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CULTURAL PECULIARITIES AND HOUSING PRODUCTION IN ALGERIA. DJELFA AREA CONDITION

Abstract: The current residential production in Algeria is diverse, but is relatively similar in terms of design. The similarity in design has become inevitable, due to the scarcity of real-estate, the increasing demand for housing, and the rise of the urban population. Because of the aforementioned reasons, we notice that the peculiarities of the local communities that structure the Algerian societies are not taken into account. The urban design of the local communities (Kabyle, Mzabi, Shawi, Targui...) show evident similarities overall; however, some details are imposed by the local culture of each community. Those details are absent in contemporary residential production. Through this study, we aim to identify a number of cultural peculiarities of the local Naily community in the region of Djelfa, the ways these peculiarities reflect on the local traditional construction, and the set of mechanisms for inclusion in contemporary housing production. The study is divided in two parts: a theoretical part, in which we highlighted the interrelationship between cultural peculiarities, urbanism and the local community, and an applied part in which we employed the Delphi technique and chose the region of Djelfa as a case study. The results show the following: 43 answers through the application of Delphi Method by experts distributed on the three questions asked which in general provided important pieces of information, through which we were able to access the set of cultural peculiarities of the local community in the region of Djelfa, the reflection of these peculiarities on the local construction and how to include some solutions to address the current residential production in a way that protects the cultural peculiarities of the Naily community in the region of Djelfa.

Key words: cultural peculiarities, local community, local housing, residential production, Djelfa, Delphi Method

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Introduction

The differences in the natural setting of the places of settlement of societies have a prominent role in shaping the cultural peculiarities of any society, which largely reflects on the people's lifestyle, in terms of housing, customs, traditions and practices.

Algeria, in its various regions, is home to various local communities, each with its own peculiarity in its habitation, customs and traditions. "It has special values that are derived from the culture of the surrounding community" (Al-Ashmawy & Subhi, 2019, p. 24). In the Kabylie region, for example, the local construction appears different from the local construction of the M'zab region, the Saoura region, and the Jebel Laamour and Al-Tawat region. On the other hand, the current housing production is unified in terms of the form and completed with several economic considerations related to cost (Hadji & Dib, 2022), the social aspect related to the observed population growth, and the sphere related to the expansion and the problem of urban real estate provision (Bediar et al., 2022). All these considerations obscured the human side of the local communities in Algeria. The impact on the inhabitant and their home, that is supposedly a place that surrounds the owner with their history and beliefs within the framework of his civilization and his culture" (Mahd & Saber, 2020, p. 1152). Its features also appeared on the built urban environment and "perhaps what we see of visual pollution with it is the best proof of that, we also find that it has placed the users of these current housing models from the local communities in forced housing conditions. Over time, it caused a rupture between the person and their cultural heritage, which has always been reflected in the local architecture in which they grew up" (Deeb, 2009, p. 25). "The lack of sufficient studies and awareness in this context led to the current situation of this urban fabric" (Kabeel & Muhammad, 2019, p. 26).



Fig. 1. Awlad Naily tent, as the first approved housing method by the local community in Djelfa, before the start of stability

The local urbanization of the Djelfa region is a model for the urbanization of the local community area of Naili tribe. Through the application of Delphi Method, we aim to search for a set of mechanisms that would include the cultural peculiarities of the Naili community in the current housing production in the Djelfa region.

Materials and Methods

Study Area

The Djelfa region is located at the foot of the Saharan Atlas, in the middle of the central steppes, where the desert merges with the high plateaus. It is bordered to the north by the state of Medea, to the east by the state of M'sila, to the northwest by the state of Tissemsilt, to the southeast by the state of Biskra and the state of Ouargla, to the south by the state of Ghardaia, to the southwest by the state of Laghouat, to the west by the state of Tiaret (Figure 2).

The origin of the Naili community in the region of Djelfa goes back to the Banu Hilal tribes coming from Upper Egypt, which was abandoned by the Fatimid Caliphate, towards the Maghreb. The first wave of these tribes came in about 1050 AD, and the second wave in the year 1060 AD. The Naili community arose in the Djelfa region and its suburbs between two major Islamic metropolises, the first of which is the present day Tiaret, the second is M'sila, the capital of the Hammadia state. Between these two sites, about 250 km is an area through which the Naili community was able to maintain its existence. Before the Naili community began to settle, it relied on the method of traveling using tents (Figure 2).

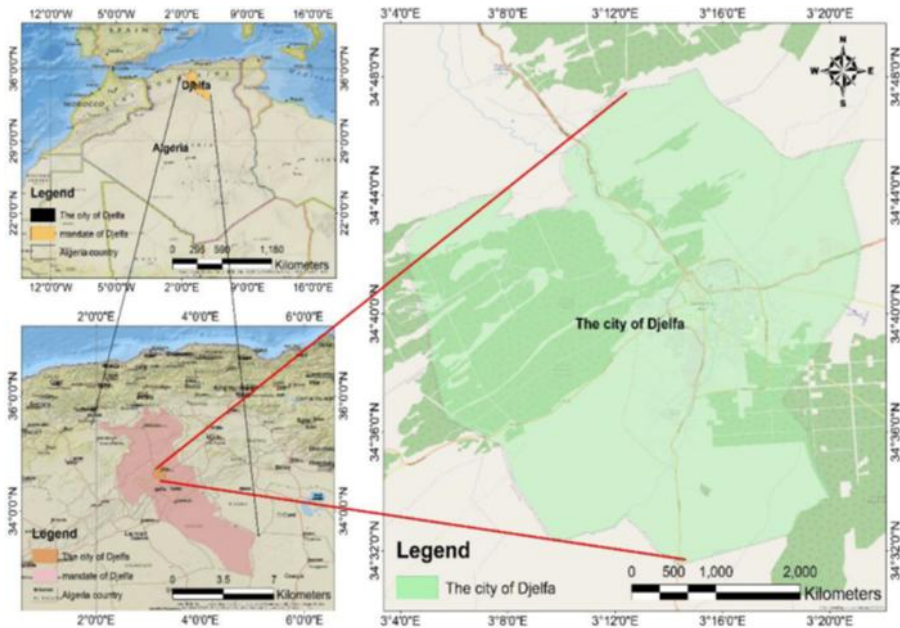


Fig. 2. Location of the Djelfa region in Algeria (Source: Dehimi, 2021)

Methods

The study was divided into two parts, a theoretical part in which we highlighted the relationship between society, local construction and cultural peculiarities, we also tried to highlight the diversity within the Algerian society, which is a group of local communities, resulting in

cultural diversity reflected on urbanization in its various components. In addition to studying the historical aspect of the successive civilizations in Algeria, it has had a profound impact on local communities and their cultures.

In the practical part, we applied the Delphi technique to the Djelfa region as a case study, with its inner cities and its local Naili community, which has its own peculiarities in housing and culture, just like the rest of the local communities that structure the Algerian society. We attempted, through the application of this technique, to study three dimensions, and given the size of the study we chose only one: the cultural peculiarities and the construction of the Naili community in the region of Djelfa. To study the latter, we suggested to answer the following three questions:

- J What are the cultural peculiarities that distinguish the Naili community in the region of Djelfa from others?
- J What are the urban and architectural elements that characterize the construction of the local Naili community, and how are these elements reflected on the cultural peculiarities of the area?
- J What are the suggestions regarding the possibility of including these architectural and urban elements in the current urban production (new housing programs)?

The Delphi technique is a systematic and interactive method that relies on a panel of experts, as an organized method of communication, to make interactive decisions based on the term “collective intelligence of experts”, in order to give answers to questionnaires related to the topic” (Ahmed et al., 2022, p. 185); therefore, the technique depends on sending questionnaires to the selected group of experts (usually, the sample size ranges from 10-18 experts) and in the light of their answers, new questions are identified, usually from two to three stages (Tomeya, 2019).

In order to obtain a relative agreement of opinion, there are two types of questionnaires adopted by this technique:

- J Open questionnaires are open questions, allowing the participants to enrich the subject of the research studied;
- J Closed questionnaires in which all the answers are presented to the experts, and they have the right to agree, reject or be neutral in choosing the answers according to the Likert scale.

Community, Local Architecture and Cultural Peculiarities: Interaction and Reciprocity

Since the local community is “a local social system that includes social relations operating within a locality” (Al-Dhaudi & Suttan, 2018, p. 195), “it is a group of people permanently living in a small area and sharing a common way of life; therefore, a local community is considered a territorial group. Each community consists of separate local communities that are distinguished from one another in dress, morals, customs and social rules” (Ghaith, 1983).

We find that the local urbanization is that material fabric that expresses the product of man’s interaction with his environment, with the aim of satisfying man’s material and spiritual requirements within the framework of the determinants of his cultural, social and intellectual backgrounds (Angry, 1986), and “it is a living expression of the human conscience and the realization of his permanent desire for belonging, creation and creativity” (Fathi, 1977, p. 21). The local urbanization expresses “the special heritage stock of

resources, climatic conditions and cultural specificity of the community” (Faraj, 1984, p. 31) and cultural specificity.



Fig. 3. Reciprocal relationship between cultural idiosyncrasies, the local community and urbanization

It is a system with a tangible and relatively material and homogeneous, or heterogeneous entity that can be measured through the way in which a person practices his life within a social framework composed of a group of individuals, and this practice takes place within a container represented in the urban environment surrounding the individual (Khalil & Muhammad, 2019). It is also “the outcome of the interaction between human intelligence and the environment in which they live, It is the product of the interaction of a group of components represented mainly in beliefs, customs and values” (Awashriyeh, 2015, p. 120). Urbanism is the incubator for human societies. we find that the latter influences its shape to serve its peculiarities. Hence, the reciprocal relationship between the three elements appears clear and strong. The local urbanization represents the mirror through which the structural norms in society can be identified. The society is a group of individuals with distinct and shared cultures of values, customs and traditions, and the social system crystallizes from them, which in turn is considered the governing law in the formation of urban spaces and architectural treatments (Muhammad, 2002). Local urbanization is considered a record of the culture and identity of communities, built in response to real needs, and brought together in an environment by people who know exactly what their feelings are with the site (al-Tayyib, 2019). The urban character of the local urbanization is nothing but a reflection and visual embodiment of the dialogue between the human culture represented in his cultural specificity and his local community, “something that gives the urban character another dimension that varies from neighborhood to neighborhood and from city to city” (Tasnim & Ahmed, 2016, p. 14). In general, we say that the local urban environment and” its design is affected by the social and cultural values of society, and “the relationship of man to his environment is subject to cultural factors that cannot be ignored, starting with choosing a specific site for its construction” (Saleh & Musa, 2020, p. 35). The design of the built environment can also affect the behaviour and culture of the given community members (Muhammad, 2002). It can be said that there is an effectiveness, and a reciprocal relationship that imposes itself between the three elements (Figure 1).

The Reflection of Sociocultural Factors on Local Construction in Algeria

The Islamic city is characterized “by many features such as symbolism, privacy, and attention to the internal and external void with an interest in strengthening human relations” (Mahd & Saber, 2020, p. 1152). Whoever studies modern day’s urban tissues of the cities of the Islamic world, and reads into its general features will inevitably be able to discover that the latter are not scattered groups that are read only according to their location, rather they are groups that express the same perception of society. This perception has led to the birth of a field organization that gives the impression that it is repeated, at least in its general outlines and major features, Despite the diversity of geography, races and cultures, and the multiplicity of models and dimensions (Boudjemaa, 2007).

The local urbanization in Algeria is characterized by diversity and variation from one region to another, and “perhaps the most important factors by which this differentiation can be explained is the cultural and social diversity, and the contrast in the natural characteristics of human settlement circles” (Marc, 1996, p. 31). In Algerian soil, we find that the Berbers are the first inhabitants to settle in the Maghreb as a whole, and with the arrival of the Phoenicians, an exchange occurred between them and some barbarian tribes. The same applies to the successive civilizations of the Romans who settled in north-eastern Africa from 42 AD to 430 AD, then the Turks came from the sixteenth century from 1514 AD to 1830 AD, the date of the beginning of the French invasion (Servier, 1990).

All of these successive civilizations left traces and fingerprints in the field and society, which were manifested in the form of material evidence and behavioural patterns. Contributed to giving the living space its shape and structure, and the Arab-Islamic civilization is unique in its most persistent, rooted and widespread influence, but this does not include the atrophy of the local cultural peculiarities, as many areas remained where the invaders and conquerors did not settle. With their relative isolation and difficulty in accessing them, they preserved part of their advantages for example: the Kabyle region, Awres Chaouia, the M'zab region, the Hoggar region and Al-Tawat...etc. So, the instrument of local social values and systems resulted in the local culture along with the legacy of successive civilizations and the influence of the Islamic religion in particular, in addition to the natural peculiarity of the endemic region, such as the climate and terrain (Kazar, 2008), and the agricultural systems as a way of living through the methods of storing and processing crops within the housing, all of these factors had a significant impact on the urban pattern and shape of each local community (Figure 4).

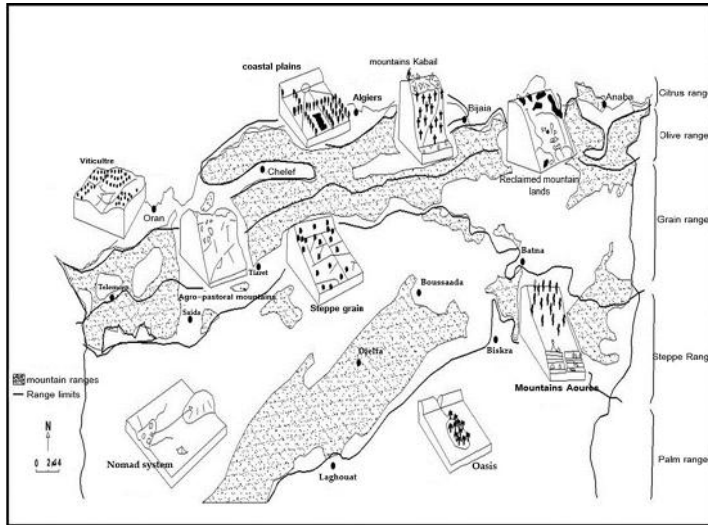


Fig. 4. Landscapes of the endemic region (climate and terrain), agricultural systems as a way of living and their role in the formation of sociocultural observations that have a reflection on the urbanization of each local community (Source: Marc, 1996)

By reviewing some models of housing in different regions in Algeria (Figure 5), we notice the uniqueness of each residential model with certain characteristics in the design, these characteristics were crystallized by several natural and socio-cultural factors. However, these models take from the purposes of Sharia by embodying the principle of modesty and openness to the inside.

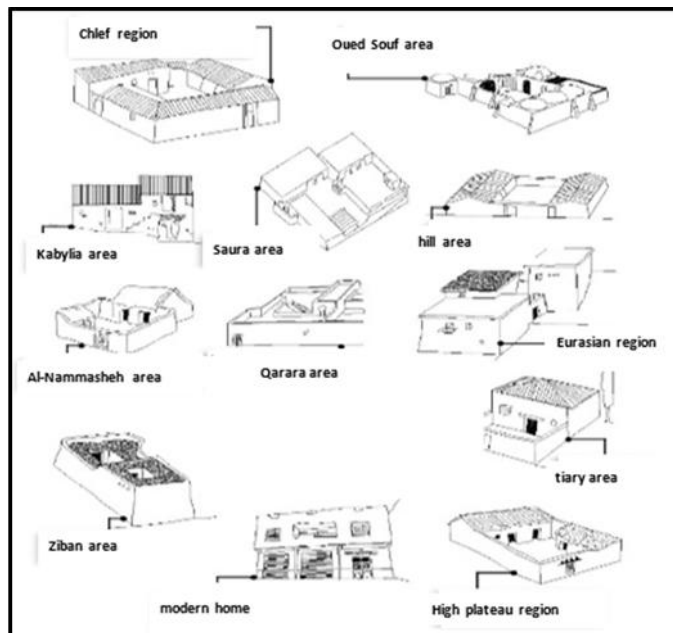


Fig. 5. Other models of the Algerian housing diversity and its differentiation from one region to another according to the socio-cultural local area. Perhaps the most important common feature between them is the courtyard or the courtyard (Source: Marc, 1996)

Mechanisms of Including Cultural Peculiarities in the Djelfa Region Using Delphi Technique

In the first phase, the open survey, we distributed 22 questionnaires to 22 experts, who have been carefully selected to ensure the success of the technique. Only 17 experts were able to retrieve their survey, which contained a good number of answers. However, some of it was outside the scope of the questions asked, where after sorting, we got 43 answers. The answers were consistent with the local reality of the studied area. The experts gave the same priority to the three questions, and the experts tried, in varying ways, to enrich the topic, each according to his specialty and point of view and linking cultural peculiarities to housing and urbanization. This came in the formulation of their proposed answers, which were organized and returned to the same experts in the second stage in the form of a closed questionnaire, using five-point Likert scale.

In the second stage, the open questionnaire, after distributing 17 expert questionnaires that were retrieved and analysed, the results were as follows:

The total of the proposed answers is 43 acceptable answers, which in total got an arithmetic mean greater than 3.50. That is, with an estimated acceptance rate of 100%. It proposed answer is divided into 3 questions in its entirety. It serves the dimension related to the cultural peculiarities and urbanization of the Naili community in the region of Djelfa. We categorized them according to the three questions as follows:

Analyzing the answers to the first question: What are the cultural peculiarities that distinguish the Naili community from others?

The objective of asking this question was to control a number of cultural peculiarities of the Naili community in the region of Djelfa. In 10 answers, the experts targeted important points related to the way of living of the Naili community in its social and cultural apartment with an arithmetic mean estimated at 4.33, which is greater than the arithmetic mean 3.5, by a percentage 100% acceptance.

Analysis of the answers to the second question: What are the urban and architectural elements that characterize the urbanization of the local Naili community, and how are these elements reflected on the cultural peculiarities of the area?

The aim of asking this question was to highlight the distinctive elements of the architecture and urbanization of the Awlad Nail region, and their reflection on the cultural peculiarities of the Naili community. Through 19 answers, the experts were able to touch on the most important and most prominent elements to be highlighted in the urban fabric of the studied area in general, with an arithmetic mean estimated at 4.33, which is greater than the arithmetic average (3.5), that is, an acceptance rate of 100%.

Analysis of the answers to the third question: What do you suggest regarding the possibility of including these architectural and urban elements in the current urban production and new housing programs?

Due to the fact that the urban fabric of Algerian cities, including Djelfa, new housing programs have become a large share of them by asking this question, we tried to search for a number of suggestions that would improve and contribute to creating a kind of compatibility between these programs and their residents from the local community in the Djelfa region. The experts gave a total of 14 answers that discussed important points that would

contribute to its improvement, with an arithmetic average of 4.37, which is greater than the arithmetic average of 3.5, which means an acceptance rate of 100%.

Results and Discussion

Based on the results of the analysis of the second phase of the questionnaire, to determine the mechanisms of integrating cultural characteristics into the urban production in the Djelfa region, which led to the selection of (43) answers distributed to the three questions related to the dimension related to the cultural peculiarities and urbanization of the Naili community, and through which we were able to access a set of data the process and suggestions that would contribute to creating a great harmony between the Naili community and the modern urban product in the Djelfa region, if applied.

As for the answers to the first question, we reached a number of social and cultural peculiarities that frame the life of the community of the Djelfa region, the Naili community, the most prominent of which is that it is a modern urban community, and that it settled in the third stage of the Bedouin stages, which is the stage of stability (Figure 6). It is related to the extended family, attachment to family kinship, and inclination to the group. While adhering to customs, traditions, and customs, most notably, a large part of family and inter-tribal problems was resolved without resorting to justice. It is also a society that adheres to the spiritual data derived from Islamic Sharia, and from the ancient local folk culture, and is characterized by a value system that determines the behaviour of its members and governs their actions, such as: public morals, sutrah, and generosity. It also has a distinctive lifestyle that is still associated with Bedouin values and standards, especially with regard to food and clothing, which is very consistent between authenticity and contemporary.

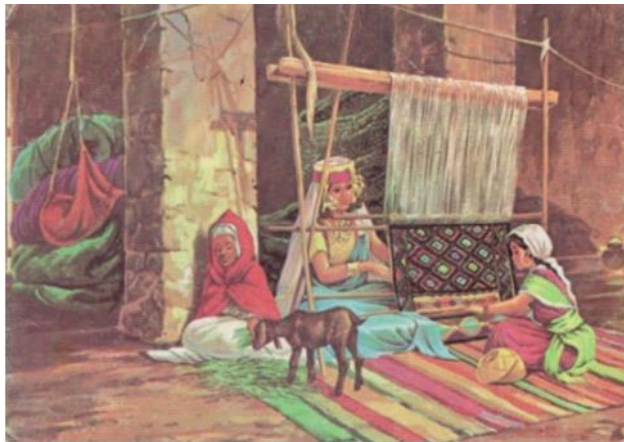


Fig. 6. Activities practiced by in the Djelfa region, the most prominent of which are weaving and raising livestock, as well as the form of clothing (Source: Djelfa Municipal Museum, 2021)

Among the most prominent of what was mentioned in the answers to the second question, are important points through which the experts targeted a number of distinctive elements of urbanism and architecture for the region, which we noted are closely related to the region. The social and cultural characteristics of this society that have been mentioned, perhaps the most important of which is that its urban fabric is characterized by simplicity and the absence of distinctive architectural and urban elements, and the facades do not highlight the differentiation and social differences in form.

Most of the palaces of the Ouled Nail tribe share a single expansion plan, through dwellings lined up around axes, roads and spontaneous intersecting corridors, in the middle of which, there is the mosque and the most important equipment that are characterized by simplicity in most cases. Complementing the home activities outside, simple arches (the arches in the hallway are in the shape of a horseshoe) after the design of mosques, these arches have an aesthetic and spiritual dimension. A kind of privacy, door and window openings like the mashrabiya especially with the appearance of the rooms on the first floor, deaf walls and building using simple local materials such as bricks or limestone.

We also found that families only build as needed. Rarely do we find more space than a family needs, expanding residential spaces to serve the principle of solidarity, especially in various occasions. The rooms are as large as possible in a way that ensures that family members can meet wherever they are in the house. We have one of the most notable components of the dorm, the “kids” room, the largest room in the dorm as a place for meeting and intimacy, and the “el-Hojra” room used specifically for storing family and guests’ repertoire, the “guests” room. The “kitchen” is large with the door open to a broken shed that obscures the view of the rest of the dwelling, which is the furthest from the guest room and with a relatively large area used for cooking for different family occasions. The existence of the ‘chmaini’ or ‘chimney’ is a must in the “kids” room and “kitchen”.

The answers of the experts to the third question also came with a set of important suggestions that could make the new housing programs permanent and not temporary. Among the most prominent of these suggestions is the expansion of the housing area so that it is not less than 100 square meters, which is reflected in the area of the rooms with an increase in their number so that they are not less than four rooms in the F4 apartment, because the Naili is famous for its fertility and reproduction and the adherence of individuals to the extended family, in addition to the inclusion of all sound insulation materials (Sound insulation) in the process of completing the apartments in order to preserve the privacy of the family, with a proposal for a courtyard with an acceptable space in the buildings, with the elimination of balconies, and the symbolic and moral suggestion of modern architecture and urbanism from the structure of the local indigo heritage.

They also concluded that it is necessary to prepare a book of conditions on the basis of competition that is committed to taking into account the peculiarities of the region, including the cultural ones, and to select businesses that take into account the standards and conditions required by law. Supervising a team specialized in various fields, while encouraging business that responds to and embodies the cultural specificities in the field with various real estate promoters in another suggestion. Housing producers, adopting schemes that take into account cultural specificities, such as covering and opening up to the interior by making squares and yards specific to the neighbourhood, and closing neighbourhoods by building walls, roads, and small corridors inside them. The buildings within the collective neighbourhoods must be in the form of groups, each group being adjacent and closed around itself in a way that secures the privacy of the residents while achieving the principle of transition from the public to the private, even if it is relative. The same applies to housing allotments; especially in how to prepare territorial zoning plans in such a way as to take into account the issue of respect for cultural idiosyncrasies in determining the locations of plots.

Conclusion

The momentum that Algeria experienced from civilizations throughout history, gave the Algerian society this composition and this diversity of habits, cultures and practices; the thing that may lead us to the need not to neglect this diversity and to look at the needs of the structured local societies of the Algerian society in general in a unique manner and in accordance with their specificities, especially in the apartment related to housing.

By applying Delphi Method to the Djelfa region as a model, and by relying on a group of experts from different fields, we were able to obtain a set of characteristics of the Naili community and the reflection of these characteristics on its local architecture, which enabled us to extract a set of mechanisms, which can be incorporated into contemporary residential production.

Obtaining housing that responds to the needs of its users, especially in the humanitarian apartment, can be done by applying the same method to the rest of the local communities that are structured in Algerian society, such as the Kabyle, Chaoui, Mozabite and Sufi communities.

Conflicts of Interest: The authors declare no conflict of interest.

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