gallimard, Paris.

Bisson, J. et Jarir, M. (1986). *Ksour du Gourara et du Tafilet. De l'ouverture de la société oasienne à la fermeture de la maison*, Annuaire de l'Afrique du Nord, tome XXV, Aix-en-Provence.

Echallier, J.-C. (1968). *Essai sur l'habitat sédentaire traditionnel au Sahara algérien*, Edition IUP, Paris

Foucault, M. (2001). *Prefácio à transgressão, Estética : literatura e pintura, música e cinema*. Organização e seleção de textos Manoel Barros da Motta. Tradução : Autran Dourado. Rio de Janeiro : Forense Universitária.

Heidegger, M. (1958). *Bâtir Habiter Penser*, in Heidegger, M., *Essais et conférences*(traduit de l'allemand par André Préau), coll. « Tel », Gallimard, Paris.

Hirsch, N. (2007). *On Boundaries, Lukas & Sternberg*, New York.

Jackson, J. B. (2003). *À la découverte du paysage vernaculaire* (traduit de l'anglais par Xavier Carrère), Actes Sud/ENSP, Arles/Versailles.

Kahn, L. (1978). *Hermès passe, ou les ambiguïtés de la communication*, Maspero, Paris.

Poet. M. (1979). *Introduction à l'Urbanisme*, Seuil, Paris.

Roncayolo, M. *Les murs après les murs. Réalités et représentations de l'enceinte XIXe-XXe siècles : deux cas français*, in Roncayolo, M. (2002). *Formes des villes, Nantes, Ville Recherche Diffusion, Ecole d'architecture de Nantes*, pp. 160-181, multigraph., p.167

Veran, C. (2010). *Comment clôturer sans fermer les villes*, Le Moniteur.