

Missing Elements for a Theory of Urban Form in Traditional Islamic Cultures¹

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Background and purpose

I started studying the Islamic city in the context of Arab culture in North Africa in early 1975, when I was a visiting professor during the Spring semester at ITAUT in Tunis. The primary objective of the study as I conceived it at that time was: "To identify and record the building and planning principles which shaped the traditional Arabic-Islamic city."² This broadened to include, as well, the legal and customary laws as the bases for the rule systems respected and followed in peoples' decisions affecting their built environment. At that time material directly usable for the study was non-existent, although after extensive research some sources were uncovered which were partly and indirectly valuable.³

Since the early eighties, a growing number of studies and occasional dissertations addressed aspects of the objectives I set for myself in early 1975. Some of the efforts studied concerns and areas which I had not covered. Now, in the mid-nineties, it is a valuable exercise to critically examine the literature, and the outcome of various efforts, to identify missing elements, which may be the necessary building blocks to structure a theory of Islamic urban form. Through on-going monitoring I have been able to identify gaps in knowledge which this short article discusses. Studies designed to fill these gaps need to be undertaken by individuals and institutions, and after this is accomplished we can begin the task of constructing the framework for a theory of Islamic urban form.

The amount of published literature in journals and books, and the occasional dissertations on various aspects of the Islamic city, which appeared during the eighties and the early nineties, are not focused enough to be directly useful as building blocks for the construction of theory. Some aspects of those efforts may, however, be valuable

¹ The completion of this article coincided with the passing away of my dear father, Dr. Selim Hakim, on June 24, 1995. This humble contribution is dedicated to his memory

² For a discussion of objectives and related issues see my 'Introduction' (1986), 11-14. of my *Arabic-Islamic Cities: Building and Planning Principles* (London and New York: Kegan Paul International, [1979] 1986), 11-14.

³ *ibid.*, pp. 15-22. See also results of my research on customary law in "The 'Urf' and its role in diversifying the architecture of traditional Islamic cities", *Journal of Architectural and Planning Research*, 11 (Summer 1994) 2, 108-127.

as support for the various primary elements in theory building. Limited space precludes a critical evaluation and discussion of this recent literature here. I have, however, written an extensive review of the literature covering the period from the mid-seventies to the early eighties (Selim Hakim, 1990).

The rest of this article will (a) briefly point out what we currently have as building blocks for theory, and (b) suggest a list of missing elements which need to be researched and developed for the purpose of structuring theory.

Available elements for theory: few examples

Although the built environment is an integrated continuum, and although the process of urbanism is a holistic phenomenon, it is helpful for research purposes to break it down into three levels: (i) the level of the single building, primarily buildings designed for public use, such as religious, economic, government and defence, health, and waterworks; private edifices built by the rich and/or powerful, such as palaces, pavilions and gardens; (ii) the level of clusters of buildings within neighbourhoods, such as clusters of houses, streets and access within clusters and quarters; (iii) the level of the settlement as a whole, the level concerned with the various physical elements and spatial units which constitute a village, town, or city, how those elements relate to each other, and the rules governing their aggregation in making up an entity.

Briefly, and for illustrative purposes, I refer to two or three studies valuable consideration of each of the above levels. There are abundant examples pertaining to the first level. This is primarily due to the efforts of Western scholars within the discipline of art History. In that tradition the study of the single monument, particularly its architecture and decoration as a work of art is the primary concern (Grabar, 1973; El-Said & Parman, 1976; Al-Faruqi, 1985; Chorbachi, 1989). What is not adequately covered at this level of the built environment are issues concerning construction systems and especially techniques of conception, design development, on-site decision-making processes and related procedures. Nevertheless, the elements for constructing theory at this level of the built environment are more available than for the other two levels.

Examples for the *second* level are primarily the result of recent work undertaken by individuals with architectural/urban design backgrounds. My work in this area has created the impetus for others to follow (Al-Muhandis, 1988; MESA, 1992). There is also the work of other individuals with similar concerns (Safak, 1980; Llewellyn, 1983). This body of work provides the theoretical building blocks for understanding the workings of the rule system, its underlying rationale and its part in shaping the built environment at this level of the settlement.

Examples of the *third* level of analysis can be found in the work of historians and geographers (Bonine, 1979; Raymond, 1985). I have documented and analysed the physical components of a typical city, and their relationship to each other functionally and contextually in making up a settlement (Selim Hakim, 1986, 1978).

The few references in the bibliography are random illustrative examples of the available elements that can be used for theory construction. A recent book should prove valuable in identifying a large number of studies which can also be used for this purpose (Haneda & Miura, 1994). A more thorough examination of published studies relevant to urban form will be a pre-requisite for establishing the available resources for theory building. As an *interim* measure, I indicate a group of topics which I believe will be essential to fill the gaps in our knowledge.

Essential elements for a theory of urban form in Islamic cultures: preliminary list

The following suggestions for study and research are not exhaustive, but should be considered prerequisites for a serious attempt in theory construction. The list was prepared by following the reverse order of the previous section, i.e. by listing topics dealing with the settlement level, followed by those of relevance at the cluster/neighbourhood level, and then those of value at the single building level. Some of the suggestions apply to all three levels combined, and some to two levels - generally the middle and upper, or the middle and lower levels. The list of topics :

- Pre-Islamic conceptions of the urban settlement and the city in the Near East and especially in the western region of the Arabian peninsula. How Arabs who were converted to Islam applied the concepts in establishing new settlements and in adapting existing towns and cities.
- Process of land demarcation and sub-division in the early formation of Islamic cities. This is the initial process undertaken in allocating the land for public and private use. Did the allocation of private land precede considerations for the layout of public right-of-ways? What techniques were used for undertaking this task?
- A detailed study of the principles and workings of land allotment (*iqta*), and revivification (*ihya*) of land within and on the fringes of settlements.
- The process of territorialisation of land (*ikhtitat*), particularly at the quarter (*mahalla*), and cluster levels.
- What was the impact of *waqf* on buildings and by extension on urban form? What was the impact on the processes of growth and change?
- What were the various types of tenure and ownership of land and buildings? What was the effect of taxation on the various tenure types?
- The institution of *hisba*: what was its jurisdiction and responsibilities, and its impact on urban management? What was the overlap and/or interaction with the judge's (*qadi*) realm of jurisdiction?
- A comparative analysis of legal and customary law 'solutions' and guidelines as generated under the influence and guidance of the various schools of law, and the manifestation of those solutions in physical terms, particularly noting differences where problems were similar.
- Cases of rulings by customs (*urf*) as found in the records of local judges (*qadis*) and in the writing of specialists on law (*muftis*). How deviant were these rulings

from the principles of the *Shari'a* and what was their impact on built form and on the manner in which local identity was perpetuated?

- Field research in numerous cities within major regions of the Islamic world, designed to document the design language (linguistic *urf*), indicating the sources of the terms, their meaning, and the actual physical configuration and arrangements which the vocabulary of the local design language referred to, including their effect on the design of buildings and the shaping of urban form. Comparative study of the results of these surveys would greatly enhance our understanding of the built form qualities of those cities.
- Symbolic manifestations in the building process, externalised in built form at the level of buildings, clusters of buildings, and the location of various building types within the city and the system of relationship between them.
- Surveying and engineering techniques which were used in building and construction.
- Building materials and construction techniques. How were materials used? Separately or in combination with others? What were their attributes and limitations?
- Traditional energy-saving practices and techniques, for example the recycling of building materials, the utilisation of water, cooling devices such as wind towers, and disposal methods for human and animal excrement.
- A study which focuses on the use of the courtyard in the design and planning of houses, with particular attention to its use as a customary inherited element vs. its intentional use as a device of climate control.
- An atlas of Islamic cities in various regions, which would show building types drawn to the same scale and presented in plans, elevations, and sections. It is preferable that the city maps are drawn in the same format and colours and supplemented by the necessary aerial photographs.

Concluding remark

I hope that the above list of topics will be of value to those concerned with the current lack of theory. Other topics addressing detailed aspects could also be added. It is important to stress that we are at a point in the development of this field which requires co-operative efforts to address the above issues, so as to make it possible to construct a theory of urban design for Islamic cultures. An achievement of this magnitude will not only be of immense value to the Islamic world and its numerous cultures, it will also be a significant contribution to our understanding of urbanism and the urban phenomenon as a cultural expression within a global context.

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