

## **In-between space: Towards establishing new methods in Street Design**

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### **Abstract**

*Urban design is largely based on two identical spaces that include outdoor spaces and indoor spaces. As a consequence, the street design is considered basically as outdoor space design. All factors that influence the street design are identified, evaluated, and considered as outdoor space factors. This paper argues that urban design reality has overlapping spaces between the two spaces that needs to be identified. As a third sort of space which I call "in-between" spaces. Considering this space classification can contribute to improve study and design our cities. In this paper I will discuss this shortly in relation to street environments.*



### **Introduction:**

The overlapping area between indoor and outdoor spaces along streets needs a new definition. Such definition is important to develop new action strategies in urban design in general and street design in particular.

This definition requires a new understanding of the indoor and outdoor boundaries and relationships. This paper argues that boundaries of indoor spaces do not end with buildings elevations but interface and integrate with outdoor spaces. If this is the case then, street design should consider its effects and consequences to the indoor spaces of the buildings and visa versa.

In the present, there are increasing efforts to introduce street design in the process of road planning as a tool to winning back a balanced street environment. Although, Norwegian Planning- and Building Act supports the local democracy, where public and private interest can participate in planning process previous to its approval by the City Council. Yet, the spontaneous changes or creating settings of individual interest are not allowed without authorities permission.

Terms such as public, private, semi-public and semi-private space of a settlement, which always are used in urban design projects or related studies, are not capable of representing the multi-faceted nature of this territory. At this territory the private and the public claims visually and functionally overlap, which creates an identifiable urban space. Instead, the term in-between should be used as an urban concept to study, design, regulate, and organize this territory of urban space.

The in-between space provides any street with a particular quality that defines the streets design character and their ability to create and contain living settings along the street.

Therefore, studying the character of the in-between space of any area within the city will provide us with important answers about how outdoor spaces are functioning and how efficient is the relationship between indoor and outdoor spaces.

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The variables that ought to be considered in studying in-between space are numerous and complex. Nevertheless, this article will describe an introduction to understand the in-between space along the streets by developing a concept model based on the interaction between indoor and outdoor spaces as it reflected in design character and space utilization.

### **Definition**

The “in-between” space is a place created and spatially defined by the relationship between *indoor and outdoor spaces* (Nooraddin, 1996). Therefore, in-between space has a form-giving role in any settlement and is a container of different function.

The in-between space is an entity made up first, the indoor space directly attached to streets including their elevations, and parts of the indoor spaces that are directly connected to outdoor spaces. *Second*, is the front open space directly attached to buildings such as sidewalk and front garden? Therefore, studying and managing “in-between” space as used here, includes architectural design, urban design, public spaces and their relation to social life, economic activities, safety, culture, and ecology.

### **The In-between Space as a study area in Urban Design**

The street design practice shows the necessity of establishing new methods to study, design and manage the relationship between indoor and outdoor spaces in the city. To do this, I suggest using the **in-between space** as an identical urban place with its’ territory, use, and design character. Such role makes the in-betweens basic components in any street planning and street design. Because their domain are created by in-door and out-door spaces, therefore they can show how the both area are functioning in relation to each other. On the other hand, this relationship forms the character of any open space as a place of activities and a container of aesthetic symbols and meanings. (Nooraddin, 1996, pp.5-23, Hertzberger, 1991). Each particular area of in-between space has a number of settings, which can be called **environmental in-between settings**. This terminology was developed from **environmental settings**, which are used in general to study the built environment. (Barker, 1968. Wicker, 1981).

The in-between settings facilitate the major functions of the street as **a place** of activities and reflect social meanings and lifestyle. Therefore, identifying, observing, and studying these settings can help us to understand the physical character and the process of everyday life in the in-between space. I will discuss the identified settings in relation to their role in creating and/supporting social everyday life, economic actives, safe communities, and traditional values of the local place architecture. By other words, how the type of relation between indoor and outdoor space will create outdoor life along the street?

### **The historical roots of In-between spaces in human environments.**

Dividing the indoor space from the outdoor space has been done since people first started to make shelter. As a consequence, differentiation of the two spaces increased gradually by developing different patterns in the buildings for human activities moving outdoor activities into indoor spaces.

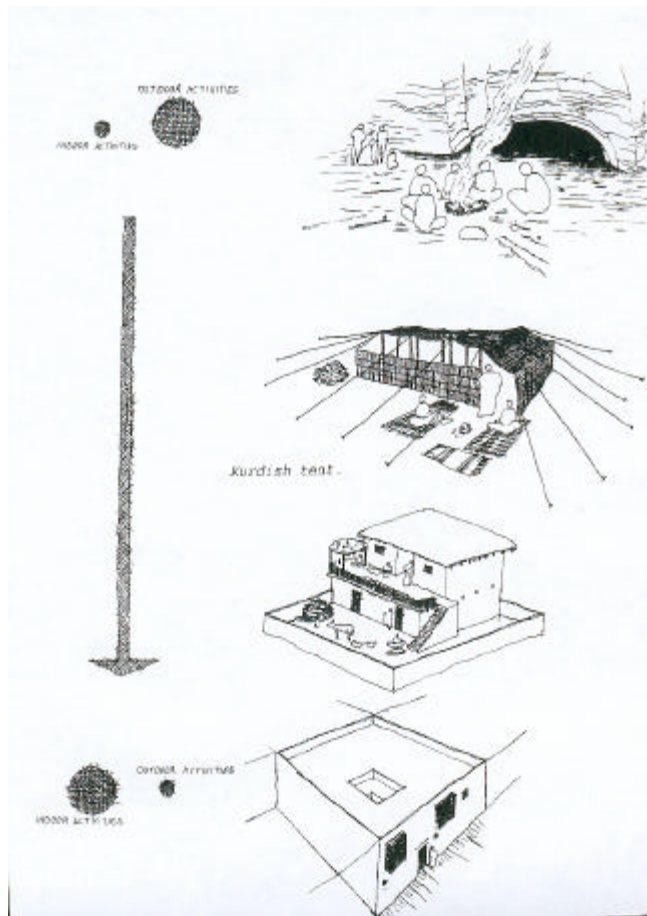


Figure 1: Transforming outdoor activities into indoor activities from early human settlements to urban settlement

This process continued progressively in the history indicating changing life style and production mode. The architecture is used as a tool to create artificial boundaries where they do not exist in nature (Kent, Susan, 1990, pp. 2-3).

The relationship between the indoor space of buildings and outdoor public open space has concerned humankind in order to keep the contact with nature and the community. The wall, which divided the two spaces, served also as a mediator with entrances and windows. The area in front of each particular shelter was used as a gathering place and for several different activities. This relationship is unavoidable and inevitable fact since without it the whole function of shelter would not have existed.

Each particular region and culture developed its unique design solutions and uses reflecting the society's habits, customs, beliefs, climate, and available technology. A large number of in-between settings came gradually to be created as satisfying these demands and led to establishing *domestic traditions of in-between space* including *design and use*.

During the early period of the human settlements, people used particular routes or roads between shelters and other places. They also used the land near the shelters as places for different activities such as relaxing, cooking, and working, which trained them to experience the space and the larger community. Since then, these two basic functions, the path and the place, were established in the streets of human settlements.

Ibn Khaldun assumed that the original settlers of urban settlements were nomads. He reasoned that in the change from pastoralism to agriculture, the main production mode for the community was an encouragement to establish permanent settlements by building shelters and other structures. This older opinion of Ibn Khaldun has been supported by different contemporary studies show that when the nomads settled, they transformed their social tradition into their new cities. Among these traditions were using the in-between space for different social and economic purposes.

Excavations and documents from the ancient cities show that cities were initially established with different types of street design which played a vital factor in shaping their forms as *organic* or *planned* (Nooraddin, 1996). Among the basic architectural characteristics in both types of city forms was the use of the in-between spaces, consciously as the place of staying activities and to mediate between outdoor and indoor spaces. This last factor contributed to

the development of various design patterns to contain, organize, and practice these functions. All affected by local forces such as climate, tradition, local nature, local building materials, and religion. These patterns are created in all parts of the in-between space, in the elevations of the buildings, the inner spaces directly adjacent with the street, and in the open land in front of the buildings. As a consequence, each particular region in the world developed its domestic in-between space architecture and use that developed over time. Historically, the level and nature of users control of the in-between space territory played a vital role in deciding the character of in-between space and its role in the city's transformation process. The examples, which could be listed in connection with this role in cities of different regions and cultures, display many common denominators. Transforming planned cities into more organic forms is a known phenomenon in the cities' history. Several scholars who show that users control played an important role in shaping organic urban form and organic urban growth have studied this phenomenon. (Kostof, 1991 Morris, 1994). Users control determined users behaviour as active creators of in-between settings that did not exist before.

### ***The in-between spaces' in the Middle East***

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On the other hand, the relation between **the indoor space of buildings and outdoor public open space** has concerned humankind in order to keep the contact with nature and the community. The wall which divided the two spaces served also as a mediator with entrances and windows. The area in front of each particular shelter was used as a gathering place and for several different activities. This relationship is an unavoidable and inevitable fact since without it the whole function of the shelter would not have existed.

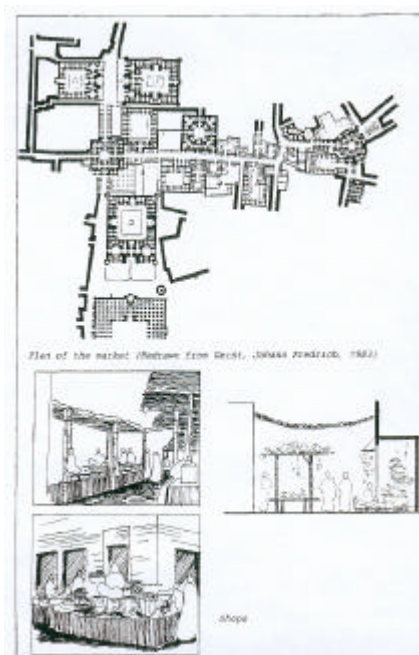


Figure 2: The “in-between” spaces along the commercial streets in Bukhara

Each particular region and culture developed its unique design solutions and uses reflecting the society's habits, customs, beliefs, climate, and available technology. As a consequence, a large number of settings came gradually to be created as satisfying these demands and led to established local traditions of outdoor space design and life. In Arabic the term of *al-fina'* is used to refer to the in-between space. Studying of *al-fina'* in any Arabic Islamic city can show the important role of in-between space in forming the city, its transformation and creating its character..

### **The “in-between” spaces (*al-fina'*) in Cairo.**

Cairo is the capital of Egypt and is located in north east Egypt on the Nile River near the delta. It is a major administrative and economic center where some 18 million people live in its greater metropolitan region.

Until the 18th century, the urban fabric of the city was composed of a citadel at the south east corner that housed the ruling class, several cemeteries outside of the main living built up area, and the major areas of the population, composed of houses and market areas (*suq*) organized along the main central street. The street system was composed of dead-end streets and thoroughfares.

The shops were small and opened toward the street space. The in-between space or the *al-fina'* used for social and economic activities. The space of *Al-fina'* and its use tradition unified the indoor and outdoor spaces along the commercial streets. This relationship did transformed the entire commercial area into one dynamic space that could be experienced by its users as a colorful environment.

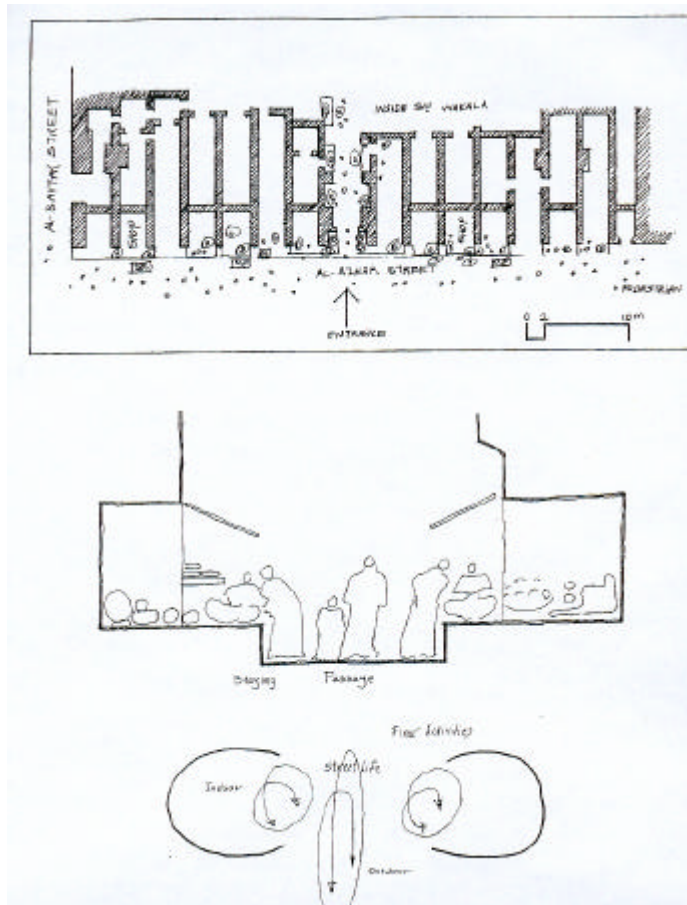


Figure 3: Reconstruction of the traditional -fina' of the commercial streets in old Cairo

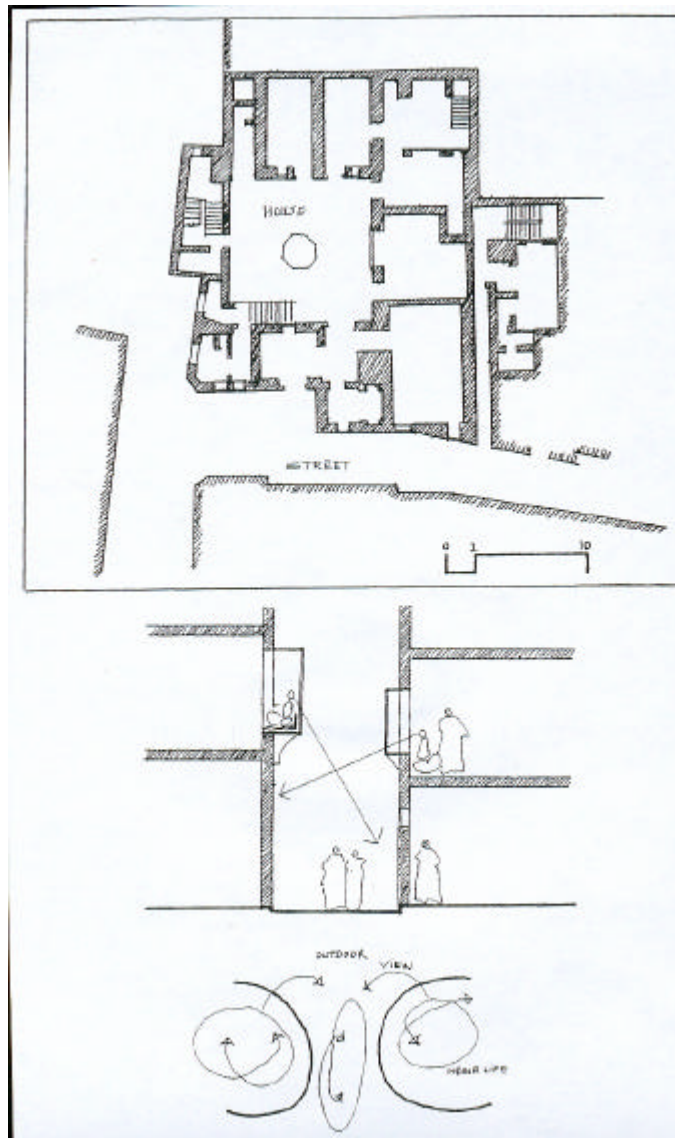


Figure 4: Reconstruction of a residential *fina'* in old Cairo.

The residential area was composed of clustered ethnic and religious quarters. The dwellings were often 2-3 floors high with a courtyard, where the interior of the dwelling was walled off from the street for privacy. This was achieved with small ground floor windows and screened window in upper floors. The upper windows were often extended out into the street space and called *mashrabiyyah*.

During the 19th century, Egypt started a modernization process based on copying models and systems from some of the developed European countries. This modernization process involved all sectors of the government and society such as administration, military, education, agriculture, industrialization, law system, urban development, and architecture.

The new streets and buildings were built within the old areas and in the new areas outside of the old city, based on a central planning imperative for the whole city. This had an important consequence in changing the character of the in-between

space of the city.

### **The contemporary in-between spaces in Cairo:**

The contemporary population growth contributed to the expansion of the built up area and the increases in its density. This general rapid growth created a rapidly changing process within the urban fabric that is strongly reflected in creating new character of in-between spaces along the streets. We can observe that over time, new *al-fina'* settings are continuously created by people in the streets and the existing *al-fina'* elements are continuously modified

For example:

1. The occupation of the sidewalk in front of the shops by the shopkeepers for the display of goods and staying activities.
2. Paving the sidewalk by owners of the respective properties, each owner using a different type of material.

3. The shop owners often use large awnings in front of their shops.
4. The mobile vendors occupy parts of the sidewalk or may block the whole sidewalk.
5. The shopowners occupy the sidewalk in order to construct flowerbeds, gardens, and parking parking places (figure 5, 6).



Figure 5: A street view in Abbasia showing a sidewalk that is totally occupied by owners and users of the street



Figure 6: A residential street in Masr Eljedidah where the residents have occupied the sidewalk for planting and using new pavements.

6. The balconies are sometimes used for sitting in the evening but more often are left unused, as storage, or built enclosed as a rooms.
7. The front garden of older low houses are often built up with new buildings, while the low buildings themselves are also often partially rebuilt or completely replaced by new, higher buildings.
8. Because the sidewalk is occupied by other users than pedestrians, pedestrians often use the roadway for walking.

### Conclusion

Cities with different economies, languages, cultures, histories, climates, political systems, and local traditions, show a strong influence of *in-between* in the characteristics of the city and its streets.

The study of *al-fina'* in Cairo shows the in-between space as an identical space that exists between outdoor and indoor space. Its territorial space involves the area of the sidewalk, the front gardens or front open spaces of buildings, the elevation of buildings and their related elements, and the inner spaces of buildings directly adjacent to the sidewalk space. By seeing these elements, spaces, and functions as involved in the territory of *al-fina'*, its role is supported both as path and place in the street environments of traditional and contemporary Islamic cities. Therefore, in-between space' is a

central urban design concept which needs our concern in research and practice.

### **References**

Barker, R. G., 1968, *Ecological Psychology: Concepts and methods for studying the environment of human behavior*, Stanford

Hertzberger, Herman, 1991, *Lessons for Students in Architecture*, Uitgeverij 010 Publishers, Rotterdam.

Kent, Suzan, (editor), 1990, *Domestic Architecture and the Use of Space*, Cambridge University Press, Cambridge.

Kostof, Spiro, 1991, *The City Shaped*, Thames & Hudson, London.

Morris, AEJ, 1994, *History of Urban Form, Before the Industrial Revolution*, Longman Scientific & Technical, Burnt Mill, Harlow.

Nooraddin, Hoshiar, 1996, *Al-Fina: A Study of "In-Between" Spaces Along Streets as an Urban Design Concept in the Cities of The Middle East*, NTNU, Trondheim, Norway.

Wicker, A. W., 1981, *Behavior Settings Reconsidered: Recent contribution from the ecological perspective*. In McReynolds, P. (editor), *Advances in Psychological Assessment*, San Francisco, Jossey\_Bass. Vol. 5.