



Exploring the Meaning of Quality from Urban Space Users' Viewpoint by Analyzing Conceptual Environment Codes*

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Received 31 May 2016;

Revised 19 September 2017;

Accepted 12 November 2017

ABSTRACT: The main purpose of urban design is to create good and high-quality urban spaces and environments for people to live while such quality may not be determined only by imposing a structural, perceptual and value system of the designer. It can be said that human and his powers to perceive surrounding environments are the focus of urban design. Having reviewed previous researches and theories in relation to the quality of civic environments it was shown that the methods based on the people's use of civic environments were more successful; this requires knowing the relation between the space nature, the qualities related to it and the human's perceptual knowledge complexities and differences to read such nature. Therefore, this paper, using the knowledge scope of other sciences in the fields of psychology and communicology in relation to urban design issues, has been done in response to this theoretical demand. This study, with an interdisciplinary perspective, in order to answer this question how a high-quality and desirable urban space from the perspective of users is, has explored users' perceptual field using grounded theory and sought the meaning of quality from the users' viewpoint by using a psychological perception as a code; in fact, codes are informative motives and indicate the meanings defined in perceptual processes. The findings show that space users' reading is a set of physical, functional, meaning and social layers through meaning guide codes which is more accompanied by reading of physical aspects of an environment.

Keywords: Urban Space Quality, Perception, Meaning, Code, Environmental Psychology, Grounded Theory.

INTRODUCTION

Urban design has appeared as an interdisciplinary activity amongst the fields of study related to the built environment since more than four decades ago. Cities' design based on environmental quality concepts and in full association with users' needs is amongst the most critical issues. A glance at contemporary urban settings shows that present situation and conditions of cities and urban settings neither meet new demands and necessities related to living methods of modern citizens nor has the advantages of old cities. The modern city environments

have changed into places loaded with widespread, scattered and disorganized data and communications which are expanding regardless of any controlling structure. The stimuli beyond the human senses have deprived the balance and variation; in addition, the apparent increase in variation has generated a new form of monotony.

A review on theoretical literature in field of urban design and previous practical researches would encounter us with a variety of theories and experiences which are

* This article is adapted from the Ph.D. thesis of the first author (Elham Mansouri) titled "Formulation of Reading Process and Designing Urban Space by Decoding and Encoding of Environment Content" researched in Department of Art and Architecture, Science & Research Branch, Islamic Azad University, Tehran, Iran, under supervisory of Dr. Hamid Majedi and co-supervisory of Dr. Farah Habib in 2015.

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classified in order to create a good quality environment as the ultimate destination of urban design.

Having benefited from the advantage of these theories and experiences and with emphasis on theories focused on meaning and perceptual domains, the present paper is to answer the question, "Having taken into consideration all theoretical and professional perspectives and conceptual definitions presented on the quality of space, what is a high quality urban space from the standpoint of users?"

The necessity of this study becomes more evident when the public needs are regarded as ultimate appraisers of space more and more. Regardless of the fact that based on what theoretical paradigms a space has been formed or which designer by which creative process has been involved in space design and so on, the people would have a good or bad judgment by space perception with regard to their needs, motivations and experiences.

So the present paper has been conducted to organize the thinking methods of urban designers with regard to cognition of perceptual elements and structures of urban space users. As it was argued, the main question of present research is, "How the space qualities and characteristics are perceived by users?"

METHODOLOGY

The present paper is a qualitative study known as grounded theory which has been conducted by using the processing of information obtained from semi-structured interviews with urban space users. According to the present research design, a set of basic concepts of reading urban space through open coding process and analysis of users' statements were collected to extract certain topics. In axial coding stage, the links between these categories are coded in different titles and in the selective coding stage, every component of encoding paradigm is described, the event process is drawn and the theory is created.

According to Strauss and Corbin (1990), data analysis is segmentation, organization and re-integration data in order to create a new perception of intended phenomenon. With regard to common procedures for data analysis, the grounded theory studies used the method proposed by Strauss and Corbin (1990). Moreover, to ensure the validity of study or precise data from the standpoint of researchers, participants or readers of findings report (Creswel & Miller, 2000), having used the grounded theory the present study used certain methods to ensure the validity of findings such as triangulation of data, peer debriefing and auditing.

The non-random sampling method was used in this

study. The universe includes some common individuals as space users. The sample includes 30 people who were selected by purposive sampling. In addition, to justify the number of samples, the present paper used theoretical saturation method (Glaser & Strauss, 1967).

THEORETICAL GROUNDS

Environmental Psychology

People often see and interpret the same scene differently. Environmental perception varies importantly with personal and cultural differences. Environmental psychology is the study of transactions between individuals and their physical settings (Gifford, 2007). In these transactions, individuals change their environments, and their behavior and experiences are changed by their environments. What sets environmental psychology apart is its commitment to research and practice that subscribe to these goals and principles: (a) Improve the built environment and stewardship of natural resources, (b) Study everyday settings (or close simulations of them), (c) Consider person and setting as a holistic entity, (d) Recognize that individuals actively cope with and shape environments; they do not passively respond to environmental forces, (e) Work in conjunction with other disciplines (Gifford et al., in R. Martin et al., 2011, pp. 440-442).

Environmental psychologists emphasize on understanding how individuals respond to complex everyday scenes (e.g., Ittelson, 1978). An individual level of awareness, degree of adaptation, and necessary selectiveness in attending to environmental cues within complex real scenes mean that people sometimes miss important elements of a scene resulting in negative consequences for health or safety (e.g., Stamps, 2005).

Figure 1 shows a model of the relation between socio-physical characteristics of places and human responses. Socio-physical attributes of places interact with human characteristics to affect user evaluations and behavior. The Individual refers to characteristics, such as personality, affective state, socio-cultural experience, expectations and intentions of the person evaluating the setting. Setting Attributes refers to social and physical characteristics of the environment. The social characteristics include purpose, culture, age or gender of the individuals using the setting. The physical characteristics are attributes, such as size, shape, order, or legibility, of the environment.

Although individuals differ, there are substantial areas of agreement. In shaping places for use, urban designers



need to know about the likely effects of their designs on the public who experiences it (Lynch, 1960), as well as the areas of consensus among most people (Nasar, in Banerjee and Loukaitou, 2011, pp.162-164).

Perception and Cognition in Psychology

Perception is a process located at the center of any environmental behavior because it is the source of all environmental information. The setting receives all senses and makes the individual faced with data beyond their power to processing. So, perception is not similar to sensation but is the result of implemented processing by individual. Ittelson (1976) interpreted that a person is part of a perceptual system. Sometimes it is difficult to separate the person from environment in perceptual processing because these two are in continuous transaction and perception depends on something the person is acting right now (McAndrew, 1993). Perception is the set of processes by which we recognize, organize and make sense of sensations we receive from environmental stimuli (Sternberg, 2008, p. 75).

To be more specific, cognitive psychology is the study

of how people perceive, learn, remember, and think about information. A cognitive psychologist might study how people perceive various shapes, why they remember some facts but forget others, or how they learn language. So we can say that in the cognition field, people think, and in the cognitive psychology, scientists think about how people think (Sternberg, 2008, p. 2).

The differences and similarities arising from individual’s perceptual processes could be pursued in individuals’ mental meanings which form the basis for an effective communication with his setting.

Meaning: Perception Continuity and Substitution of Mentality and Objectivity in Environments

The scholars and professionals in the area of built environment talk about meaning as an idea which plays basic role to create a desirable social setting. Meaning is a parameter focusing on individual’s mental characteristics. In fact, the quality of meaning associated with social settings could not appear independently from mentality, memories and culture of observer.

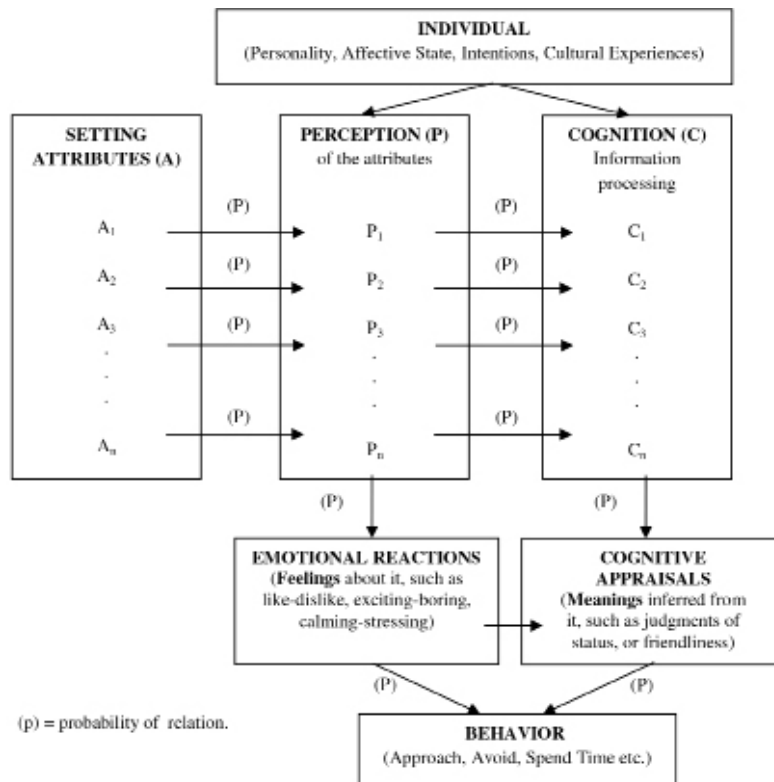


Fig. 1. Basis for Environmental Response (Nasar, in Banerjee and Loukaitou, 2011)



Meaning basically signifies something which has not any quantitative form. Meaning is the content aspect of a phenomenon which completes its formal and apparent dimensions (Pourjafar et al., 2008, p. 8).

Certain meanings are related to potential instrumental use of setting while others are related to emotional qualities perceived by an observer or user. The symbolic meaning also bears more ambiguity than other levels of meaning (Lang, 1987).

Gibson (1950) distinguishes between six levels of meaning: 1-primary and tangible meaning 2-practical meaning 3-instrumental and machine meaning 4-value and emotional meaning 5- signs 6- symbols.

Hershberger (1974) also defined five levels of meaning some of which are equal to Gibson's classification. 1-explicit meaning including shape and form (almost similar to first level by Gibson), 2-referential meaning (equal to sixth level by Gibson), 3-affective meaning 4-value meaning assessed whether something is good or bad (almost similar to fourth level by Gibson) and 5-prescribed meaning. The difference between the concepts of environmental capability and prescribed meaning is that the former refers to behavioral facilities of setting and the latter implies a degree of coercion in behavior depending on setting structure.

Charles Morris (1938) also defined three levels of meaning as syntactic, semantic and pragmatic. The syntactic meaning arises from the arrangement of a building in surrounding setting. The semantic level is attributed to norms, ideas or insights suggested or offered by an element. The pragmatic level associates symbol to setting users (Lang, 1987).

In addition, Morris represents another classification with psychological approach: (a) referential level in which meaning points to denotation and focuses on external agent (b) value level which points to coordination between received meaning and value system of observing mind and mainly emphasizes the factors such as observing individual, inside human, etc.

Bourdieu (1977) believes that each phenomenon indicates two primary and secondary levels. The primary level renovates the main characteristics of phenomenon such as color, shape and structures and the secondary level includes their symbolic meaning.

In addition to the above-mentioned classification, there is another type of environmental meaning referring to two "explicit" and "implicit" levels of meaning. Echo (1968) defines the implicit meaning (main point) as main performance or performance achieved by a subject as well as the main meanings of a symbol, object, building, etc.

The implicit meaning also defines secondary performance holding symbolic nature beyond explicit meaning. It actually points to abstractive attributes associated with and transferred to by an explicit meaning (Kalali & Modiri, 2012, p. 46).

As it was argued the symbolic meaning of setting is more ambiguous than other levels, because it deals with learning, cultural differences and what individuals like or dislike. In addition, emotional and affective meanings are also considerable. The experimental studies identified three types of primary emotional reaction: pleasure, arousal and dominance. Pleasure deals with like and dislike. Arousal is related to exciting attributes of setting and dominance is the sense of individual freedom (Lang, 1987).

Figure 2 demonstrates an insight aligned with the expressed ideas which presents a compliance of continuous stream of objectivity and subjectivity in perception and cognition of meanings especially in terms of environmental subjects.

Meaning Manifestation: Basis for Perception and Communication between Individual and Environment and Experience of Place

The perceptive and cognitive processes are developed by individual's mental finding meaning. The communicative processes between individuals and environment would be effected by similar meanings manifestation.

It has been pointed out quite clearly that people communicate verbally, vocally and nonverbally. Verbal behavior is much more codified while using more "symbolically" than either vocal or nonverbal behavior. Environmental message is multichannel (Rapoport, 1982, p. 49).

Environments and nonverbal communication also lack the clear-cut lexicons with indexical relationships to referents that language possesses. If we wish to study meaning in its full, natural context, we need to begin with the whole, naturally occurring phenomenon.

In any communication process, certain elements are essential (see Hymes, 1964, p. 216):

(1) A sender (encoder), (2) A receiver (decoder), (3) A channel, (4) A message form, (5) A cultural code (the form of encoding), (6) A topic-the social situation of the sender, intended receiver, place, the intended meaning, (7) The context or scene, which is part of what is being communicated but is partly external to it-in any case, a given (Rapoport, 1982, p. 52).



Primary and Tangible Meaning (Evident Physical Features)		Perception of Shape and Form		Syntactic Meaning (Placement in Context)	
Practical Meaning (Function and Utility of the Phenomenon)		the Prescribed or Pre-Determined Meaning (Encourages the Perceiver to Show a Specific Behavior)		Functionalist Meaning (Use of the Phenomenon)	
Instrumental and Machine Meaning (Responsive to Intentions and Special Applications)		Emotional Meaning		Conceptual Meaning (Norms, Concepts and Attitudes Presented by the Phenomenon)	
Value and Emotional Meaning (Perceivable Emotional Aspects of the Phenomenon)		Value Meaning (Assessed to Be Good or Bad)			
Meaning at the Level of Signs.		Referential Meaning (Subjective Symbols and Hidden Meanings)			
Meaning at the Level of Symbols					
Explicit Meaning Primary Meaning Referential Meaning			Implicit Meaning Secondary Meaning Value Meaning		
Objectivity			Subjectivity		

Fig. 2. Comparison of Theories on the Levels of Meaning in a Spectrum of Objectivity and Subjectivity

People typically act in accordance with their reading of environmental cues. It follows that the “language” used in these environmental cues must be understood; the code needs to be precisely read. Once the code is learned, the environment and its meaning play a significant role in helping us judge people and situations. The objects of the world are given meaning partly by other people’s actions encoded in them. Blumer speaks of physical, social, and abstract objects, but in the built environment these are combined and interacted; most conceptualizations of the built environment stress this point that environments are more than just being physical (Rapoport, 1982, pp. 57-60).

Information is encoded in the environment and needs to be decoded. But environments can only do this if they communicate-if the encoded information can be decoded.

Encoding is also part of the general idea of ordering systems, cognitive schemata, and taxonomies that are important while forming a different topic (Rapoport, 1982, p. 81). By encoding, we mean what arrangement

would be provided for X and decoding also offers the kind of suggestion or meaning propose by this arrangement.

The surrounding urban environments are potential messages produced during different stages in diverse time spans by a range of message producers (sender). These messages become actual and perceived and evaluated through perceptual-cognitive processes.

Berlo (1960) indicated that when we talk about message, we encounter the code, way of expression, elements and structures related to these elements as message factors. Environmental codes are similar to components of message puzzle. The content of environmental messages including a wide range of simple and primary concepts to symbolic and meaning-oriented concepts are related to setting which have been created by different designing methods through specific arrangements for codes assortment (even regardless of specific arrangement style), and are created, settled and sent into an environmental message and this is the message encoding process. The sent message interfered



with a variety of internal and external parasites is decoded after being received (By the space user). In fact, the physical and affective forms of message must be changed in accordance to meaning forms of receiver’s mind. An appropriate relationship will be established between designer and user by overlapping and coordination of received messages and an effective relation will be established between person and setting.

Environmental Qualities: Closest Conceptual Definitions to Operational Context

As pointed out by Tibbalds, people judge architecture and planning, landscape and engineering, by the quality- principally the physical quality- of what they see around them. They are concerned with the function and attractiveness of places as a whole and less with individual buildings, plans, and procedures, however well-conceived each of these may be in its own right (Tibbalds, 1984, p. 24).

The quality of a subject is derived from two sources or contexts: “mental” context of person and “objective” context of object, level of priority, similarity or inferiority to other objects perceived by human mentally or objectively as the set of characteristics of that object. (Billings, 1993).

The theories on urban design quality have been presented in three distinctive views. Some only perceive

the quality as inborn attribute of physical environment depending on the physical setting. Others consider quality as a mental quality dependent on observers and believe that quality has no relationship with structure and attributes of physical setting. The third group assume it as a contrast between mentality and objectivity. The supposition of quality as a “phenomenon” or “incidence” which occurs during the transaction between physical and tangible attributes on one hand and patterns and cultural codes and individual abilities of observer on the other hand: the experimental theorists of urban design such as “Lynch”, “Appleyard”, “Lang” and “Nasar” are the most important supporters of such concept of urban design quality. According to aesthetic model of urban design presented by Nasar, the quality of urban design as a concept is understood, recognized and evaluated by offering the tangible characteristics of the physical environment on one hand and created by observer on the other hand (Nasar, 1994, p. 381).

In reviewing the keywords and concepts of urban design quality, the study of three classification types of the desirable urban space components is significant in order to apply in the decoding processes of this research.

Sherman (1988) presented different definitions of successful urban places indicators which are the result of using qualitative components (which are not expressly stated in this classification).

Table 1. Indicators of Successful Urban Places

(1)	Planning will be invisible and the results will look natural, as though they happened of their own accord
(2)	There will be interesting and stimulating shapes
(3)	The 'familiarity' of streets and street life will be celebrated
(4)	There will be secret places which once discovered grow on you, making you look deeper to find more
(5)	There will be surprises, to keep citizens awake, provide topics of conversation, prevent ennui
(6)	Experiment will be encouraged, and there will be exciting things to do
(7)	There will be areas and opportunities for informal, casual meetings to take place, including warm and friendly bars and pubs
(8)	Food and drink will be a treat, and people will be able to purchase and consume it at varying prices and degrees of leisure
(9)	There will be a variety of comfortable places to sit and wait—a city worth living in has to be a city worth sitting in
(10)	There will be a good balance between the needs to prevent loneliness and to preserve anonymity and privacy
(11)	Changing seasons will not draw attention away from the sterner pursuits of daily life but rather will be an integral part of a continually changing city, and celebrated as such
(12)	The senses will be heightened: affection/friendliness/hospitality; a sense of belonging; historical and cultural continuity; a sense of fun/humour; opportunities for gossip; open-mindedness; vitality; fantasy; flamboyance; colour; beauty/aesthetic stimulus

(Adapted from Sherman (1988) in Montgomery, 1998, p. 95)



Montgomery (1998) also presented qualitative principles of successful urban places. This classification of principles based on the constituent criteria includes

form, activity and meaning (image) (Montgomery, 1998, p. 94).

Table 2. Summary Principles for Achieving Urbanity

(A) Activity	Principle 1:	Generating pedestrian flows and vitality
	Principle 2:	Seeding people attractors
	Principle 3:	Achieving a diversity of primary and secondary uses
	Principle 4:	Developing a density of population
	Principle 5:	Varying opening hours and stimulating the evening economy
	Principle 6:	Promoting street life and people-watching
	Principle 7:	Promoting street life and people-watching
(B) Image	Principle 8:	Legibility
	Principle 9:	Image ability
	Principle 10:	Symbolism and memory
	Principle 11:	Psychological access
	Principle 12:	Receptivity
	Principle 13:	Knowledge ability
(C) Form	Principle 14:	Achieving development intensity
	Principle 15:	Zoning for mixed use
	Principle 16:	Building for a fine grain
	Principle 17:	Adaptability of the built stock
	Principle 18:	Scale
	Principle 19:	City blocks and permeability
	Principle 20:	Streets: contact, visibility and horizontal grain
	Principle 21:	The public realm
	Principle 22:	Movement
	Principle 23:	Green space and water space
	Principle 24:	Landmarks, visual stimulation and attention to detail
	Principle 25:	Architectural style as image

(Montgomery, 1998, p. 114)

Carmona (2008) proposed another detailed conceptual to operational classification on space qualitative attributes and a list of positive universal qualities for public spaces. In this classification, the urban space is regarded as a complex identity including environmental, economic and social characteristics and dimensions (Carmona et al., 2008, p. 15).



Table 3. Universal Positive Qualities for Public Space

Clean and Tidy	Well Cared for	Clear of litter, fly tipping, fly posting, abandoned cars, bad smells, detritus and grime; adequate waste-collection facilities; provision for dogs
Accessible	Easy to get to and Move around	Ease of movement, walkability; barrier-free pavements; accessible by foot, bike, and public transport at all times; good quality parking; continuity of space; lack of congestion
Attractive	Visually Pleasing	Aesthetic quality; visually stimulating; uncluttered; well-maintained paving, street furniture, landscaping, grass/verges, front gardens; clear of vandalism and graffiti; use of public art; coordinated street furniture
Comfortable	Comfortable to Spend Time in	Free of heavy traffic, rail/aircraft noise, intrusive industry; provision of street furniture, incidental sitting surfaces, public toilets, shelter; legible; clear signage; space enclosure
Inclusive	Welcoming to all, Free, Open and Tolerant	Access and equity for all by gender, age, race, disability; encouraging engagement in public life; activities for young people; unrestricted
Vital and Viable	Well-used and Thriving	Absence of vacant/derelict sites, vacant/boarded-up buildings; encouraging a diversity of uses, meeting places, animation; availability of play facilities; fostering interaction with space
Functional	Functions without Conflict	Houses compatible uses, activities, vehicle/pedestrian relationships; provides ease of maintenance, servicing; absence of street parking nuisance
Distinctive	A positive, Identifiable Character	Sense of place and character; positive ambience; stimulating sound, touch and smell; reinforcing existing character/history; authentic; individual
Safe and Secure	Feels and is Safe and Secure	Reduced vehicle speeds, pedestrian, cyclist safety; low street crime, anti-social behaviour; well lit and good surveillance, availability of authority figures; perception of security
Robust	Stands up to the Pressures of Everyday Use	High-quality public realm, not repeatedly dug up; resilient street furniture, paving materials, boundaries, soft landscaping, street furniture; well-maintained buildings; adaptable, versatile space
Green and Unpolluted	Healthy and Natural	Better parks and open space; greening buildings and spaces; biodiversity; unpolluted water, air and soil; access to nature; absence of vehicle emissions
Fulfilling	A sense of Ownership and Belonging	Giving people a stake (individually or collectively); fostering pride, citizenship and neighbourliness; allowing personal freedom; opportunities for self-sufficiency

(Carmona et al., 2008, p. 15)

He stated it is a mistake to think that quality of urban space is merely the visual and aesthetic attentions (Carmona et al., 2008).

According to Madanipoor (1996, p. 39) visual qualities are one of the spatial qualities of the built environment. But among all proposed theories, the question is that how individuals and space users realize qualities and features of space?

streets, parks, shopping centers and any setting in which people are present with various purposes were explained among the daily experiences of interviewees. Then the interview centered on the nature of urban environments was clarified for people. The interview included 4 open questions.

QUALITATIVE ANALYSIS OF DATA

To implement the study, the researcher initiates the interview process as thought the concept of urban space bears meaning for people and it will be pursued through their own words. The examples of urban space include the



Table 4. Interview Questions about Individual Experience of a Desirable Urban

Row	Question
1	Talk about a good urban space you ever experienced?
2	What caused this space to sound good? What do you like about this space?
3	Imagine the space in your mind and name everything you remember?
4	What does it feel to be in this space or what does it revive in your mind?

The individuals were asked to mention one of the good urban environments experienced so far and complete the interview on attributes and qualities of these settings.

The researcher’s reason to search the instances and places using people and their experiences instead of selecting a specific sample example is that the most durable memories in mind, represent certain features which give them stability and remembering them in their

mind. Selection of people from their experiences shows the importance of selected experience.

The noteworthy point is that although the entire people of aforesaid locations (street, square, park, and mall) are urban spaces, but most of the people experienced well-being and desirability in parks and malls when they wanted to talk about a desirable urban space.

Table 5. Instances Given by Interviewees (People) for Good Urban Spaces

Desirable Urban Spaces	Number of People Pointed to them
Park	13
Mall, Market	10
Street	5
Urban Complex	1
Holy Sites, Shrines	1

The following Table shows the codes derived from data.

Table 6. Coded Data from Interviews with People about the Experience of a Good Urban Space

Concepts Derived from Data (Open Encoding)	Concept Classification (Axial Encoding)	Equivalent Concepts	Selective Encoding (Category Level 1)	Selective Encoding (Category Level 2)
“There are all kind of shops in mall” “Buffets and restaurants existing in setting are very good” “There is space both for sports and leisure time and relax with family” “I can provide whatever I need once I get there” “You could easily test products and get advice” “There are desirable prayer rooms” “There are Shaded pavilions and seats” “There are varieties of comfortable places to sit and wait in floors” “There are clean toilets” “There are many leisure facilities” Variety of activities and shops can be found in space”	- Diversity of uses - Public services and facilities - Leisure and entertainment	Meaning Manifestation: Practical Meaning	Functional Component Quality	Positive Evaluation of Space



<p>“I like the large area over there”</p> <p>“I love the big park over there”</p> <p>“There is enough space to stand up and see shop windows”</p> <p>“You can bike the whole park”</p> <p>“There are nice parking over there”</p> <p>“They are easily accessible”</p> <p>“There are even facilities for the disabled”</p> <p>“It has modern and stylish space”</p> <p>“It has Well-designed space”</p> <p>“There is a very beautiful piano on the first floor”</p> <p>“The city theatre has a unique building”</p> <p>“You can see the whole city from here”</p> <p>“The mall environment is bright and clear and everything is safe and clean”</p> <p>“It has acceptable cleanliness”</p> <p>“Fresh unpolluted air , the sound of birds , beautiful landscape in autumn”</p> <p>“Water pond at the entrance just created a sense of freshness”</p> <p>“The best thing over there is fresh air”</p> <p>“I love its traditional setting”</p> <p>“Everything has its own place”</p> <p>“I do not feel puzzled because everything is well-ordered”</p> <p>“Seeing different people in front of shop windows is amusing”</p> <p>“Seeing people around gives me a feeling of vitality”</p> <p>“It is interesting to see different people around”</p> <p>“I love this space , because every time I come here I see a lot of people”</p> <p>“Seeing people commuting is fun”</p> <p>“Hearing the sound of children’s laughter in the space changes my mood”</p> <p>“I love where I’m not alone”</p> <p>“When I go to the park, watching people makes me entertained”</p>	<ul style="list-style-type: none"> - Scales and Proportions - Accessible - Architecture and Design - Visual Cues and Attractions - Good Quality Construction and Maintenance - Natural , Green and Clean - Order - Current Public Life - Inclusive 	<p style="text-align: center;">Meaning Manifestation: Primary and Tangible Meaning, Practical Meaning, Instrumental and Machine Meaning</p>	<p style="text-align: center;">Physical Component Quality</p>	<p style="text-align: center;">Positive Evaluation of Space</p>
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<p>“You are allowed to wander in store for hours and do your shopping at patient”</p> <p>“The setting gives me a sense of peace and quiet”</p> <p>“There is a certain order and regularity in space”</p> <p>“It is a positive point that you have plans for life and passage of time”</p> <p>“I love the sense of relaxation in space”</p> <p>“I feel good about being in space”</p> <p>“Every time I go there I feel that I am free from everyday life”</p> <p>“A sense of relief that you are not wasting your time”</p> <p>“Feeling of respect you receive from shop keepers”</p> <p>“This space has a special beauty and intimacy”</p> <p>“It is a civilized space”</p> <p>“It is interesting to me to visualize my history in space”</p> <p>“Here is not a cliché site like other places newly in fashion”</p> <p>“Many old pine trees that have significant view and give the space a new power”</p>	<p>- Satisfying and relaxing</p> <p>- Sense of citizenship</p> <p>- Ancientness and historical background</p>	<p>Meaning Manifestation: Value and emotional meaning Meaning at the level of signs and symbols</p>	<p>Meaning Component Quality</p>	<p>Positive Evaluation of Space</p>
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DISCUSSION AND CONCLUSION

The first category of concepts, collected in open coding process is centered on “diversity of uses”, “public facilities and services of space” and “entertainments” which are more about the experiences of malls as a good urban space. The expression of proposition such as “there are all sorts of shops in shopping center”, “buffets and restaurants existing in setting are very good”, “there is space both for sports and leisure time and relax with family”, “varieties of uses and shops are available in space”, “abundant entertainment facilities” and etc. are instances of propositions expressed in this category.

The companionship of such attributes in space is actually includes “functional qualities of space” selected as component in this category. Functional responses of space to users’ need is one of the reasons for selection of space by them.

The second category of collected concepts includes people positive perceptions of physically attributes of space. The expression such as “I like the large area over there”, “It has modern and stylish space”, “good parking”, “you can bike the whole park”, “you can see the entire city from here”, “It has acceptable cleanliness” and other propositions presented in second part of tables, concepts including “scale and proportions”, “availability”,

“architecture and design”, “signs and visual attractions”, “good quality construction and maintenance”, “natural , green and clean” and “order”.

It can clearly be concluded that these concepts are included in category of “qualities of physical components of space” as the constituents of all tangible and physical aspects of space. Although using the word “physically” instead of “bodily” is located in a meaning field, the researcher emphasizes that tangible sights are not actually inserted in the field of visual area and includes all senses. This issue is also considered in interview questions.

The third part of the collected codes was distinct with similar propositions such as “seeing people around gives me a feeling of vitality”, “It is interesting to see different people around”, “I love this space, because every time I come here I see a lot of people” which include the concepts of “current public life” and “inclusive”. It means that the space is accessible for all sex, age, race and disabled groups of people and encourages the social and public life. These concepts also constitute the concept of “quality of social component of space”. Since there is special emphasis on data collected from interviews on this component and public life in space in many theoretical classifications under the category of functional components of space, but the researcher argues that component possesses some distinct areas of importance.



Activities related to the space and being more precise on the observable behaviors in urban space are the results of human presence and interaction with their environment. If a person is removed from space, the abstract categories of performance and practical could be still remained in space however in potential form. Once the social aspect is added to the space, the behaviors occur in that. So, the "social component of a space" is introduced as the fourth component of location models (body, function and meaning) which is to be applied in the formulation of a comprehensive model.

The last category of codes collected from interviews includes the propositions such as "This space has a special beauty and intimacy", "It is a civilized space", "I love the sense of relaxation in space" and etc. which are guidelines to derived the concepts such as "Satisfying and relaxing space", "pride of citizenship", "ancientness and historical background of space" were in axial code category. These propositions actually have the same nature of verbal expressions of mental spaces. The propositions collected from interviews were actually the interviewees' judges and perceptions of meanings in space. So, the concept of "quality of meaning component of space" could cover all these meanings and their relation with each other.

Finding these categories in this study was conducted at two levels: Level 1) as the result of relationship between concepts and defining a more abstract level between them which was considered in aforesaid explanations. The re-examination of these components in selective coding revealed a higher level of revealed categories and was localized as the confluence of the categories in the previous level. This higher ranked level which possess only one category was named as "positive evaluation of space".

Further review of coding processes and its comparison to texts and notes from the interviews showed that the interviewees cover the entire components of level 1. In other words, the interviewees' experience of a good urban space include "quality of functional component of space", "quality of physical component of space", "quality of social component of space", "quality of meaning component of space" and the neighboring of these components led to the positive "positive evaluating" of space. The noteworthy point is that most of the propositions are related to "physical quality of space" and "functional quality" followed by "functional quality" and "social quality of space". Eventually the meaning propositions including the feedbacks of three physical, functional and social components of space were expressed. It shows that people perceive their environment

with all its dimensions and react to it by an evaluating reaction. However, the most environmental implications are received from physical content of environment. Similarly, the social and functional components which together constitute the human behaviors and reactions to space areas will be read.

This reasoning is consistent with the following studies: As pointed out by Tibbalds (1984), people judge architecture and planning, landscape and engineering, by the quality- principally the physical quality- of what they see around them. Carmona (2008) points to mutual and coincidental impacts of proper physical characteristics and conditions on flow of activities in space and presence of people in setting. Madanipour (2006) talks about the issue that visual qualities are one of the several spatial qualities of built environment and other qualitative components bear equivalent and parallel role to create space quality. The Sherman classification (1988) is about the qualities of urban space while he avoids the separation of space components and emphasizes the non-analytic and multi-layer attitude to define desirable urban space. Trib (1974) also indicates that mental perceptions are organized non-physical compounds which are not only their physical setting and components but also their formal manifestation of physical, economic and social structures of city in citizen's mind.

In any part of the content readings of space, there is also a sort of meaning expression. As seen in data analysis tables, a column entitled "Equivalent concepts" is placed next to each row of coding.

Special emphasis of researcher on meaning analysis of reading and evaluation of urban space by space users is influenced by the importance of the meaning component in substitution of space with location. The present paper aims to answer the proposed questions through cognitive perceptual approaches. It's so clear that all comments and issues raised are the basis of perceptual- cognitive processes and "imply meaning" to perceived sense. Appleyard (1979) continued the studies by Leench and considered broader aspects of the issue such as social, environmental and functional dimensions and discussed "environmental meaning". In other words, we should have special attention to meaning dimensions of setting to understand how the relations and reactions of functional and social contexts as well as the economic and natural setting of city impact the citizen's recognition of their living environment.

This part of study used the sex-level classification by Gibson (1950) to discover equivalent meaning contents: 1) primary and tangible meaning 2) practical meaning



3) instrumental and machine and meaning 4) value and emotional meaning 5) signs and 6) symbols.

It is clear evident that the spaces regarded as desirable urban spaces in public sights could cover the six meaning levels by Gibson which is actually “quality of meaning component of space”. In fact, each component is the surface expression of meaning. A setting will be desirable if it has the capabilities to provide the grounds for all levels of meaning.

A summary of coding processes will be presented as follows:

- The individuals’ experience of a desirable urban space mostly includes parks and malls.
- The propositions expressed by people on their experiences of space is mostly accompanied by physical components reading of space. The social and functional components possessed the highest level of objective manifestation of space.
- People pointed to four space components (physical, functional, social and meaning) in their experience of a desirable urban space.
- The affective reactions and people’s evaluation of space were expressed in terms of adjectives attributed to space and feelings and meanings expressed in them arising from the neighboring of all experienced components.



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