Studying the Correlation between Social Behavior and Urban Development for Tribal Residential Communities

Dr. Ola Tarek Galal Alkabany
Lecturer at Misr institute of technology, Mansoura, Egypt
archolatarek@yahoo.com

Abstract:
Future urban development projects have always lacked a clear vision that takes into consideration the social behavior of clan and tribal communities who have their own special social structure, consisted of basic social units controlling their urban formation; as a result, the desired social development is negatively affected, in addition to the other various side effects on both urban and economic development. In this sense, there will be no actual contribution to the urban development of the clan, tribal or Bedouin areas, unless it is through providing more spatial stability for the tribes residing at these areas; an objective which can only be achieved by studying the real reasons behind their reluctance to settle at the residential units specified for them by the government.

In light of the above, this current study will first discuss some of the main concepts related to the human social behavior, with a special focus on the Bedouin communities; taking into account the relationship between human behavior and the surrounding environment that constitutes such communities, as well as the nature of the relationship between residence in general and the places affected by the private social status of man; and that is in an attempt to understand these special social organizations, within which the individuals of these communities live, as well as the characteristics and patterns of the social relations governing the movement of those individuals, hence affecting the general urban fabric of these residential communities.

In this regard, this research will address the urban formation of these residential communities, based on a comparison between the government's general planning and the urban field investigation of the areas in question. Furthermore, this display will include maps for the land utilizations and maps for the urban fabric in detail, in addition to the outcome of the field visits to the Bedouin villages and their surroundings, as well as the questionnaires filled by some of the inhabitants and the tribal sheikhs.

That is to say, the main objective of this research is to prove that the social clan formation of the Bedouin communities affects the general form of these residential gatherings significantly; and that is through identifying the general and private urban formation, the fabric's form, the social status, the community's urbanization, and the impact of all these elements on the desired urban formation.

In this context, this research shall conclude some of the characteristics and standards of the current formation at the Bedouin communities, as well as their counterparts of tribal features; and that is in order to conclude and determine specific recommendations for the general urban development of these communities. Hence, the government could pay more attention to the Bedouin communities by understanding their actual needs, in order to help them to settle without prejudice to the private social formation of each tribe.
الملخص:
تتفق مشروعات التنمية العمرانية المستقبلية لوجود رؤية واضحة تعمل على مراعاة السلوک الاجتماعي للمجتمعات القبلية العشائرية والتي تتميز بوجود بنية اجتماعية أساسية، والتي تتحكم في التشكيل العمراني الناتج، مما يؤثر سلباً على التنمية الاجتماعية وما يرتبط بذلك من أثار جانبية على التنمية العمرانية والاقتصادية. وعلى لاب يمكن للإسهام في التنمية العمرانية الفاعلة للمناطق العشائرية والمدنية أو البدوية، ان نزيد الاستقرار المكانى للقيام في تلك المنطقة، والذي يكون بدلاً من استقرارهم في الوحدات السكنية المختلطة من قبل الحكومة.
وعليه فإن البحث يتناول في بداية بعض المفاهيم الرئيسية المتعلقة بالسلوك الإنسانى الاجتماعي، مع التركيز على المجتمعات البدوية، وعلاقة السلوک بالبيئة التي تشكل المجتمع، وطبيعة العلاقة بين المسكن والمكان الذي يتأثر بالحالة الاجتماعية للناس. وذلك في محاولة لفهم التنظيمات الاجتماعية التي من خلالها يتعايش أفراد المجتمع، وخصائص وانماط العلاقات الاجتماعية التي تتحكم في حركة الأفراد، وتؤثر بالتالي على النسيج العمراني العام للجمعيات السكنية.
ويقصد البحث التشكيل العمراني لتلك التجمعات السكنية بناءً على المقارنة بين المناطى العشائرى وال trữ العشائرى والميداني للمتادى مع الزراعة، يشمل ذلك خرائط استعمالات الأراضي وخصائص التشكيل العمراني، ونتائج الزيارات الميدانية للقرى البدوية والمناطق المحيطة بها والاستبيانات التي تم عملها مع بعض السكان ونشاط البيئة.
وبهدف الوصول إلى أن المجتمعات البدوية والترابع العشائرى الاجتماعي لها يؤثر على نمط التشكيل السكنية، حيث يتم تحديد شكل النسيج والتشكيل العمراني العام والخاص والحالة الاجتماعية، ومدى تحضير المجتمع وتأثير ذلك على التشكيل العمراني.
ومن ثم يلخص البحث إلى استنتاج بعض الخصائص ومعايير التشكيل الموجودة في المجتمعات البدوية وما يشابهها في الخصائص العشائرية، بهدف تحقيق واستخلاص توصيات التنمية العمرانية العام للجمعيات البدوية، ويتطلب أن تتم الحكومة بدراسة مالية الدومن عن طريقاً فهم متطلباتهم لمساعدة في عملية الاستقرار وشراع عدم عمل الاستقرار بالترابع الاجتماعي الخاص بكل قبيلة.

الكلمات المفتاحية :
التنمية، العمرانية، المجتمعات البدوية

1. Social Behavior at the Bedouin Communities
The social tribal formation of the Bedouin communities significantly affects the general form of their residential organization, as well as their social behavior which is the effective outcome for all of the material and moral factors affecting any given group of people residing within a specific geographical space under the prevalence of certain social and economic characteristics (F. Elsayed 1980).
1.1 Social Change
Planned social change is considered to be one of the many forms of social change. It is the sort of change that is consistent with the principle of the State's interference in the organization and programming of society affairs, for the sake of the public interest. That is to say, if the State wants to make a plan to spread culture and education among the citizens, they shall first depend on the social researcher (i.e. the social engineer) in order to obtain basic and vital information such as:

1) Which social segments and categories are in actual need for culture and education, and in which quantitative amount for the learners?
2) What is the impact of spreading culture and educational attainment on the geographical and occupational distribution of the inhabitants, the social transformation, and the family stability? (A.M.D 2010).

1.2 Social Structure
The social structure is the general organizational frame, under which fall all aspects of the human behavior within a society. It includes a number of social systems with stable behavioral rules that govern the various human activities within a society. In other words, the social structure could be defined as a group of organizational frames, within which all human relationships are organized, whether they were interrelationships between the individuals inside the same society, or the correlations between the individuals of a specific society and their counterparts from other societies. Hence, this social structure consists of a group of social formats. (J. Salama 2006)

1.3 The Impact of Kinship on the Urban Formation
The element of kinship plays a major role in the organization of human groups, as it defines man's membership in the group as well as his/her responsibilities, rights and duties towards the other members in this group. This element is mainly based on two types of relations: blood ties and affinity relationships. In this regard, the element of kinship has a large impact on the urban and architectural format of the human group (H. Fathi 1995)
2. The Social Characteristics of the Bedouin Communities

Each community has its own specific and exceptional characteristics; therefore, in order to identify the social behavior of a community, all of the influences surrounding this community shall first be studied, including the geographical, environmental and economic factors, as well as the nature of the social relationships producing this behavior. Hence, the social behavior could be evaluated through a sequence of relationships between the different social levels, starting from the society as a whole down to the family.

2.1 The Housing Characteristics at the Bedouin Community

There are different patterns for Nomadism. First, there is the full nomadism based on constant migration from one place to another and shepherding as an economic activity. On the other hand, there is semi-nomadism where the family settles at one place and does wholly move with the sheep; however, they send only one individual for shepherding at the spring season, while practicing some activities of marginal agriculture. Then, there is the full settlement by engaging in constant or handicraft works, or even a government job, where the activity of shepherding recedes notably.

2.2 The Morphology of Bedouin Tribal Communities

According to the general agreement of opinions, the term "Morphology" could be defined as the science that deals with the study of form and shape. Nonetheless, the term "Urban Morphology" refers to the structural fabric of small or large cities, including their planning, form, function and roads, through which this fabric could be studied and through which a complete idea about the city's forms over the different historical eras could be obtained. In this regard, Ibn Khaldun was one of the first scholars who discussed the concept of Urban Morphology (M. Eldeiouji 2018); thus, he defined it as "the science that deals with the study of the various phenomena related to the structure of society, in an attempt to study the aspects of the inhabitants, the origins of civilizations, the residents' distribution over a specific area, and the systems organizing all of the different matters and activities, such as the individuals migration, the population density, the general planning of villages and cities, the conditions of their locations, and the functions they perform" (Ibn Khaldun 1960).

In this context, Figure (2) shows the morphological formation of the Bedouin community, in an attempt to attain the general structure, upon which these residential gatherings are based.
2.3 Patterns of Tenting with the Bedouins

The tent is considered to be the first cell and social unit that could be encountered at the desert community; that is to say, it is not just a spatial unit, but it shall be taken into consideration within the general frame of relationships gathering several individuals within one family. (J. L. Burckhardt 2015)

Three houses or groups; each one sees the other tow and itself
Three groups linked to the first group, which is a link between group X & Y
Figure (3): Pattern of Tenting with the Bedouins – Reference: Jean Louis Burckhardt, "Notes on the Bedouins and Wahabys", Translation & Commentary by Dr. Ahmed Owedi Elebadi, Part One, 2015

In addition, Figure (3) illustrates the sequence of these formations with each other to form integrated units as follows:

Network of groups, as each one sees two or more groups at the same time.
Figure (4): Formation of a Group Network for the Bedouins' Patterns of Tenting – Reference: Jean Louis Burckhardt, "Notes on the Bedouins and Wahabys", Translation & Commentary by Dr. Ahmed Owedi Elebadi, Part One, 2015

Analytic Study of Some Bedouin Villages Progressing at Urban Development
The Bedouin communities live within the frame of the following three basic overlapping and interacting systems: a) the natural surroundings, i.e. the geographical location; b) the formed surroundings, i.e. the housing environment; and c) the social surroundings. Thus, the interactions between these three systems with their sub-sections represent the processes of everyday life and development at the community. In this regard, nomadism is generally considered as an obstacle to the progress of development, since Bedouins do not contribute with their resources to the plans of economic and social advancement. In addition, it is also considered as an obstacle to the national unity, due to their isolation from the prevalent stream of life in the State, or due to their special social formation dependent on the tribe that constitutes its social relations based on kinship; thus, the loyalty to kinship unity is more important to them than the loyalty to homeland. (M. Elfarouk 1999) Therefore, these communities differ widely from one pattern to another. In their transformational movement, these communities pass through three basic stages: nomadism, ruralism and urbanism; and that is due to the social change followed by obvious changes in the urban formations of the Bedouin gatherings. That is to say, the aspects of nomadism can only start to fade gradually according to the analysis of some social indicators that illustrate the progression of
development for each village by linking between the social surrounding and its conditions, structure and impact on the formation of these communities.

3.1 Studies of Urban Formation for the Bedouin Communities within the Area under Study
Throughout a comparison between the villages under study, as models for the Bedouin villages progressing in development at Sinai, the researcher was able to conclude some urban characteristics that could be considered as unified features for all Bedouin villages in general. After detecting the genealogical descent of Sinai tribes, the Tribe of Toura was selected as it is one of the largest tribes geographically. The Tribe of Toura consists of three dissenting smaller tribes (Al-Sawalha – Al-Olaiqat – Muzaina); that is to say, these tribes do not form homogeneous unity genealogically; however, they form together a significant political and administrative unity.

Throughout the questionnaire conducted during the field visit, the researcher has confirmed the existence of these tribes and clans up till now under the same names. In addition, after comparing them to the Bedouins' current land possession areas – as per what is legally stated by the government after many negotiations, three villages were selected for study in detail; thus, each village belongs to one of the aforementioned dissenting tribes that belong to one larger tribe (Tribe of Toura); hence, they share the same genealogical and social attributes. Furthermore, each village of the selected villages is affiliated to a different administrative district or city, so that the entire governorate could be represented as follows:

1) **Al-Jubil Village**: Affiliated to El-Tor City, Tribe of Toura, Al-Sawalha Clan; which is the highest village in modernization within its area, due to the large number of government institutions, development projects and educated people.

2) **Abo Sewira Village**: Affiliated to Ras Sedr District, Tribe of Toura, Al-Olaiqat Clan; which is the highest village in modernization within its area, according to the group of middle villages at the development level.

3) **Al-Garandal Village**: Affiliated to Abu Zenima District, Tribe of Toura, Muzaina Clan; which is the highest village in modernization within its area, according to the group of low villages at the development level.
3.2 Results of the Analytic Study
First: Results concerning the Impact of the Movements and Transitions of the Bedouin Inhabitants:

1- Traditional Villages: The Bedouin moves according to the available fertile areas, and they mainly work in shepherding along with some commercial activities.

2- Transitional Villages: Those villages combine between the characteristics of Bedouin areas and the characteristics of rural areas; and that is due to the partial agricultural stability (known as "Rural Bedouins"); thus, there are established agreements between the neighboring tribes at the plains of the agricultural activity, hence pushing towards the stability of these tribes and the formation of stable villages, prompting the government to provide them with some utilities and services.

3- Modern Villages: Those villages have appeared due to their proximity to the major cities and the settlement of newcomers at governmental housing units specified for them by the government, with the presence of some groups of Bedouins dwelling at planned villages that were established without taking into consideration their social formation. In this context, the inhabitants of these villages of newcomers are employed in government positions; however, the Bedouins are still working in the pastures surrounding the village.

Second: Results concerning the Formation of Bedouin Residential Communities according to the Social Structure:

1- Modern Villages:
At those villages, one cannot notice the sequence of Bedouin social structure in the urban formation due to the prevalence of government housing units that is largely consisted of the newcomers' housing units and Bedouin planned units, with constant and frequent forms for all Bedouin designs across the projects of Bedouin settlement in Sinai; thus, they do not take into consideration the sequence of their social formation during the processes of detailed planning and urban formation for these communities; in addition, there are some scattered Bedouins whose dwellings do not affect the general formation of the village.
2- **Traditional & Transitional Villages** (Villages of Unsettled Bedouins and Rural Bedouins):

At those villages, the social formation is largely coherent, maintaining the inherent family traditions and customs as well as the genealogical sequence and kinship relations as follows:

- The residential communities are divided into phratries and subdivisions, classified according to the number of families in the gathering and the lineage extension to the grandfather.
- Each phratry or subdivision is consisted of three different housing patterns: (the newlyweds' house, the family house, and the house of the gathering's sheikh or elder).
- Opposite to the house of the gathering's sheikh, there is always a yard for consultation and a house for prayers and other services.
- The traditional villages are different from the transitional ones in accordance with the geographical nature of the area, regarding the availability of a source for water and the mountain nature; therefore, the forms of these gatherings vary in terms of their distance or proximity; however, they maintain the same formation based on the tribal division and social format amongst them.
Table (1): The Urban Division of Tribal Segments at the Bedouin Villages under Study

Table (2): The Urban Fabric and Expansion Areas at the Villages under Study
Third: Results concerning the Formation of Housing Units inside the Residential Community:

The Bedouin villages have the same general formation for the residential community based on the social structure; therefore, after conducting all procedures of comparison, observation and analysis for various groups of residential gatherings, in light of the lineage sequence obtained from the questionnaire, the researcher was able to conclude the required spaces and number of units for these gatherings as follows:

<table>
<thead>
<tr>
<th>Area of Units</th>
<th>18 to 15 Units as per the Number of Families</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newlyweds at the exterior attached space</td>
<td>80 – 220 m$^2$</td>
</tr>
<tr>
<td>House of the head of the tribal segment, attached with storehouses and livestock breeding areas</td>
<td>800 – 1200 m$^2$</td>
</tr>
<tr>
<td>Family house at the exterior attached space</td>
<td>400 – 800 m$^2$</td>
</tr>
<tr>
<td>Middle yard for gathering</td>
<td>Half to 2 Acres Approximately</td>
</tr>
</tbody>
</table>

Table (3): Results of Bedouin Gathering Areas

Taking into Consideration the Smallest Tribal Segments at the Housing Formation

In addition, a general shape for the gathering pattern of these communities could be elicited according to the morphological formation of the Bedouin community.

Table (4): Map for the Social Distribution of the Housing Patterns at the Bedouin Villages under Study
Furthermore, the following Figure (6) displays a diagram illustrating the approach followed by the Bedouin for the urban formation of their housing areas, as well as the pattern of distributing the housing units in a way that is consistent with the nature of their family formation. Moreover, the figure also includes a proposed form for the urban formation recommended by this current study, in order to be taken into consideration when designing the Bedouin housing formations as a reference guide for decision makers, before embarking on the planning process.
4. Recommendations

4.1 Urban Development Recommendations
- When designing the housing units at the Bedouin community, it shall be dealt with as an integrated ecological system, dependent on the participation of the communities' individuals and the tribes' sheikhs; thus, each housing unit shall be considered as a main core for the community's formation.
- No specific pattern for development shall be imposed on the Bedouins; however, the competent authorities shall qualify them and help them to establish settlements that respect their own culture and social format.
- At the preparation of general plans for the areas of Sinai, it should be taken into consideration that this development shall be executed as a part of the general ecological and social systems.
- When designing the housing gatherings of the Bedouin tribes, they shall be of a compact fabric gathering around open spaces for consultation and meetings; in addition, it should be taken into account that each housing gathering shall include one family with the same origin and lineage.
- When conducting the procedures of observation and analysis for the Bedouin areas before embarking on the process of urban design, it is recommended to seek the participation of some individuals from the local tribes, in order to take into consideration their social format; and they shall have the priority when setting the major objectives.
- It is recommended to prepare a complete database for the Bedouins' lineages, in order to facilitate the State's plan aiming to grant the Bedouin individuals the ownership of units and lands at the area, based on their lineage from a pure Egyptian origin.

4.2 Recommendations for the Bedouin Areas Development
Based on the analytic study and the field visit, the researcher hereby proposes a methodology to elicit the urban formation of the Bedouin gatherings through three phases as follows:

- **Phase One: (On the Level of Tribes):**
  - To study the origins of the tribes, lineages and clans forming the housing gatherings at the area; and to prepare statistical functions in this regard.
Phase Two: (On the Level of Clans):
- To study the social indicators of each tribe, and to determine the degree of influence between the indigenous people of Bedouins and the newcomers.
- The goal of this phase is to determine the degree of development already attained by this community, so that it could be classified as (a traditional gathering, a transitional gathering or a modern gathering); and that is in order to determine the personal and social natures, as well as the best method of dealing with them during the processes of development.

Phase Three: (On the Level of the Clan Components):
- To study the properties of all sheikhs of tribes and tribal segments, including all wells, agricultural lands and pastures; and to identify the social and tribal relations amongst them.
- The goal of this phase is to elicit the followed form of the urban fabric and the style of distributing the housing buildings, as well as the different relationships between them.

- That is to say, after studying all of these steps before embarking on the process of urban development, the urban designer could elicit the ideal form for the desired urban fabric that respects the needs of the inhabitants, as well as their social and tribal relations.
- On the foregoing, the researcher hereby recommends that the government shall pay more attention to studying the Bedouins and their issues through understanding the requirements of the settlement process, without prejudice to the private social formation of each tribe.

References
- Hossam Fathi Ahmed, "The Urban Formation in Traditional Communities at the Oases in light of the Change in their Cultural and Social Formats", 1995.
- Momtaz Hazem Eldeiouji, "The Influence of Morphological Changes in the Urban Fabric on their Formative Characteristics", Published Research, Department of Architecture, Faculty of Engineering, University of Mosul.2018.
- Mosaad Elfarouk Mohamed Hamouda (1999), "Development of Local Communities (Rural, Urban, Modern & Desert)", Page 245.