# THE INTEGRATED BICULTURAL REFERENT OF THE BUILT COLONIAL HERITAGE: SOCIAL HOUSING MODELS IN ORAN (1954-1958), ALGERIA

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#### 1. Introduction

The French colonial built heritage of the 20th century in Algeria is little addressed by political discourse and is not considered as a component of the cultural and patrimonial identity of the country. In this context, the city of Oran has witnessed significant urban and architectural growth since the 1930s based on a prosperous mid-century economy and capital inflows from the inner countryside as well as from France. As a result, the construction sector called for a considerably larger workforce. This led to a massive influx of rural labor which added to the city's existing population and further heightened the need for the provision of adequate housing. The rehousing of the rural or urban indigenous population with limited incomes required new housing models. Specific housing design solutions attempted to respond to the local lifestyle. At the same time, derivative models were designed for other ethnic groups (European and Jewish). These projects, carried out initially in Morocco, were widely published and publicized as part of the modern vernacular movement [1]. Indeed, they were part of the various "experiments" undertaken in North Africa by metropolitan architects, supported by liberal politicians. The work of these architects was in symbiosis with the International Modern Movement precepts and ideals of socio-cultural models which dominated the architectural production of that time.

Nonetheless, the limits of the spatial solutions should be noted, particularly their relation to the historical, cultural and material referent that pre-existed the suggested design. Presently part of the local architectural heritage, the models generated to respond to the needs of the local population are not considered to be of cultural relevance, despite the urgency to react adequately to the accelerated urban growth that resulted from the increase in population and the rural exodus [2].

In this regard, this paper addresses social housing models built in Oran, Algeria, between 1954 and 1958, as components of modern postcolonial heritage. The study examines four representative housing models: the *Nid d'abeilles, Sémiramis* buildings and their two derived models, *Trèfle* and *Brunie*. The *Trèfle* apartments were a notice-

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able exception as they were intended for European officials, whereas the other three were dedicated to different economic and social categories of the indigenous Muslim population [3].

It should be stressed here that the historical value of the addressed housing models may not provide the only basis for heritage recognition. In fact, the models are assumed to be a bicultural hybrid response and as such, may potentially serve as a vehicle for the production of more fitting current housing. There is therefore a need for a critical analysis of its qualities and shortcomings. Ultimately, the analysis carried out in this paper aims to identify the mixed heritage as the evolution of a cultural identity model that is not necessarily dictated by postcolonial political ideology or defined by a colonial scholarly thought, but informed by social dynamics.

### 2. Methodological approach

The methodology relies on a historical approach to the colonial period as well as a qualitative survey of the current housing condition. The combined approaches provide on the one hand, an understanding of the temporal and spatial evolution of a culturallybased architectural expression formalized by architects, and on the other, the double role played by the local community in the housing projects under review. First, it explores the influential contribution of the local culture in shaping architectural models as perceived by Western designers; then, an investigation is made of the reactions and changes that the same community made to what was specifically designed for them.

Both approaches are based on the "cultural transfer" concept. The theoretical framework and related concepts are developed from two disciplines; history and psychoanalysis. This conceptual framework is believed to be a potential theoretical contribution to the historical analysis of the inherited patrimonial built environment.

For this purpose, the approach relied on two tools: at its inception, a monographic work, based on rarely explored archives and literary sources from the colonial period [2]. The main resources came from magazine archives [3- 4- 5- 6] and publications on architects' work [7]. This first investigation allowed a better understanding of the original typologies, and thus, their successive developments. Subsequently, survey data were collected through field observations, photographs, surveys and semi-directed interviews carried out with 10 inhabitants for each project, 40 interviews in all. The interviews with the inhabitants addressed four main spatial components in relation to:

- accessibility to the building
- accessibility to the housing unit
- organization and use of the main housing spaces i.e. courtyard or central space
  - openings and external spaces i.e. windows, balconies and loggias

The objective was to verify the evolvement of the spatial components based on the location, the organization of the various physical components, the function, and the spatial and functional transformations.

This research unfolds in four parts; first, the concept of cultural transfers is addressed in relation to the research objective of this study; second, the representation of cultural identity by both the present political ideology and architects is explored; third, a historical analysis of the colonial models is carried out and finally, an analysis of their postcolonial transformation is presented.

#### 3. Cultural transfers

Cultural transfer is widely discussed in anthropology and psychology, particularly in terms of its contribution to the construction of the general theory of acculturation [8]. However, this concept remains relevant in historical cultural studies, as is evident in the significant works of Michel Espagne [9-10]. In this regard, and drawing experience from various historical studies, prevailing research methodologies are revised, allowing the redefinition of concepts such as intermixing, hybridization and translation to be applied to complex cultural systems [11]. Giving a new meaning to the transferred elements generates new forms of hybridization and intermixing [12], which in turn provide opportunities for a continuous renewal of the multiple cultural resources available to the specific society [13].

Methodologically, the cultural transfer concept explores two aspects. First, it explores the role of stakeholders, namely the architects through their thoughts and the local users through their social practices. It assesses the flow of transfer between two cultures and their superimpositions [12]. Indeed, the legacy transferred from local and western cultural representations involves a process of continuous reinterpretation [13]. In architecture and urbanism, these influences are reflected in the transfer of styles to generate new local and regional models [14]. This transfer into a new context generates a new meaning and role of the translated elements, since "translation can be considered as a borrowing, importing or exporting of cultural items. It allows one to describe and think about the cultural property transition between areas and to define the intermixing" [15].

On the other hand, the transfer of imposed cultural references, as in the case of colonies, raises more complex questions about the impact of these references on local and Western players. It also questions how well these references are identifiable and appropriate. To this effect, "the analysis of cultural transfers is an effective heuristic tool to identify the manifestations of cultural imbrications. Without providing a global explanation, it makes it possible to re-evaluate and highlight the part played by foreigners in the construction of national identities. It operates a change of polarity and places the relationship between stakeholders at the center of self-reflection" [15].

In this regard, the method uses psychoanalytic concepts to explain spatial translations of local and western cultures as expressed by architects and users. This approach brings a critical view to the interpretation of production modes and appropriation of spatial configurations. It refers to Lacan's work on the concepts of *signifier* and *signified* [16] and their applications to physical space.

The interest of the contextualized approach lies in the observation of a superimposition of spatial "signifiers" and "signifieds" [16]. 'Signifiers' are defined by formal representations resulting from reinterpretation of the culture of the 'other' [16]. 'Signified' corresponds to specific or appropriate spatial components defined by a given society that has its own codes [16]. In the case of this study, these indicators are used in both the historical and spatiotemporal analyses. They examine the combined characteristics of the transferred representations. The aim is to make this space a language and not a simple built environment [17].

Therefore, the cultural referents analysis and their interweaving will be codified as follows:

signifiers: only the local architectural form is borrowed. This implies a non-integrated cultural hybridization;

signified: draws directly from the organizational structure and functions in relation to local cultural codes and needs that represent an integrated cultural blend.

# 4. Cultural identity between political discourse and architects' representations

The built heritage of the French colonial period testifies to the evolution of lifestyles and enriches the historical value of the city [18]. It represents a past that has left visible traces and continues to exert an influence on the present [18].

After the country's independence in 1962, the lack of official recognition of the colonial legacy may be justified by the relatively recent attempt to construct a national identity, a rather short period compared to the one hundred and thirty-two year-long occupation, during which a devastating depersonalization process through assimilation and acculturation of the local population was put in place [19]. However, this is not the only reason for the current political denial of the colonial heritage. Indeed, deep ideological convictions, political opportunism or intellectual laziness have developed a self-centered cultural paradigm [20], clearly expressed in legislation. National Law No. 98-04 of June 15, 1998 [21] on the protection of cultural heritage refers, through the notion of "cultural property", to the vestiges passed on by the various civilizations which succeeded one another. Nevertheless, the reference to urban and rural ensembles is reductionist and partial because they are limited to traditional Islamic elements such as "*Medinas, Casbahs, Ksours, …*" [21]. Political ideology identifies them as expressing knowledge and practices based on tradition. They are, therefore, the only recognized spatial expressions representative of official cultural identity.

Comparatively, the built heritage of the French colonial era infers marginal interest and consideration in terms of a recognized and accepted local heritage. Yet the buildings, spaces and cultures, identify Algerian cities as a completely mixed aftermath [19]. Therefore, it is important to review how traditional models were integrated into their design during the colonial period. It involves identifying the conditions and ways in which architectural representations are accepted and adopted by society and thus, qualify as being integrated into the cultural construction of the material heritage.

To that end, the study of the social housing historical context should provide a general understanding of the different translations operated into the resulting design models and later popularized at the 1953 Ninth Congress of the *Congrès Internationaux d'Architecture Moderne* (CIAM) in Aix-en-Provence, France. Under the direction of Le Corbusier, projects and proposals were carried out in Algeria and Morocco, defining the basis of a housing typology adapted to modern conditions. In this context, the studies attributed more importance to anthropological investigations by exploring the self-constructed habitat. They considered the lifestyles and socio-cultural needs of the local population that settled in cities.

The first prominent example of this new design was a project by Roland Simounet [22], the CIAM-Algiers group's most well-known representative. He proposed individual duplex apartments with loggias that attempted to integrate the social characteristics of the local population [22]. However, the urban organization, developed according to an organic structure resembling that of Algiers' old quarters, *La Casbah*, with narrow streets, was considered conducive to popular revolts. It was thought to be inappropriate for colonial control [22] and therefore could not constitute a universal modern model. Conversely, the study carried out in Morocco, under the leadership of the Urban Planning Department's head, Ecochard [23], had a different interest and was well received by CIAM members. The team, composed of the GAMMA (Group of Modern Moroccan Architects), which is affiliated with the CIAM and the ATBAT-Africa agency, was managed by Bodiansky and animated by Candilis. They offered units with doubleheight patios on the facade, superimposed over each other. But the vertical development (Candilis referred to the desert fortresses called *Ksours*) reveals the ambiguity in the use of the courtyard or patio. The courtyard is specific to a horizontal rural habitat, whereas the patio is associated with an urban dwelling, as it could be developed vertically.

Consequently, if the courtyard is a passageway, between an exterior and an interior, the patio (also called *Wast-Eddar*, center of the house) plays a rather more complex role [24]. Beyond the essential role of aeration, lighting and receptacle of social interactions, the patio allows the distribution and the organization of rooms and service spaces. However, the exteriorized space on the façade separates it from its functional role. The formal reinterpretation of the modern Muslim house by Candilis and his team seems to be strongly influenced by Le Corbusier's work and can be interpreted as the result of his tenure at his former employer's office.

In fact, "the complex structure of the vertical buildings designed by Candilis and his team is derived from Le Corbusier's first vertical alveolar duplexes in 1925 in combination with Ecochard's requirement to provide incoming Moroccan families with a courtyard, in which sanitation fixtures and washing facilities, such as toilets and kitchens were incorporated" [23, p. 243].

It should be noted that these models were transformed by architects after their implementation in Morocco. The analysis will discuss the relevance of the proposed design.

#### 5. Models in colonial times: cultural interweaving

# 5.1.The Nid d'Abeilles and Sémiramis housing; the hybrid and non-cultural model

The first attempts of adapted social housing models in the North African colonies were initiated in Morocco by Ecochard and Candilis, the most representative being *Nid d'Abeilles* and *Sémiramis*. These models found a wide field of expression in Oran and later in several cities in western Algeria. The project was initiated in 1954, under the supervision of a control structure, *Ia Société Coopérative Musulmane Algérienne d'Habitation et d'Accession à la Petite Propriété* and a design firm, called *l'Office Privé du Logement Familial* which was hired for the project. The latter happened to be also the subsidiary of the *Atbat* in Oran [3]. The projects, on a fixed budget contract in Oran, were to be directed by Candilis and two partners, Marcel Mauri and Denis Pons [3].

Between 1955 and 1956, the first project was finished in a plaza called *Korte*, one year after that of Casablanca. This relatively short period made it possible to review the shortcomings noted in Casablanca so as to better adapt the project in Oran. However,

the plans maintained their system of distribution and articulation. The cells of the northsouth bar (in the case of *Nid d'abeilles*) replicated the pattern of circulation via northfacing corridors, and double-height patios on the south side. One design change occurred by separating the kitchen from the courtyard in Oran's plans. This change is in contradiction with what was reported in the *Chantiers magazine*. The separation of the kitchen was meant to respond to the climatic conditions of inland cities [3] (Figure 1).

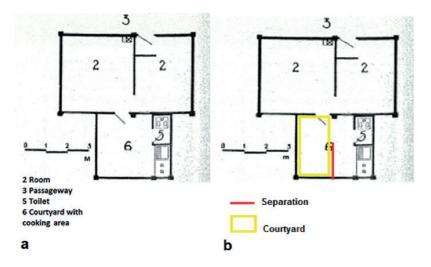


Figure 1: Courtyard evolution in a Nid d'abeilles unit!: a) the original model showed a back side courtyard that does not act as a transition to the rooms; b) transformations during construction in Oran's project: defining a smaller but independent courtyard by separating it from the kitchen and toilet. (Source: a) Chantiers 32, 1959; b) Chantiers 32, 1959 with identification of changes by Authors - legend).

Moreover, the unit plans of the east-west building (*Sémiramis*), which were thought to have been improved [3], were modified after the first experience in Morocco. Here, the architects added a room to the two existing ones and fitted in a corridor and toilet which were previously located in the courtyard. These transformations changed the relationship between the living spaces and the courtyard (Figures 2a and 2b). As explained above, the first models express a formal reinterpretation of the courtyard. The architects reused it in Oran as a signifier, expressed essentially through a facade component. The courtyard has progressively been separated from the other spaces, losing its traditional organizational and structural role. These transformations bear witness to the evolution of the lifestyle and inadequate reinterpretation of the traditional courtyard. Candilis states explicitly in his commentary:-

"The expression of individual housing, the cellular structure of the *Nid d'abeilles*, is a comprehensible and usually very simple means of articulating the exterior facade of a building. In economic housing in North Africa (*Place Korte, Terrade*), this expression takes the form of individual patios" [7].

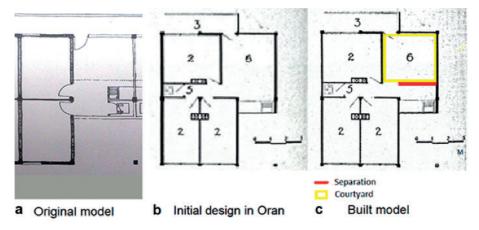


Figure 2. Courtyard design modification in a Sémiramis unit: a) the original model included a front side courtyard connecting the rooms; b) transformation in Oran design: addition of a corridor for room access; c)transformation in Oran built model: kitchen separated from the courtyard. (Source: a) AA 57, 1954; b) Chantiers 32, 1959, c) identification of changes by Authors - legend).

# 5.2. The Trèfle development: the mixed model

The *Trèfle* model was derived from local home designs developed by Candilis in Morocco [4]. It was among the first expressions in Oran, in 1954, and contemporary to the Casablanca projects. This type of model seems to present a certain quality in the search to adapt to the urban context. Hierarchical transitions are carried out by a set of articulated devices such as different levels, the courtyard, and the raised street on the façade side (Figure 3).

The staircase, integrated into the façade, serves one unit at every split-level. However, the unit presents a different configuration, compared to the cell intended for the local population. A mutation was observed in the distribution of rooms and service spaces: instead of being adjacent to a courtyard, they are organized around a multipurpose central space, a living space for meeting, taking meals, playing, etc. Intended or not, this type of space planning is close to that of a patio in the traditional local house in terms of its multi-functionality and organizational role.

The staircase serves one dwelling at each half-level, thus offering some privacy, yet the unit's configuration is different from the indigenous model. The rooms are organized around a versatile central space intended for living, eating and socializing. This arrangement developed, either consciously or unconsciously, is close to that of the traditional Islamic house. In all, it is assimilated to the organizational role and function of the patio. For this purpose, the central space constitutes a signified reinterpretation that responds to organizational and cultural needs. On the other hand, the connection of the unit to the exterior is via a large loggia on the west side and a balcony with substantial proportions on the east side. These elements, specific to the European way of life, express the Western spatial signified, which seem to respond to the needs of modern mixed housing (Figures 4a and 4b).

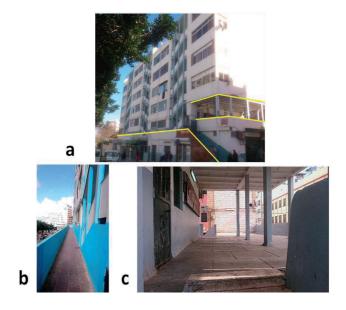


Figure 3. Transitional design elements from the street in the Trèfle building: a) An overview of the transition in building design elements (stairs, raised passageway, covered courtyard); b) raised passageway; c) covered courtyard (Source: Authors).

#### 5.3 The Brunie Apartments; advanced or hybrid model?

The Brunie Apartments, the fourth case study investigated in this research, express a continuous reinterpretation of the models on both sides of the Mediterranean Sea. It represents an evolution of Candilis' thought if one considers his experience in the design of such buildings. The *Operation Million* project, which he developed with his agency in Paris, was re-adapted to the local context by the architects Mauri and Pons [3]. One of the first achievements of this type was realized in the *Brunie* neighborhood, in 1956. The houses, intended for Muslim officials, borrow certain characteristics from the Trèfle housing: a reduction in the number of units served by the stairs (two or exceptionally four for each level) and the interior configuration of the buildings arranged around the central space (Figures 5a and 5b).

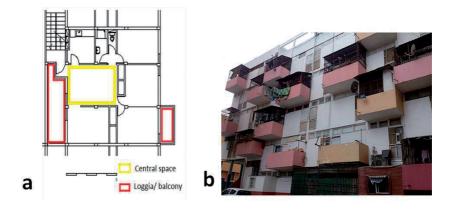


Figure 4. Interior and exterior building components in the Trèfle unit: a) plan identifying central and exterior components; b) balconies on the inner façade (Source: Authors).

However, balconies were kept on the front facades only, which represent 28 per cent of all housing (Figure 5b). This compromise had an impact on the overall quality of the units, given the obvious usefulness of this space. However, it should be noted that the cost of this model was intentionally reduced in Algeria to 900,000 FFs, compared to the 1 million FFs allowed for similar units in metropolitan France This lower price may explain the omission of some outdoor building elements. In this case, the partial reinterpretation of the bicultural components qualifies them as signifiers.

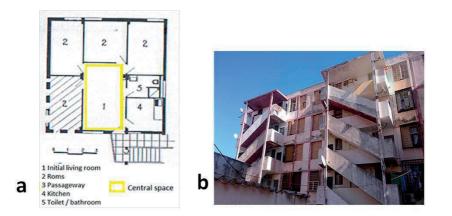


Figure 5. Central space in a Brunie unit: a) the plan identifies the central main space and its organizing role; b) the absence of balconies or loggias along the façade prevents any potential future space usage. (Source: a) Chantiers, 32, 1959; b) Authors).

# 6. Models in the postcolonial period: permanence of the signified and mutation of the signifiers

The observations, surveys and interviews carried out in 2016 / 2017 in 10 units of each housing development reveal contrasting transformations, either in the form of mutations, maintenance or evolution of the original designed ones. The field investigation aims to verify transformations or adaptations of models inherited by local users. They reveal the evolution of the *signifiers* and the *signifieds* identified above corresponding to hybrid and mixed models. The analysis enables the identification of the spatio-cutural composition that responded best to the needs of the local community as well as representing its cultural identity

# 6.1. Nid d'abeilles and Sémiramis; mutation of hybrid signifiers

The upper level apartments of the *Nid d'abeilles* are accessible via a central open staircase and a long narrow passageway. The on-site survey indicates that the residents appreciate the exterior open staircase but not the passageway. As a result, on almost all levels, the original occupants raised a significant portion of the parapet (Figure 6). This transformation generated an appropriation of this space, when it was possible, occurring mainly for the end passageway units (Figure7).



Figure 6. Elevation of the parapet in Nid d'abeilles building for more privacy (Source: Authors).

This modification expresses a quest for privacy right at the unit's threshold. This modification seems to attempt to replicate the *Skiffa*'s role in the traditional urban house. The *Skiffa* is a separate space that protects the visual privacy of the patio from the exterior. However, the reinterpretation of this space in the *Nid d'abeilles* unit is expressed by a wall panel within the main room (Figure. 1). As a result, this spatial translation does not respond to the need for privacy.

In addition, the southern courtyards, intended to provide light and ventilation for adjacent rooms, underwent fundamental changes made by the occupants, which affected their form and function. The double height is reduced by half and is expressed in the different types of closures, which are permanent, partial or full. Currently, the annexed space was used to accommodate a bathroom, a shower or a protected drying rack. In most cases, the wall separating the yard from the kitchen has been removed to install appliances or a multifunctional table (Figures 8a and 8b). This mutation dissolves the climatic role of the courtyard and engenders an unhealthy housing environment due to limited access for ventilation and natural sunlight.



Figure 7. Appropriation of the passageways in the Nid d'abeilles building as a result of an elevated parapet (Source: Authors).

On the North façade, the raised openings, as designed in the original Moroccan model, were eliminated by the architects in the Oran projects [5]. They had to guarantee, among other things, the ventilation of the rooms [5]. We suppose that the modifications made on the kitchen side of the unit necessitated compromises such as the suppression of the openings on the north side (in view of the tight project budget). Abandoning these building elements negatively impact on comfort in the unit, leading to high indoor humidity. It is important to note that this discomfort is also exacerbated by the lack of insulation, as the exterior wall is made of a single layer of hollow brick without any insulation and a low level of daylight, a result of the deep recessed rooms in the south facade.

According to the first results of our analysis, the model represents a mere cultural hybridization of *signifiers* and does not provide an organizational and functional structure adapted to the evolution of the local culture. The same transformation process was observed in the *Sémiramis* apartments, where the corridors and the private courtyards curtailed their traditional multifunctional family uses. The changes involved the appropriation of the passageways playing a new role - a transition to private spaces. In this case, they replaced the traditional vestibule (*Skiffa*) that precedes the private courtyard. This taking over of an originally public space often started as an outdoor space for drying clothes (Figure 9a). Nevertheless, being larger than those of the *Nid d'abeilles* model, the passageways were not completely closed but secured with metal

grilles. Others were partially covered with a roof to accommodate a bathroom and a toilet (Figure 9b). The encroachment on public space is completely different on the top floor. Here, the inhabitants self-appropriated the roof to accommodate their extended family (Figure 9c).

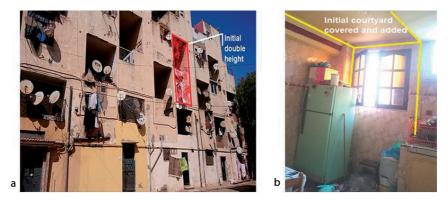


Figure 8. Courtyard transformation in the Nid d'abeilles appartments: a)view from the outside; enclosed area reduced from double to single height as an extension to the inner space; b) view from the inside, where the courtyard was added to the existing small kitchen (Source: Authors).

In general, the height of the openings was maintained despite the fact they interrupted the view to the outside. The interviews reveal that the users have usually given priority to privacy despite the feeling of confinement. The narrowness of the rooms (2.50m wide) and their cluttering with furniture prevent any modification with fixed features. In some cases, they are merged into a single area to become a large multifunctional living room.

Although this model also presents ambiguities in the local cultural translation of building elements, the separation of the courtyard from the access to the bedrooms and the lack of service spaces (such as the bathroom and storage space) generate a partial occupation of this area. As a result, its functional role is lost, and the organization of the cell is not optimized.

These buildings are in a state of advanced deterioration. Their occupants do not identify themselves with this type of habitat. In their remarks during the survey, they wish for a better living environment than these models, which are thought to express misery and discomfort rather than modernity.

#### 6.2. Trèfle; persistence of mixed cultural signified

In the *Trèfle* apartment, a different type of behavior has been observed. The occupants appreciate the spatial transitions offered by the staircase, the courtyard and the raised street. Without using additional partitions or raised walls, these building solutions act as boundaries that create semi-private spaces and avoid any risk of intrusion. At the level of the unit, different arrangements have been made by occupants to adapt to their needs, without generating major physical changes.

The central space continues to function as a living, meeting, eating and play area.

If, in some cases, it is not arranged as the main living room, the adjacent room which overlooks the loggia becomes a reception room, a major space in local culture. On the other hand, the large storage area between the rooms allows flexibility in the modification of their accesses or their extensions to favor peripheral paths (Figures 10a and 10b).

The loggia in the front façade presents a generous surface of 9m<sup>2</sup> bringing light and ventilation to the central living room as well as allowing multi-usage, for example, as a living room adjoining the central space, a play area for children or a household service. Its original access from the central space is often abandoned and reoriented towards the front door. Balconies also become service spaces due to their large surface areas (4.5 m<sup>2</sup>). However, for practical reasons and privacy, they are systematically covered and secured by the occupants using grilles or wire mesh (Figure 4a).

The modification is atypical as it is appropriate to current representations and the local way of life. The L-shaped openings that frame the façade have been filled. Only the central section is left open and accessible. This redesign corresponds to the cultural and functional needs of the occupants.



Figure 9. Passageways and courtyard appropriations in the Sémiramis building: a) occupation of passageways as a cloth-drying space; b) partial occupation of the courtyard; c) courtyard transformation, enclosure / small staircase built for the upper level (Source: Authors).

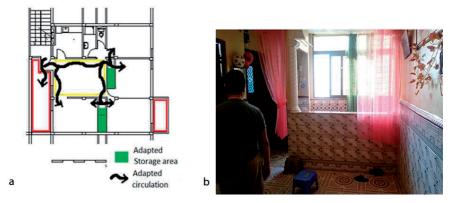


Figure 10. Accommodation of access and circulation in the Trèfle Housing unit: a) maintain preservation of spatial relations as a result of the central location of main space and a large storage area; b) change of loggia access depending on its use (Source: Authors).

Apart from the recurrent complaints about antiquated utility services, the residents appreciate the conviviality that their urban and architectural environments provide. They would, however, like an additional surface at the entrance to preserve privacy. These dwellings, originally intended for a European population, continue to function without major changes. The persistence of certain spatial components reflects their ownership and acceptance by the population.

The central living space, completed by the external space components identified above as cultural mixed *signified*, appears to be suitable to the occupants' culture and contemporary needs.

#### 6.3. Brunie; mutation of hybrid signifiers

In contrast, the reaction of the current population of the *Brunie* development is more radical. At an urban level, the limits of the built area are not clearly defined.

This situation has engendered large-scale illegal occupation of the external spaces by extending the inner private space or by creating enclosed courtyards on the ground floor. The passageways are exploited randomly, depending on the opportunity: drying racks, or appropriated as entrance extensions that were missing in the original design (Figures 11a and b).

In the apartment, although there is a central space, the absence of loggias or balconies constitutes a daily constraint. According to the descendants of the first *Brunie* inhabitants who still occupy their parents' units, initially, outdoor drying racks, grouped per 4 units, were planned in the back yard of the development. They were intended to replace the outer extensions of the unit (such as balconies or loggias). But they were soon abandoned due to their lack of privacy and distance from the unit.

The central space (contrary to what was observed in the European model) is not complemented by loggias or balconies. In this case, the suppression of external components makes the hybrid *signifiers* inappropriate for the inhabitants' contemporary needs. The inhabitants complained about the lack of basic spaces essential to the

proper function of the unit. As a consequence, the smaller rooms serve for drying clothes and are often congested by cupboards. Many homes are rented to students or young couples for short stays. In the owner-occupied units, there is a general hope for a rapid relocation to better accommodation. They expressed no regrets at the prospect of leaving this housing complex that is presently experiencing a high level of deterioration.



Figure 11. Appropriation of the passageway in the Brunie housing: a) view of passageway appropriation; b) view of the other side, same appropriation (Source: Authors).

#### 7. Conclusion: the intermixed cultural referent of the built heritage

In the fifties, new forms of public housing resulting from cultural interweaving were developed and adapted to suit the local population of occupied North Africa. Some models could constitute a built cultural heritage. They are representative of the local cultural identity but are not considered by the current political mainstream. This study has explored four cases of social housing in Oran, built between 1954 and 1958, to identify the most expressive models of contemporary cultural identity. To this end, the analysis based on the cultural transfer concept has addressed the various reinterpretations of the bicultural referents and emphasized the role of the local community to validate models that better meet cultural codes and contemporary needs.

The Nid d'abeilles, Sémiramis and Brunie housing projects, initially intended for a Muslim population, represent hybrid *signifiers*, not adapted to local cultural codes or to the needs of contemporary life. However, the Trèfle model, which is derived from the initial modern Muslim models and intended for Europeans, represents an integrated cultural hybrid *signified*. It is best suited to the local organizational structure and functional needs of modern life. The organization of the cell around the central space is similar to that of the traditional house around the patio. In addition, Western cultural components such as loggias and balconies introduce the extroverted relationship of the cell with the outside and are easily adapted to contemporary needs.

The inhabitants' behaviour and practices inside the housing units has reinforced the hybrid character of these models. The processes of mutation or permanence of the global spatial structure and functions are indicators of their cultural identity.

Furthermore, this exploration opens up new opportunities to decolonize cultural

identity. The study provides a critical review of the identification and recognition of the integrated built bi-cultural heritage and suggests the necessary codes to adopt in the experimentation of future projects.

# References

- [1] Lejeune, J., Sabatino, M., & Bergdoll, B. (2010). Modern architecture and the Mediterranean: vernacular dialogues and contested identities. London: Routledge.
- [2] Frey, J.-P. (2010) Les valises du progrès urbanistique. Modèles, échanges et transferts de savoir entre la France et l'Algérie. Les cahiers d'EMAM ,20, pp. 33-57.
- [3] (1959) Les réalisations de la Coopérative Musulmane Algérienne d'Habitation et d'Accession à la Petite Propriété. Chantiers, 32.
- [4] (1953) Habitat collectif. Architecture d'Aujourd'hui (AA), 47, pp. 98-99.
- [5] (1954) Habitat collectif musulman à Casablanca. Architecture d'Aujourd'hui (AA), 57, pp. 54-55.
- [6] (1955) Habitat urbain de type musulman, groupe d'immeubles à Oran. Architecture d'Aujourd'hui (AA), 60, p. 5.
- [7] Candilis, G., Josic, A., Woods, S. (1978) Une décennie d'architecture et d'urbanisme. Stuttgart: Karl Kramer Verlag.
- [8] Tremblay, M.-A. (1962) Le Transfert culturel: Fondement et extension dans le processus d'acculturation. Anthropologica, 4 (2), pp. 293-320.
- [9] Espagne, M. (1999) Les transferts culturels franco-allemands. Paris: Presses Universitaires de France.
- [10] Dmitrieva, K., & Espagne, M. (1996) Transferts culturels triangulaires France Allemagne – Russie. Paris: Éditions de la Maison des Sciences de l'Homme.
- [11] Espagne, M. (2004) L'horizon anthropologique des transferts culturels. Dans M. Espagne, Revue germanique Internationale (21). Paris: PUF.
- [12] Espagne, M. (2013) La notion de transfert culturel. Revue Sciences/Lettres, 1, pp. 2-9.
- [13] Yelles, M. (2000) Pour en finir avec le Patrimoine ? Production identitaire et métissage dans le champ culturel algérien. Insaniyat 12 (3), pp. 7-29.
- [14] Raafat, A. (2009) Mediterranean sea, A cultural unifier lake in cycles. In: G. El Kadi, S. Attia (eds.), Le patrimoine partagé de la méditerranée, Alexandrie. Alexandrie: IRD/ Bibliothèque d'Alexandrie. pp. 59-67.
- [15] Abdellatif, R., Benhima, Y., König, D., & Ruchaud, E. (2012) Construire la Méditerranée, penser les transferts culturels, Approches historiographiques et perspectives de recherche. Munich: Oldenburg.
- [16] Juignet, P. (2003) Lacan, le symbolique et le signifiant. Cliniques méditerranéennes, 2(68), pp. 131-144.
- [17] Brice, A. (2002) Psychanalyse, espace et institution. Filigrane, 2 (11), pp. 151-156).
- [18] Guerroudj, T. (2000) La question du patrimoine urbain et architectural en Algérie. Insaniyat, 12 (3), pp. 31-43.
- [19] Boumaza, N. (2003) L'identité en chantiers. In: Algérie, traces d'histoire, Archi-

tecture, urbanisme et art, de la préhistoire à l'Algérie contemporain. Lyon: CER-TU, p. 03.

- [20] Safar Zitoun, M. (2009) Le regard de la sociologie sur la ville et l'urbain en Algérie: le retournement pervers du paradigme culturaliste colonial. Paris: Karthala.
- [21] Journal officiel de la république algérienne 44, loi n° 98 04 du 20 safar 1419 correspondant au 15 juin 1998 relative a la protection du patrimoine culturel. (1998). Available at :http://www.joradp.dz/HFR/Index.htm
- [22] Çelik, Z. (1997) Urban Forms and Colonial Confrontations: Algiers under French Rule. Berkeley: University of California Press.
- [23] Pinson, D. (2006). De l'échec d'une charte à la poursuite d'une réflexion. In: J.-L. M. Bonillo (ed.), La modernité critique autour du CIAM 9 d'Aix-en-Provence. Marseille: Imbernon. pp. 241-255.
- [24] Abdulac, S. (2011) Les maisons à patio, Continuités historiques, adaptations bioclimatiques et morphologies urbaines. Paris: ICOMOS.
- [25] Poulot, D. (1997). Introduction générale. In D. J. Grange, & D. Poulot, L'Esprit des lieux, le patrimoine et la cité (pp. 15-34). Grenoble: la pierre et l'écrit, Presse universitaires de Grenoble.

#### **Biographical Notes**

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#### Summary

The built heritage of the 1950s French colonial era represents the complexity of the hybrid cultural identity bequeathed by history but attracts minimal interest and consideration as an accepted local heritage. This research focuses on the opportunities and misconceptions about cultural reinterpretations and on the role a given society plays in the definition of cultural and patrimonial identity. For this purpose, the paper explores four social housing models and their derivatives (Nid d'abeilles, Sémiramis, Trèfle and Brunie) built during the French colonial period between 1954 and 1958 in Oran, Algeria. The historical analysis, supported by a qualitative study of the spatio-temporal evolution of these public housing projects, is based on the dynamics of cultural transfers. It aims to understand the interweaving and evolution of formal, organizational and functional reinterpretations of architectural components generated by western architects and remodeled by the local population. The result identifies hybrid cultural housing and highlights the pivotal role of social stakeholders in the acceptance and accommodation of mixed models. It encourages the identification of sustained and integrated bicultural referents which reflect the contemporary cultural identity.

#### Riassunto

Il patrimonio costruito dell'epoca coloniale francese degli anni '50 rappresenta la complessità dell'identità culturale ibrida ereditata dalla storia, ma attrae un minimo interesse e considerazione come patrimonio locale accettato. Questa ricerca si concentra sulle opportunità e sui pregiudizi, sulle reinterpretazioni culturali e sul ruolo che una determinata società svolge nella definizione dell'identità culturale e patrimoniale. A questo scopo, il documento esplora quattro modelli di alloggi sociali e i loro derivati (Nid d'abeilles, Sémiramis, Trèfle e Brunie) costruiti durante il periodo coloniale francese tra il 1954 e il 1958 a Oran, in Algeria. L'analisi storica, supportata da uno studio qualitativo dell'evoluzione spazio-temporale di questi progetti di edilizia pubblica, si basa sulla dinamica dei trasferimenti culturali. Mira a comprendere l'intreccio e l'evoluzione delle reinterpretazioni formali, organizzative e funzionali delle componenti architettoniche generate dagli architetti occidentali e rimodellate dalla popolazione locale. Il risultato identifica l'alloggiamento culturale ibrido e mette in luce il ruolo centrale degli attori sociali nell'accettazione e nella sistemazione di modelli misti. Incoraggia l'identificazione di referenti biculturali sostenuti e integrati che riflettono l'identità culturale contemporanea.