NIZAMS: THE HIDDEN SYNTAX UNDER THE SURFACE.
URBAN MORPHOLOGY IN TRADITIONAL ISLAMIC CITIES.

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Abstract
The reasons behind the urban form of traditional ‘Islamic cities’ are still disputable themes among authors. As a step forward, the city should be observed by taking into consideration the indigenous structures and concepts. This article, after reviewing the earlier ideas and efforts in this regard, suggests that the city is the result of interaction of various Niams and the major reason underlying the urban morphology is the simultaneous presence of these Niams and the fact that their hierarchy of importance was flat and horizontal. It defines the Nizams as interlinked frameworks including various dimensions which make the syntax of the city’s order.

Keywords
Urban Morphology; Traditional Islamic cities; Nizam.

Introduction
One of the exclusive characteristics of traditional ‘Islamic cities’ is their traditional urban form, and this has often attracted the attention of non-native travellers and scholars. For the European scholars, mainly French Orientalists, who developed the first body of scientific studies and theorizations about the urban affairs of traditional ‘Islamic cities’ in the early 20th century, they described the morphology of these cities as an exclusive feature, which together with their distinctive urban elements - such as the mosque, bazaar, and Hammam - differentiates them from other cities of the world. Comparing these cities with Roman ones, taking the latter as the ideal model against which they should be measured (and highlighting their differences from it), these scholars understood the morphology of traditional ‘Islamic cities’ by negating their character and particularity, rather than presenting their exclusivities.

Revisionist authors of the 1960s who began to address the deficiencies in the Orientalists’ ideas, trying to give consideration to the social context of the cities in their investigations, nevertheless to some extent followed the same approach. Despite their efforts, the Orientalists’ attitudes towards observing urban form remained almost unchanged, so that, in later observations too, the traditional ‘Islamic cities’ urban shape was understood as an unusual or abnormal form. This time the authors did not explicitly articulate this position, but their justifications and attempts at finding the reasons behind the urban form, betray their perspectives. Although their
arguments considered the contexts and did not foreground perceived deficiencies, they had repeated recourse to comparisons with Max Weber's theories, with European cities, or with the European meaning of public life and space. In recent arguments, which one can refer to as the third phase of urban studies on traditional 'Islamic cities', the distance from the French authors' theories becomes more drastic. The authors in this phase not only fundamentally criticise the French Orientalists' ideas, they also open new aspects of understanding the different dimensions of the form of the city by proposing specific approaches.

An essential question — either hidden or obvious — behind all these observations has been: why does the traditional 'Islamic cities' urban form look the way it does, a question to which the authors propose various explanations according to their distinctive perspectives. While a group of scholars evaluated this particular urban form as a negative feature derived from the lack of urban structures — social, administrative, and religious — another group attempted to find the answer by observing cities in their context and not necessarily relating negative characteristics to them. Despite these endeavours and explanations, a general framework or theory for the reason behind this particular form is still absent. Many of the explanations are applicable but do not encompass all the influential factors and do not explain the variety of urban forms in different cities of the region. In other words, these elucidations might be true by themselves, but they are not by any means sufficient. Therefore, to achieve a more comprehensive explanation it is necessary to revisit this essential question. For that reason, this article first highlights the main gap in understanding and analyzing the morphology of the traditional 'Islamic cities' by reviewing the ideas which have attempted to clarify the reasons behind the form these cities take, and then provides a new approach to question the urban form in traditional 'Islamic cities' by grasping autochthonous concepts and structures (Nizams).

**Precendent Arguments**

In earlier arguments on the urban morphology of traditional 'Islamic cities', authors mostly argued that the urban form is the result of the direct impact of either one factor or a collection of factors as these impinge upon the city. These factors include a range of issues such as climate and the absence of wheeled vehicles, the lack of administrative or municipal organizations, the need for privacy, the lack of a defined status in Islamic law for cities, the lack of protection for the existing streets against the encroachment of private residences, and the impact of Islam. These explanations indicate that there are some dominant elements in the city which shape it and these are the main reasons underlying its form. That means the city gained its shape because those special factors have imposed their rules in the city.

There is a general consensus among authors about the influential factors in traditional 'Islamic cities', despite the high variety in the explanations that have emerged since the first decades of the 20th century. Generally it can be said that all of them circle around a distinct number of main common topics: for instance, climate, irrigation systems, security and resilience, absence of wheeled vehicles, socio-political and economic factors - including socio-cultural conventions and privacy — religion; and historic backgrounds. For example, climate is introduced by Hassan Fathy (1986) as the main determinant of urban form. He believes the form of the streets is the result
of the climate, and that the arid climate of the region necessitates this kind of pattern. On the other hand, the irrigation system and topography are mentioned by Michael E. Bonine (1979) as another form-generating aspect. He argues that the form of the street network in Iranian cities was developed due to the irrigation systems, whose orthogonal network of water channels corresponds to the slope of the land and determining the walkways.

However, there is a high level of disagreement about the ways these influential factors affect the city. For instance Paul Ward English, Besim Hakim, and Janet Abu-Lughod all consider religion as the main formative factor. For his part, Paul Ward English (1966) believes that religion has resulted in a decrease in political and civic interest in the city, which has led to a lack of city planning organizations, and segregation within neighbourhoods. By contrast, Besim Hakim (1986) believes there are particular building codes which guide city-making and shape the geometry of the urban form. Nevertheless, the differences between Muslim and Hindu quarters convince Janet Abu Lughod (1987) that Islam shapes the urban form of Islamic cities, by such means as making juridical distinctions among different classes of the population, on the basis of their relationship to the Umma, by encouraging gender segregation which leads to the creation of spatial imperatives, and by its definition of the property system.

Similarly, the socio-cultural structure and its sub-factors attract the attention of another group of scholars. For example Jamal Akbar (1988) highlights the question of responsibility and categorizes the forms of responsibility for property into six types, each one being the product of three main factors of: ownership, control, and use. He believes this particular issue of responsibility is the main shaper of the layout of Islamic towns. With a different approach, Spiro Kostof (1991: 63) claims that the urban process which shapes the urban form in Islamic cities depends on “implicit conventions informally established and observed,” certainly, “written building codes of local currency,” and “religious law.”

In a different way, some authors point to the background or primary prototypes of the cities as the factors which have influenced their form and defined the way they grew. Eugen Wirth (1975) proposes that the features of tree-lined routes and cul-de-sac in these cities are rooted mainly by Mesopotamian principles.

Some other authors propose different explanations which are not focused only on the above factors. For example Nader Ardalan et al. (1973) seek the origin of the form of the city in the mystical religious philosophy of gnosis, while Nazar Alsayyad (1991) focuses on the role played by the caliphs in shaping the urban form of early Arab urban settings and subsequently the model of the ‘Arab Muslim City’. Masoud Kheirabadi (1991) points generally to the urban factors that have been influential on the form of the city.

The Necessity of a New Approach

All these explanations and theories elucidate one or some influential aspects of the urban form and subsequently clarify a dark corner of the whole. Studying the historic evolution of cities reveals that not only was religion important and omnipresent but the climate was also a significant influence, due to the rough desert climate. Similarly, the prevailing social structures
were in direct inter-relation with people’s way of life, so they also defined the urban form in many regards. Additionally, many other micro-factors emerged according to the historical, cultural, and social background of the city and its special conditions— for instance, whether it is a capital city or a commercial one, or has a village origin, and so on.

All of these factors - macro and micro - were woven to the life of people, affecting the way they built their cities. These elements construct a whole whose internal interactions generate the final form of the city over time. The manner and degree of each factor contributes to the distinctive formation of each city, and the final forms of cities are always different, although they have generally similarities and have been grouped into one category.

Moreover, it can be said that the whole stream of research goes in one direction and it seeks to understand the order of traditional ‘Islamic cities’ and the reason behind it by employing would-be universal— not local— analysis methods, norms, approaches, and definitions; and supposing a meaning and structure for order in its global sense. But it seems that merely latching onto these methods, which originated from and were based in other contexts and places, mainly western one, cannot furnish a proper basis on which to understand cities — as the still-ongoing disputes and incompatibilities between scholars’ accounts may testify.

Obviously, what is needed is a change in approach, considering the indigenous context not only in order to discover the factors of significance, but also as a way of understanding and reading the city, which can also explain why cities have gained this special geometry. Understanding the difference between traditional ‘Islamic cities’ and other cities, as well as the exclusivity of each group of cities, necessitates applying a new kind of view, which is more appropriate and compatible with the indigenous context and originates from concepts that belong to the life-world of the people. This new way of understanding the city reveals that the cities can have another kind of urban geometry which is not known in international standard discourses introduce a new urban order, and opens a general framework in which the impact of influential factors on the form of the city can be studied in a more comprehensive way.

Towards a New Framework: Nazm and Nizam

Climate, geography, water, religion, society, and many other elements, seem to constitute the basic influential factors in the formation of the cities all over the world across the ages. These elements impact the cities distinctly in different contexts according to the way they are related to the life-world of the people.

In the context of traditional ‘Islamic cities’, these elements are so interconnected and interwoven with the citizens’ life-world that they generate a particular character. Due to this multiplicity, such factors are not treated any more as individual influential elements but expand a vast framework of tangled relations within the city. This complex framework determines how the city might embrace such elements and interact with them. For instance, the role of water in shaping the city is not merely limited to its ecological importance and its one-dimensional, physical presence, but encompasses its special association and meaning in religion and religious-philosophy
(the latter entailing Hikmat and sacredness). This fact changed it from a normal, important ecological element into a very special and cherished element in the city. Each of these areas—environment, religion, and philosophy—define the importance, function, and application of water in its exclusive mode, which together determine how it is ordered and the way the city has to embrace water, use it, and interact with it. Physically and environmentally, the cities of the region have mostly a hot dry climate; on the other hand, water has always been appreciated as a very important element that increases humidity, improves microclimates, tempers the heat of summer days, and thereby promotes thermal comfort in hot arid lands (Fathy, 1986).

So, water has been physically important, not only because it is an ecological element which is valued in all cities, but also because its scarcity has transformed it into something that represents more than just a normal, prerequisite, factor in a city (Habibi, 2006; Sultanzade, 2001; Gaube, 1979; Gulick, 1974). Spiritually, from the religious point of view, water is necessary for many ceremonies and ritual purifications—such as ablution for daily prayer.

From a philosophical-religious (Hikmat) point of view, water was understood to be one of the main elements of the world of imagination (alam-i-misal) which, in Islamic cosmology, stands in an intermediate region in the hierarchy of cosmic existence, between the material and purely spiritual worlds (Ahari, 2007). As Nasr (1980: 2) argues “Its forms, sounds and colours have an objective reality, and its ontological reality serves to give human imagination a function above and beyond profane imagination as understood in the modern world.” Furthermore, the image of paradise is always represented in connection with water, in the way that water is an element present in all of the scenes describing paradise in the Quran. So, from a philosophical religious point of view, water is a limpid and sacred element belonging to alam-i-misal whose limpidity can reflect infinity, paradise, purity and so on. As Bianca (2000: 66) declares, alongside other architectural elements, water has a “contemplative” status, and is an element through which man’s mind, according to Islamic philosophy, is enabled “to open a window into the realm of timeless existence.”

Therefore, water is connected to the life-world of the residents in a multifarious way and must fulfill various functions in the city. This means that water constitutes a framework with tangled relations in the city, through which the city reads and uses it. These define how water should be available for the city and its buildings; and how the buildings, Mahallas, and routes should be formed to meet the city’s needs for water.

We can better explain this framework and relations by grasping an informative terminology: Nizam. Nizam is cognate word of Nazm. Nazm means regular order and is manifested in regular, geometric patterns, such as characterise Islamic ornamentation, while Nizam connotes another kind of hidden order that is not necessarily a regular, geometric pattern. In fact, Nazm has a Nizam but Nizam does not necessarily present a Nazm. Nizam points to a hidden framework, according to which the elements of a complex are connected to each other. It has a sense of logic, but not necessarily a clearly determined regular order on the surface (see Figure 1).

Each essential factor enters into the framework of the city in the form of a Nizam which is, in fact, the framework determined by that factor’s
multiple relationship to the autochthonous life-world. Nizam is the direct result of people’s mental structures and presuppositions imposing their rules into the city — structural rules or formal ones — and the manifestation of the presence of the factor at all layers. Each layer imposes its order into the morphology of the city. The Nizams are treated as matrices.

Clearly, there are numerous Nizams shaping the form of the city, ranging from the most obvious to the most concealed and a similar discussion can be held for other Nizams existing in the city, such as trade, socio-cultural structures, religion and political structures.

Figure 1: Abstract representation of Nazm and Nizam. (Source: Author)
Form of the City as the Result of the Simultaneous Presence of Nizams

The city is the outcome of the interaction of Nizams; the simultaneous presence of all Nizams at - almost - the same level of importance - and not the dominance of just one or two of them. This means that the city not only has to smooth the operations of trade and commerce, but must also provide a base for the religion, respect cultural values such as privacy, the segregation of different ethnicities and professions, and so on, while nevertheless embracing them, but at the same time respond to climatic and ecological issues, which because of heat and aridity necessitates special solutions. The city divides land up according to the tenets of Islam, to keep the members of a clan or religion or family together, tempers the unbearable heat and aridity of the climate, brings water to the arid city, and so on, all simultaneously; what has been discussed in other texts too. So all the Nizams contribute to the building of the city and none of them is so dominant that it overshadows the others and dictates its framework to the whole city and the other Nizams; this may be the distinct and exclusive feature of the cities of the region.

Therefore, the city we encounter is one whose geometry is the product of the superimposed, physical manifestations of the interwoven and (almost) equivalently important Nizams. If we suppose the framework of each Nizam, very simply, and without considering its meaning and any historical and dimensional complexities, as a net (or matrix), we will have a number of nets which are laid over each other and constitute the form and order and syntax of the city (see figure 2). What is important in this composition is that even if we reduce each of these Nizams to a simple network, the combination of these networks seen from above gives us a seemingly chaotic geometry, because there are many orders within it, without any dominant framework that dictates and shapes other orders according to its framework. So, for example, what makes the Old City of Safavid Isfahan different is mainly the simultaneous presence of all the Nizams in the city, without any highly dominant Nizam. The multiplicities of interwoven Nizams, which have grown in time, along with their internal relationships, undoubtedly make this composition more complex.

Figure 2: Abstract representation of the syntax of the city. (Source: Author).
The twofold geometry of Safavid Isfahan might be the best illustration of this claim (see figure 3). In the (pre-Safavid) Old City of Isfahan - the Seljuqid city - where the city was built incrementally by the people, there were some principles and Nizams in the city whose hierarchy of importance was flat and horizontal; although in some periods, according to circumstances, one of the Nizams acquired less or more importance, there was always a general balance so that none of the Nizams dominated in a determining and decisive way. This superimposition of Nizams, as well as their simultaneous presence, created a non-geometric form for this part of the city.

Figure 3: Street network of Isfahan in Safavid period. Two cores of the city are clear in the map. The north eastern part belongs to Old City and the south western part to the New City, namely Safavid one; (Source: based on Seyyed-Reza-Khan map).
In high contrast to this, in the Safavid period, the ideas and orders of the Shah stood at the top of the hierarchy and became overwhelmingly dominant, so that a framework was defined, into which most of other vital elements of the city such as water, society, religion and so on were inserted. The result is a relatively geometric order in which the hierarchy of Mahallas, the water canals, the commercial routes, and the religious buildings were shaped or appointed according to a dictated order; a superior order.

The superior order which dictates its rules - should not necessarily originate from a geometric order; it can also be the order of nature, which leads to an organic pattern. The important issue is whether or not there exists an above-order, to dictate its logic onto the city.

In sum, in the case of the Old City of Isfahan and most of the traditional ‘Islamic cities’, there is not any above-order. The Niams in these cities interact with each other and their simultaneous presence forms the shape of the city and contributes a kind of complexity to it. This simultaneity is the main reason for the particular morphology of such cities, which makes reading their form difficult and challenging. This factor can also explain differences between the geometries in the cities within the general category of traditional ‘Islamic cities’. The way in which the Niams are ordered within a hierarchy is the main determinant of this difference.

References

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