THE “PEDESTRIAN REALM” AS A GENESIS OF COMMERCE: BAZAARS OF THE EAST AND MIXED-USE CENTERS OF THE WEST

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1 ABSTRACT

Commerce is an ancient economical framework that enables establishment of social ties, improving cultural relationships, and trading values (Edgu et al., 2012). The products typically has reached its destinations (customers) through pedestrian spaces such as Bazaars in the East and commercial centers in the West. The presence of people has been a key to successful urban public space (Marcus and Francis, 1998; Gehl, 1987) and commerce has been the primary activity of such spaces for over centuries. Yet increasing vehicular and transportation activity and changing commercial dynamics of contemporary cities have been adding more pressure to pedestrian spaces (Morgan, 1996), requiring further examination.

This research is to document and assess the physical make up of the pedestrian realm in mixed-use settings in both the Eastern and Western cultures. The paper aims to gain greater understanding of the role and characteristics of pedestrian environments by drawing lessons from case studies to inform future commerce oriented mixed-use settings. The paper utilizes qualitative methods and case study analysis techniques to investigate the relationship between pedestrian realm and commerce. Interviews are conducted with three stakeholder groups in each setting: pedestrian, designer and developer/planner from (Taylor and Bogdan, 1998). The research also utilizes evaluation and observation techniques (Francis, 2001; Marcus and Francis, 1998) as well as map analysis techniques (Wheeler and Koo, 2011) in order to further examine the spatial configurations and characteristics of these settings.

Research illustrates that commerce oriented centers of the East and West may illustrate changing visual characteristics, serve varying transportation modes but carry similarities in the way how pedestrian realm and street networks are designed to create as a central organizing element to activate commerce. Whether the “pedestrian realm” is the genesis of commerce or not still remains somewhat as an ambiguous question but the interviewees points out diversity of land uses, utilization of human scale, the presence of pedestrian spaces and amenities, and presence and the diversity of people as the noticeable positive characteristics of such settings contributing to their vitality. Research also highlights various physical qualities that are unique to each setting reminding that design and planning of such environments require critical understanding of regional parameters while exploring cross-cultural references.

1.1 Keywords
pedestrian realm, commerce, mixed-use centers, bazaars, urban design, public spaces, urban landscape
2 BACKGROUND

Commerce is an ancient economical framework that enables formation of social ties, improving cultural relationships while exchanging values and trading commodities (Edgu et al., 2012). Although commercial activities are mainly driven by the strategic placement of greater transportation networks among production and economic centers in macro scale the products typically reaches their destinations (customers) through pedestrian spaces and networks and districts such as Bazaars in the East and malls and mixed-use centers in the West. The presence of people has been a key to successful urban public space (PPS, 2005; Marcus and Francis, 1998; Gehl, 1987) and commerce has been the primary activity of such spaces for over centuries.

Commercial nodes, specifically bazaars or mixed-use centers, in many instances are typically being planned as live, work, entertainment centers to attract more users to maximize their use. Varying strategies such as service improvements, invitation of famous brands into the facilities or holding various events are being used for the same reasons (Young Min et al., 2012). These centers are also planned as tourist destinations, complete with tour guides and souvenirs, and some include hotels so that vacationers and conferees do not need to leave the premises during their stay (Goss, 1993). Retail land uses are shown to effect movement patterns by acting as a multiplier by transforming a linear relation between spatial integration and pedestrian flow into an exponential relation in mixed-use areas (Hillier et al., 1993).

Mixed-use centers and bazaars' increasing role and evolving presence in both Eastern and Western cultures as part of changing city form, and their dependency for pedestrians activity with their complexities as commercial environments it make them critical setting to investigate their physical make up for their pedestrian realm. Since such settings needs to activate pedestrian presence and flow, this raises a research opportunity to have a greater understanding of the physical make up of the pedestrian realm as well as how these settings are influenced by their commercial element. This research illustrates that only limited number of studies scrutinizes the relationship between the pedestrian realm and the commercial activity with cross-cultural inquires. Thus, changing commercial and transportation activities in contemporary cities adds more pressure to such pedestrian spaces and networks (Morgan, 1996), requiring further examination.

This paper focuses the physical make up of the pedestrian realm in selected mixed-use commercial settings of the East and the West in order to document the desired characteristics of such pedestrian environments and to inform the design and planning of future urban centers with cross-cultural references. The study focuses on three acclaimed sites in each setting; Southlake Town Square, Legacy Town Center in Plano, and West 7th Urban Village in Fort Worth in Texas, USA, and bazaars of Tabriz, Isfahan and Kerman in Iran. This research primarily answers the following three questions: 1. What is the role of the pedestrian realm in bazaars and mixed-use centers? 2. What are the physical attributes of the pedestrian realm in each setting? 3. What are the characteristics of bazaar and mixed-use centers that contributes to the pedestrian realm?

3 LITERATURE REVIEW

Both researchers and designers must be concerned with raising the standard of the designed environment from the present level, to one which successfully meets the complex levels of human demand (Smith et. Al., 1997). Reaching to these design standards are the real challenge for the designer and researchers, looking for the best examples and precedents that responds to the desired quality and learning from the features is the first step to take. Whereas the importance of considering historic precedents has been established in the study and theory of urban form, much less attention has been paid to the historic precedents of urban function (Marcus, 1998). The medieval town square or Italian piazza cannot provide models of function to emulate, although they may offer important lessons in form, such as height to width ratio, sense of enclosure, and furnishing to enhance uses (Marcus, 1998) reaching the quality that is desired for the pedestrian realms of today’s cities. Commerce and retail centers have played a significant role throughout history and despite the new vehicle oriented trends they tend to attract pedestrian activities and people (Goss, 1993). Therefore the public life has a great influence on commerce, as well as, commerce influencing the public life (Young min et al., 2012).
3.1 Pedestrian Realm

A 'pedestrian' is defined in the dictionary as “one traveling on foot.” Yet the fact that walking has been the predominant mode of transportation through most of human history, makes it more valuable than just any mode of transportation (Owens, 1993). A body of literature deals with the growing concern for the automobile on urban life and its implications for pedestrians. This concern can generally be traced back to planning concepts reacting to the negative impacts of the industrial city (Has-Klau, 1990). Not surprisingly, traffic appears to be an important influence on pedestrian behavior (Owens, 1993, p.117). For at least several decades the overwhelming criteria used in street design has been to maximize its utility to the automobile (Untermann, 1987). This has resulted in streets that are wider, smoother, and more uniform in the name of safety. While this may improve driver visibility it also encourages faster driving, thereby making a less inviting street to walk along (Bosselmann, 1987). Some general discussion can be found in the urban design literature, “with the exception of Jacobs (1961) and Jacobs (1985). There is a few studies that are focusing on detailed analysis of the pedestrian realm” (Owens, 1993, p.118).

Rapoport (1987) divides pedestrian activity into two principle types: dynamic and static. Dynamic activities are principally comprised of walking, strolling, and running. Static activities include standing, sitting, squatting, leaning, working, playing, talking, and pottering. These correspond well with the distinction made by Gehl (1986) between coming and going activities and staying activities. Significantly, staying activities last longer. He found that although activity frequency was evenly split between the two types, staying activities accounted for 90% of the total time spent on streets, discussing that the influence of environmental quality on pedestrian activity varies with type.

Optional activities such as strolling or sitting are highly sensitive to the character of space. Pedestrian street life is affected by the physical variables of the environment, but perceptual and cultural variables as well (Rapoport, 1987). Likewise, issues such as safety, climate, noise, fumes, congestion, topography, distance, proximity to services (benches, cafes, shops), and other human activities all affect the attractiveness of a street for pedestrian use. “Rapoport (1987) claims that the single most important characteristic of pedestrian-supporting spaces is complexity. Gehl (1986) has a notion of 'soft edges' that states the same thing in a much less abstract way” (Owens, 1993, p.118). Gehl particularly emphasizes the need to make strong links, both physically and psychologically, between indoors and outdoors. This can be influenced by the arrangement of interior activities, distance, and the quality and comfort of intervening spaces. Little or no setback leaves no occupiable space. According to Gehl, too much distance (more than 18 ft) discourages the connection between building and pedestrian realm. A monotonous edge can also discourage walking by increasing perceived distance, and “the quality of the route is just as important as its actual length” (Gehl, 1986). Alexander (1977) reinforces the need for good edges in his book 'A Pattern Language', “If the edge fails, then the space never becomes lively.”

Lynch (1960) distinguishes five elements which facilitate the linkages of a community (pedestrian) to a city being, paths (channels where people move), edges (linear elements such as railway lines), districts (sections of the city having some identifiable characteristics), nodes (strategic spots where people can enter), and landmarks (points of reference such as a monumental building).

Although pedestrian presence and activity is in the heart of the most design research and literature, as exemplified with a few overview above, there are only limited number of studies scrutinizes pedestrian’s relationship to commerce oriented space and activity in relatively contrasting settings. Specifically the relationship between the pedestrian realm and the commercial activity is not fully explored in bazaars and mixed-use centers with cross-cultural inquires within the same research framework to drive lessons to benefits both.

3.2 Bazaars

Bazaar defined as a marketplace or assemblage of shops where miscellaneous goods and services are displayed to buy and sell (Gharipoor, 2003). Bazaar started establishing centuries before the automobile era which can provide an example to focus on a non-motorized urban area. Located on the edge of the Silk Road, the first establishment of commerce started shaping the urban social centers of the East. It was also used as a main pathway and a place for meeting people. This has shaped a greater role for this setting as a pedestrian realm and the activities rolling in between trade and business. "Bazaar consists of a number of smaller bazaars that makeup a multi-functional, multi-layered construction. When the bazaar was expanded over time" (Soltani-Tirani,1982, p.111) It is a complex of street and lane, of courtyards, of public amenities, a complex which is repeated tens of times in the immense area the market
covers, providing the essential elements in commercial and cultural life and extended to the houses of many of the citizens who reside in the bazaar district (Bakhtiar, 1974).

3.3 Mixed-Use Centers and Developments

Mixed-use, defined as developments that have three or more significant revenue generating uses that possesses significant functional and physical integration of project components. It is a relatively close-knit and intensive use of land with, uninterrupted pedestrian connections, and development in conformance with a coherent plan that frequently require the type and scale of uses, permitted densities, and related items (Schwanke, 2003; Ozdil et al. in Regional Choices for North Texas, 2008). Most of these developments serve to the immediate neighborhood and the community around them and in some instances they are destinations within the larger city or in the region.

Mixed-used centers and bazaars are typically retail oriented settings which benefit from an improved physical environment to generate pedestrian activity. They typically react to their target service area based on the demand created for whether regional, district level or metropolitan. Although mixed-use centers and bazaars might seem different in the first glance the literature review as well as the research illustrates varying complimentary physical characteristics among them. They both seem to benefit from street pattern or networks of paths as well as hierarchy of open spaces. Buildings and stores are mostly formed aligned with these pedestrian networks and public spaces, and they are dependent of the quality of pedestrian realm. Stuing existing conditions and searching for attributes that improve pedestrian realm in commerce oriented environment in cross-cultural settings can help to better understand the role of the pedestrian realm and the attributes that can generate the future success of such settings.

4 RESEARCH METHODS

The research utilizes qualitative methods and case study analysis techniques to investigate the relationship between pedestrian realm and commerce (Guba et al., 1985; Taylor and Bogdan, 1998). The study primarily benefits from the data collected from person-to person interviews. Research also follows case study techniques to document and study each setting (Francis, 2001; Francis and Marcus, 1998). Map analysis techniques are also utilized to further examine the spatial configurations and characteristics of these settings (Wheeler and Koo, 2011). The spatial analysis grounds its basics with the aerial photos obtained from Google Earth to get a basic general idea of how pedestrian spaces are located according to the general pattern of the setting.

Total of six acclaimed sites to represent bazaar and mixed-use centers are selected for this research; Southlake Town Square, Legacy Town Center in Plano, and West 7th Urban Village in Fort Worth in Texas, USA, and bazaars of Tabriz, Isfahan and Kerman in Iran. While bazaars in this research are selected based on familiarity of the author and data availability three matching mixed-use case studies were selected based upon their relative comparability informed by the ongoing mixed-use study at University of Texas at Arlington (Ozdil et al., 2009). These setting were chosen because of their exemplary qualities in two distinct environments and relevant significance in diversity of culture, time and place.

The study intends to assess the role of the pedestrian realm with the help of interviews conducted with three stakeholder groups: pedestrian, designer and developer/planners for each case study. Designers and developer/planners are identified for interviews based on their involvement in the design, planning/developing of these settings while shop owners or shop keepers are utilized as users. Stakeholder for bazaars are reached through phone calls while most mixed-use stakeholder interviews conducted in-person.In the case of bazaars, the pedestrian users identified through random phone calls by the area code matching that particular setting and asking the interviewee whether they are pedestrian users of the setting.

5 ANALYSIS AND FINDINGS

As it is stated earlier in this paper the objective is to document and assess the physical make up of the pedestrian realm in mixed-use settings in both the Eastern and Western cultures. This research primarily answers the following three questions: (1) the role of the pedestrian realm in bazaars and mixed-use centers, (2) the physical attributes of the pedestrian realm in each setting, and (3) the characteristics of bazaar and mixed-use centers that contribute to the pedestrian realm.
5.1 Case Study Findings
Each case study is organized to start with an introduction containing basic site history, site description, and location and context information. Following the introduction detailed information regarding the site’s physical characteristics, site surrounding and relations, accessibility as well as interview results are documented and analyzed.

5.2 Southlake Town Square, United States
Southlake Town Square is a 125 acre master planned mixed-use development, located within the corporate limits of the city of Southlake, Tarrant County in North Texas. The primary mixes of uses are commercial, retail, office, residential and institutional. Like many town squares in Texas, Southlake Town Square is home to Southlake City Hall (City of Southlake website, 2012)

The Southlake design allows individual blocks to accommodate their parking load without sacrificing any prominent public street facade to a garage or parking lot. While the 460x480-foot blocks for the two-story buildings at Southlake are large. At Southlake, efforts to limit the perceived length of streets have included mid-block vehicular breaks that read as streets and notched corners of the larger blocks to accommodate squares and plazas (O’Looney et al., 2006).

![Figure 1. Southlake Town Square location (adapted from Google, 2012)](image1)
![Figure 2. Southlake Town Square street pattern (adapted from Google Earth, 2012)](image2)

Southlake Town Center was built around a combined city hall and sub county courthouse facing a block-square garden. The buildings around this city hall have three stories, tapering a block away to two stories. The attention to façade detailing is intense, but the developers allowed a mix of modern buildings amid the traditional ones (Wallace, 2009).

The interviews findings illustrated that almost all of the respondents agrees on the success of the project, and the fact that it is attracting pedestrian activity. They commented on a combination of factors that has assisted to establish pedestrian realm in this setting. Qualities considered by the informants positively in this setting can be summarized as: Sense of comfort, Human scale, Architecture, Atmosphere, Public Space, Variety of uses Pedestrian access, Design details.

5.3 Legacy Town Center, United States
Legacy is a well-established, mixed-use development located in Plano, Texas. Legacy Town Center is a compact, mixed use, walkable neighborhood built on a greenfield site in the middle of the Legacy Business Park, to the east of the Dallas North Toll way in Plano. The 150-acre development contains apartments, townhouses retail office space, hotel rooms, and a Theater (NCTCOG, 2012).
Legacy Town Center is a master plan community which is envisioned, designed and built as the core of a 2,665-acre suburban business park. Design is primarily shaped by walkable block sizes, pedestrian friendly building frontages and accessible open space infrastructure for a diverse set of residential, commercial, entertainment and service uses. Some of the key design features include but are not limited to: Pedestrian friendly streetscapes, 5-acre parks, 4-acre lake within the development, enhanced infrastructure, luxury apartments, hotels, boutique retail, 120-foot-wide fountain, and 24 live-work-play environment (North Texas 2050, 2010).

Interviewees results for the Legacy Town Center illustrated that the restaurants play an important role in attracting the pedestrian traffic and the intentional situation of the parking garages systematically bring people to the sidewalk and create more pedestrian movement to attract more pedestrian activity. Qualities considered positively by the informants in this setting can be summarized as: Edges, Details, Variety of uses, Variety of shopping options, Parking, Safety and Security, Merchandising, Relation to the city, Pedestrian access-Organization of uses.

5.4 West 7th, Fort Worth, United States

The West 7th Urban Village is one of 16 different small geographic areas zoned for dense, multiple-use development that is mass-transit and pedestrian friendly. It serves as a gateway to the Cultural District and Downtown. People are already drawn to cultural venues in the district, and the introduction of a lively, mixed-use urban neighborhood with a greater variety of retail and entertainment attractions should help increase activity (City of Fort Worth, 2012).

Mid-rise and high-rise housing, retail, and offices overlook the Trinity River corridor, which provides scenic and recreational opportunities for the residents and businesses within the urban village. Other land uses include boutique retail, restaurants, urban-scale apartments, and professional offices (City of Fort Worth, 2012).

Urban design elements that have been used and established in West 7th can be identified as (City of Fort Worth, 2012): Neighborhood-scale mixed-use development, an attractive boulevard with a comfortable pedestrian environment with buildings fronts, a neighborhood is further integrated with land uses along West 7th Street through improved pedestrian connections, a modern roundabout creates a unifying gateway landmark and a boutique hotel adds to the urban ambiance.
There are still some challenges that need to be considered in order to make a better environment. Vacant lots and auto-oriented development along West 7th create an environment in which walking is impractical and uncomfortable. Some vacant lots are not maintained, and others are used for parking. Pedestrian connections to surrounding streets are limited. Strategies to address this issue include policies that encourage more intense use of developable land, rezoning to apply more appropriate urban development standards, and urban design strategies such as pedestrian improvements and landscaping (City of Fort Worth, 2012).

In West 7th the common theme that has been collected from the responses was the need for reconnection with the city and downtown but at the same time it is considered utilitarian space for the pedestrian. Qualities considered positively by the informants concerning pedestrian realm in this setting can be summarized as: Atmosphere, Architecture, Mixed-use activity, Human scale, Pedestrian access, Activity watching, Design details, Clarity-Merchandising, Public space, Relation to the city fabric.

5.5 Kerman Bazaar, Iran

Located along the Silk Road, the oldest and most important trading route in eastern civilization, Kerman, which was once a trading metropolis of international renown has one of the most historical bazaars in Iran. Kerman was chosen for its location and the role its bazaar once played in the formation of the city itself. Commercial trading with adjacent cities was easy as Kerman lies on a vast plain, and is classified as dry and warm climate (Aletaha, 1999).

Neighborhood centers play an important role in the social and cultural life of a city, which made the district dynamic and lively for local residents. Apart from its role in the district itself, the neighborhood centers were shaped around a Bazaar, a branch of the main bazaar and it connected nearby districts to the main bazaar (ArjomandKermani, 2009).

These pathways are of secondary importance to the main bazaar, and render residential quarters accessible through a system of paths peripheral to each walled quarter. Normally four to five meters wide, these pathways lead through the encircling walls through gateways. Constantly kept in the shade by the surrounding high walls, these paths are today cool channels for pedestrian circulation even in the hottest of summers. The Kerman bazaar has been and still is the liveliest location in the city, and it continues to exert considerable influence on the cultural, economic and social life of the town (ArjomandKermani, 2009). In some parts open public spaces were created along the covered bazaar. This open space was generally located where the main bazaar and the minor pathways meet. There are also other public spaces where the main bazaar intersects with a secondary pathway.
In Kerman bazaar the common theme emerged from the interviews was the “variety” as being the most important factor of the pedestrian realm. In this particular case variety refers to not only diversity of people, but also variety of functions and spaces offered in this setting including in the architecture. All the participants implied the covered part of the main pathways to be very successful and the fact that it is restricted to cars is a positive point. Qualities considered positively by the informants in this setting can be summarized as: Variety of uses, Variety of spaces, Diversity of people, Activity watching, Sequential qualities, Relation to the city fabric, Pedestrian access, Sense of comfort, Security, Gender preferences, History, Design details.

5.6 Tabriz Bazaar, Iran
Tabriz city, with an altitude of about 4400 ft above sea level, is considered a mountainous city. The Mehran Rood River goes through the middle of it. The bazaar of Tabriz dates back to the early periods of Iranian urbanism of 6th century. The bazaar faced many recession and growth periods and was destroyed several times, is most likely that the main passages in the bazaar are reconstructed exactly as the past after a destructive and violent earthquake in 1780 (Mansouri, 2011).
The central core is divided into two parts named as upper and lower bazaars, lower bazaar is being the part from the core to the River and upper bazaar is being the northern banks of the Mehran River. Tabriz bazaar is generally occupied by jewellers, gold and silversmiths on south, leather and shoe sellers at east, religious and educational facilities at west, carpets and textiles in center and iron, copper and metal works at north (Edgu et al., 2012).

In Tabriz bazaar the most common theme retrieved from the responses was the variety of spaces and the diversity of uses being the most important factor of the pedestrian realm. Also the importance of the pedestrian access connection to the city has been emphasized in many different ways. Qualities considered positively by the informants concerning pedestrian realm in this setting can be summarized as: Pedestrian access, Variety of spaces, Diversity of uses, Unity, Human scale, Activity watching, Relation to the city, Design details, Merchandizing, Sense of comfort, Gender preference, Security and safety.

5.7 Isfahan Bazaar, Iran

Isfahan city is located in 32° 38’ 30” N latitude and 51° 38’ 40” E longitude. Isfahan bazaar core consisted of two parts, the old section, which started from the old square, and the new section, which started from Naghsh-e-Jahansquare, with its measurements of 1680x523 ft. and connected to the old section. Old square had a castle, and mosque and residential. There were some peripheral markets along the main streets radiating from the old square from at least that time (Arjomand, 2010).

The 1.5 km (1,650 yard) shopping street is still the main street in the bazaar. Creation of Naghsh-e-Jahan square played an important role in Isfahan’s town planning. The important point is the best design for connecting of this new square with the old structure of the city core. The purpose of design was linking it with the main chain of the grand bazaar, which extends from the Old Square (Karimi et al., 2003). The buildings surrounding the Naghsh-e-Jahan square (originally including a large number of coffee houses), to the south east and the large bazaar to the north, where the old core was located (Walcher, 1997).

“The volumes of the various sections of the bazaar, the width and the height of the bazaar lanes were determined to a large extent by the trades and crafts that were sustained in the different sections. Some areas required simple cells with low ceilings and circular openings in the roof to admit light and air. Others required higher ceilings and more ventilation, but these, too, had circular openings in the roof, often at the apex of a vault. These admitted a pale yellow light and kept the interiors warm and dry in winter, in summer they were cool, shaded and airy. Many of the old covered streets have lost their roofs through time. Beyond the plain and undecorated walls may often lie cool and tranquil gardens, shaded courtyards and arcaded walks, but none of this is evident from outside” (Bakhtiar,1974, p.18).

Figure 11. Isfahan Bazaar and surrounding environment (adapted from Google Earth, 2012)
Figure 12. Isfahan Bazaar street pattern (adapted from Google Earth, 2012)
In Isfahan bazaar the common theme retrieved from the responses was the variety of spaces and the diversity of uses as the most important factor of the pedestrian realm. Also the importance of the city fabric and its connection with the bazaar was one the important facts. Qualities considered positively by the informants concerning pedestrian realm in this setting can be summarized as: Pedestrian access, Diversity of uses, Relation to the city, Sequential quality, Security and safety, Activity watching, Sense of comfort, Variety of shopping options.

5.8 Synthesis of Findings from Case Studies:

The case study review illustrated that in spite of many differences that pedestrian setting of East and West have there are many common features. The table below reveals the overall look of the case studies combined with the attributes collected from the interviews. There are several common features in pedestrian spaces and pedestrian realm, in both bazaars and mixed-use centers. Among them activity watching, pedestrian connection, diversity of uses and design details are most common. Histories, variety of spaces and sequential qualities have only been identified as contributors to the pedestrian realm in bazaars. Parking, clarity and atmosphere have only been mentioned in mixed-use centers.

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6 CONCLUSION

This paper document and assess the physical make up of the pedestrian realm in higher density mixed-use commercial settings of the East and the West in order to better understand pedestrian environments’ role, and to inform future design challenges with cross-cultural references in similar urban settings. Three settings in mixed-use centers, Southlake Town Square- Southlake, Legacy Town Center-Plano and West 7 Urban village - Fort Worth as well as three bazaars, Kerman Bazaar, Tabriz Bazaar, and Isfahan Bazaar were selected to explore pedestrian realm in public settings. This research primarily focused on the following three questions: (1) the role of the pedestrian realm in bazaars and mixed-use centers, (2) the physical attributes of the pedestrian realm in each setting, and (3) the characteristics of bazaar and mixed-use centers that contribute to the pedestrian realm.

6.1 Pedestrian Realm and Commerce

The study reveals that the relationship of pedestrian realm and commerce is symbiotic, and complementary to one other. As it is illustrated in Table 1 research identified various physical attributes
and characteristics that contribute to the quality of pedestrian realm in these settings. For example sense of comfort, which can be provided by the right temperature and right amount of exposure to the natural environment is suggested to be one of those qualities. Activity watching is the most important activity that occurs in these settings, therefore every physical characteristic that provides a potential for this option is considered as essential. Diversity of people is one of the contributing factors to activity watching potential, as well as variety of uses. Additionally, a well-defined mix of uses provides variety of options and a potential to satisfy all demands in one stop. One of the most mentioned of these uses would be restaurants, coffee house or cafes, which in turn leads to repeat business. So as one of the participants mentioned, the world is changing from utilitarian only and recreation only uses to a mix of those where you get to enjoy and at the same time get your needs fulfilled. The edges are the most important feature of the pedestrian environment as they stimulate activities, define the human scale and sense of enclosure for the pedestrian to be comfortable and motive. It is desirable, to be activated by commerce or at least transparent edges which provide an opportunity for activity watching. Providing a safe and secure environment without automobiles harassing the pedestrian activity are among the most essential physical characters as mentioned by the informants. For the places that has a distinguished history, it is important for them to represent it, whether it is through different architectural styles or through decent representation of the past. It can offer a sense of place and identity for the pedestrian environment. All of which provide a good atmosphere for pedestrian to relax and enjoy their time while they are meeting their timeframe.

People enjoy watching other people interact, watching diversity of people and diversity of spaces. So the most important factor here as also supported by literature is diversity, variety and complexity (Rappaport, 1987) of people, uses, and spaces. It was stated several times pedestrian activity encourages more pedestrian activity. Architecture at the same time is a unifying elements or character. Also providing a sequential qualities is important, so the place would be cohesive and readable for the pedestrians. Details are what people on foot pay most attention to. Creating a good pedestrian realm needs careful attention to the details in design. However without having provided a general sense of comfort for the pedestrians, the details are not that significant of the fact. As one of the participants mentioned: "you go to a place to watch activities, it does not matter if it is poorly designed with details". Research illustrated that public spaces are another element that help pedestrian spaces to thrive. People should feel they belong to the place or they should be provided with a sense of ownership of the place which can be achieved through public spaces.

Research reveal also some key findings concerning the nature of commerce in such settings. The types of commerce influence the pedestrian activity and should be scale depending on the customers volume it is responding. It is desirable for commerce to be related to everyday-life essentials. The study illustrated that the most compelling and attractive types of commerce are the food places such as restaurants, café and such, because people tend to return more often to such places and they provide a gathering place and activity watching potential. Both bazas and mixed-use centers findings suggested that commerce and pedestrian realm as inseparable elements and they should be addressed well through design and planning.

6.2 Mixed-use centers and Bazaars

Both bazas and mixed-use centers play major roles as destinations for their community, city and the region surrounding them. They draw people from around to come and enjoy their time. In mixed used centers it was mentioned that they are responding to the bigger regional scale, as well as in bazaar, the setting is serving as a destination for it surrounding and the city in general. In bazas reviewed in this study the pedestrian realm has not been designed for pedestrians only but after the introduction of the automobiles, it has been restricted to automobile movement, so it became pedestrian only space in time. In mixed use centers reviewed in this research, it is designed for the automobiles mainly. While making a comparison between bazas and mixed-use centers, one of the informants mentioned that, if there is no automobile traffic it is hard to introduce the space to the pedestrians, but once it is established and became known to the community, it is actually a good suggestion to make it pedestrian-only environment. On the other hand the designer in one of the settings concludes that "bazas are formed as pedestrian access because it has enough potential". "This potential comes from the integrity of the network between districts and the urban fabric", he mentioned. The parking in mixed use setting are located in the setting and adjacent to the pedestrian realm while in bazas they are mostly located outside of the settings. Parking should be provided and
positioned sensibly. The mid-block location of the parking is a strategy to bring people to the sidewalks and from there to the other activates provided as it was mentioned by the designers in the mixed use setting. Safety and security is another important characteristic of the pedestrian realms, and it mostly deals with vehicular movement and the location of the parking to provide that safe environment for the pedestrians either in bazaars or mixed-use centers. As it was mentioned by the interviewees, accident causing problems discourage pedestrian activity. Pedestrian-only environment such as bazaars due to the comfort and safety level they are providing and by the fact that people are not disturbed by cars as much, seem to be prone to more pedestrian activity.

The other surprising finding of this study is that architecture is not mentioned strongly by the respondents as a physical attribute that impact the relationship between pedestrian ream and commerce. The human scale and the right geometry of the environment, that provides an enclosed area for the pedestrians to feel safe and secure, seem to be a very important factor that emerged more than the architecture itself. Human scale has had an important role in the success of these places, they support the idea of enclosure and being protected with walls and certain height to width relationship.

In conclusion, this research covered important grounds addressing a void in literature by highlighting the relationship between the pedestrian realm and the commercial activity in bazaars and mixed-use centers with cross-cultural inquiry. That being said, it is suggested here that empirical studies with large number of cases must be undertaken as future research in order learn more about the symbiotic relationship between commerce and pedestrian realm and promote long term viability.

7 REFERENCES


Student Term Paper, ARCH 209C with Clare Cooper Marcus, UC Berkeley,


