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Behavior Settings' Parameters on College Campuses Case Study of Central Space in Kish International Campus of University of Tehran

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ABSTRACT

Behavior Setting is a physical space with functional or organizational goals. People's behavior in behavior settings is the function of physical aspects of the environment and collective behavior as well as individual characteristics. Considering the fact that there is a certain proportion and relationship between physical and behavioral aspects in behavior settings, This article, with a qualitative study based on field surveys and library-based data, by a Look to the behavioral setting concept and investigating the central area of Kish International campus of University of Tehran, as a successful example of the behavioral setting, provides parameters for these spaces on college campuses. The results indicate that several factors are needed to establish behavioral setting on college campuses. These factors include careful visual design, creating spaces with normal vision, sound and proper lighting and a variety of facilities, including: sitting room, good desk, etc.

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INTRODUCTION

Jon Lang believes that the built environment is an organized location with different quality levels (Lang, 1987). Organization of a place can change from a single level that provides an anchor to the levels that completely surround a person. Sometimes these places are designed only for aesthetic purposes. However, as usual, design is aimed to provide some of the activities. One of the solutions of providing activities for design is use of environmental designers from the activity systems in terms of creating behavioral settings. The built environment provides the setting for life, it is comprised of behavior settings (Barker, 1968; Bechtel, 1997; Lang & Moleski, 2010; Schoggen, 1989; Wicker, 1979).

Behavioral setting has different potential competence which is somewhat indefinite, and using this feature is dependent on the following factors:

- 1 - Users' Needs
- 2 - Their ability
- 3 - Their experience about the feature
- 4 - How to build and arrange the form of used environment (MOTALEBI, 2002).

Design based on the above factors allowing the designers to create flexible behavioral settings which answer the ever changing trends of people. Altman said that this environment is affected and also makes it possible to monitor social interaction (Altman, 1975).

Dare to say; in the design of the campus, creating a space for interaction between students seems necessary, space with specific features that is responsive to the needs of the individual and the group. This environment must have feature provide the social relations of which has significant association with some "interactive features" such as population, type and duration of social interactions occurred in the space. This reflects the definition, simplicity and impact of physical design on student relationships.

But the parameters that a behavioral setting should have in university campuses is somewhat influenced by student behaviors. Therefore, in the design of the campus environments, creating a behavioral setting for interaction between the students seems to be necessary; a space with certain capabilities that is responsive to the individual and group needs of students. This environment must have feature provide the social relations of which has significant association with some "interactive features" such as population, type and duration of

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social interactions occurred in the space. This reflects the definition, simplicity and impact of physical design on student relationships.

Methodology:

This paper seeks to answer the question that what are the parameters of behavioral setting for university campuses?

And thus the hypothesis of this study is based on the statement that by comparative studies of successful cases, the parameters of behavioral setting for university campuses can be obtained.

In this regard, this paper which is type of applied research, using qualitative research methods including descriptions and analytical - adaptive techniques, and undertaken based on field data (imaging) and Library documents, by enumerating parameters of behavioral setting, and putting features expressed by Jon Lang about behavioral setting as the basis of this article and providing case of the central space for Kish International Campus at University of Tehran as an example of successful behavioral setting in university campuses, establishes parameters that are required to behavioral setting for university campuses.

Theoretical framework:

3.1. Concept of behavioral setting:

The concept of behavioral setting was devised for the first time by "Roger Barker" and his colleagues in line with research in "Developmental Psychology "for the social, psychological, physical analysis of children. The relationship between behavioral setting concept and designs by architectures and urban designers gradually was considered and developed.

Behavioral setting or a ' location -behavior ' is analyzer elemental or element for environmental analysis which is used to describe the main functions of architecture and urban spaces or designing them. Behavioral setting is a small social unit that is resulted by sustainable combination of an operation and a place in a manner that under a regular process, meet the necessary functions of that environment.

The constituent elements of a behavioral setting for Roger Barker are:

- 1 - Continuous and consistent activities on a location or a consistent pattern of behavior.
- 2 - Three-dimensional arrangement of context of a location – behavior
- 3 - The environmental structure of a location – behavior which is result of a coexistence between two first and second elements, and Roger Barker called it Synomorphy. Synomorphy means that with no structural connection between the human realm and behavior, there is no possibility of forming a stable location – behavior.
- 4 - Also existing of a period of time (Barker, 1968).

In future studies, one of His disciples, named "Wicker " introduced other factors that can effectively explain the behavior of a compound. Among these factors, the two programs of the plan of a behavioral setting and a person or factors that control it as fifth and sixth elements are more important (Wicker, 1979).

For example, a classroom is a location – behavior or a behavioral setting that consists of continuous and stable bases for a specified period of time. This function and performance is precisely the learning. This location – behavior has a specified domain resulted by physical elements, such as walls, ceiling and floor of classroom, doors and windows and furniture in the classroom. The physical elements can organize the behavior of people in classroom so that in the coexistence between individuals within a class of and its physical elements, space of a classroom can be easily separated from other behavioral settings. So that, for example, the behavioral setting of an outdoor classroom is a different from the market. The difference is not only due to the physical arrangement of spaces, but also the behavior of programs or plans of the two locations – behaviors. To set up classroom, a specific program for educational activities is anticipated. However, the program determines the activity of a market is buying and selling. On the other hand, in a classroom, an individual as a teacher of that class controls the whole class, but in a market, its management factors with vendor coordination, are responsible for control the behavioral environment.

What should be noted here is that a physical model of architectural space may be divided into smaller behavioral settings. Therefore, to study a larger and more complex location – behavior, such as a city, it is required to observe and investigate its different location – behaviors in the heart of a hierarchy of behaviors.

Definition of a behavioral setting:

Primarily, designing different sites for designers typically is done by providing some activities; esthetic has had a major role in. Environmental designers, for providing Activities use the providing systems that are composed of behavioral circuits. Constance Perrin suggests cases of behavior as a unit for architectural design and analysis and writes:

" ... The behavioral circuit is as ergonomics anthropology, which in order to recognize the physical and human resources required, considers and investigates everyday behavior of people at the scale of rooms, houses, residential block, neighborhood or city "(Perin, 1967).

Behavioral setting or place is a sustainable combination of place and behavior that includes the following components:

The recurrent activity or repeatable pattern of behavior, a special design of the environment or the physical environment, consistent relationship between the two, or a co structured specific time period, which means that if the current pattern of behavior in a behavioral setting occur at different times, a physical location can be part of a behavioral setting or space. An ongoing pattern of behavior can include many different behaviors that can occur in parallel:

- Overt emotional behavior
- Problem-solving or problem- resolving
- The main motional activity
- Interpersonal Interaction
- Change in things

The composition of these behaviors that constitute the current model, are occurred in particular the fact that the physical environment (Baron, 2009). Behavioral setting has internal structure that can be synchronized with the internal physical environment, a large number of people with different behavioral Occupy behavioral settings. A "behavioral setting" enables a person to to achieve" consent or satisfaction ". The satisfaction for different people has different needs and a different time.

Behavioral setting has its own privacy; privacy of a behavioral setting is a convention in which the behavior is based. Wall is an ideal boundary that prevents the inside and out. Qualities such as vision and sound fading are important in the privacy creation. If behavioral setting's privacy has not enough clarity, there would be problem in its definition. The problem of behavioral setting's privacy occurs when the activities that require separation, are not separated enough or are over-separated (Garr et al., 2013; Hall, 1959)

Behavioral setting's another element is the activity system. Environment consists of a hierarchy of behavioral Settings in linking together create an activity system.

The effect of behavioral setting on individual behavior:

In general, the behavioral setting compared to current patterns of behavior or physical environment are more compulsive. Environmental compliance and the behavior depend on competency levels and organic characteristics of people. Since many of human behaviors include the practical activities, physical environment must be compatible with human capabilities (Heft, 2013; Schoggen, 1989). Behavior Research researches enables environmental designers and engineers to recognize foundations of existing models and patterns of behavior required by a specific situation. Behavioral setting analysis, compared to the insight only achieves a richer understanding of human behavior. Such analyses provide and information about individual and group differences in behavior patterns can save designers from Stereotypes about the people and activities they do.

Behavior settings consist of standing, or recurrent, pattern of behavior or activities, and particular configuration or pattern of the word, a milieu, that coexist for a time period. The same milieu may be used for many different behaviors at different times. When the activity within it changes the milieu will become a part of a different behavior settings. The more ambiguous, or multivalent, the milieu is, the greater the multiplicity of uses that can occur. At the extreme, however, the milieu affords so much that it affords most activities poorly (Lang & Moleski, 2010).

From the Lang viewpoint, behavioral setting has four features are given in Figure 1. Based on these features, if in a specific behavioral context , at various times , different permanent behavior patterns occur, the environment will be studied as a behavioral setting (Lang, 1987).

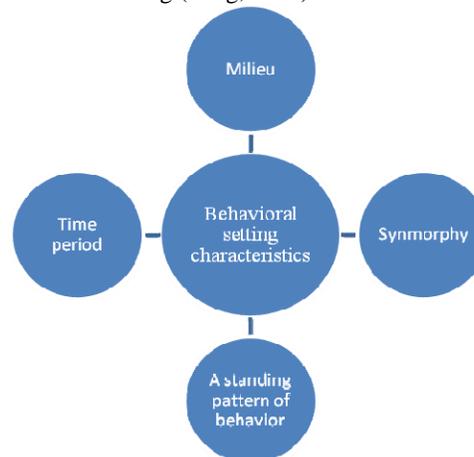


Fig. 1: Behavioral setting characteristics, (Lang, 1987)

Case Study:

The Kish International campus of University of Tehran is located near the north coast of the island. The building was originally designed for business use, which later due to opening this campus changed its land use and it can be used for learning application now. The space studies as behavioral setting is the central hexagon of Kish International campus of University of Tehran. It has a seating space for students to study, and at certain times, as well is used as a gathering place for ritual ceremonies, exhibitions and conferences. Due to the geographic location of the site, it is the place most of the students and faculty come together. Previous studies showed that the students based on their disciplines, call this place with different names. Architecture students called this location "Agoura ". Agoura means ancient Greece squares where different functions were formed around. The urban design students called it "Terma" said to the old Roman baths, for its interactive character for a stroll in it.



Fig. 2: The central space of Kish International campus of University of Tehran



Fig. 3: The central space of Kish International campus of University of Tehran

Detailed interviews with students indicate that most people have a sense of belonging to this space by most people had used it. They even wanted to add a little buffet to this place so that they do not need to get out of this place to drink a coffee. Most of them were willing to add even more comfortable seats, so they spend a longer time in this place. Figures 2 to 4 show the images of this central space

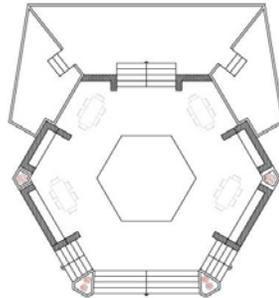


Fig. 4: Plan, the central space of Kish International campus of University of Tehran

Lang emphasizes that the behavioral context should have the ability for behavioral patterns to take place in. Of course this does not mean that only specific behaviors happen within it; because what actually happens depends on trends, motivation, knowledge and abilities of people who are involved with it. There form the same patterns of physical form may have the ability (capability) of accepting a variety of behavioral patterns, for different people at different times of the day, week or year (Lang, 1987). Accordingly, the central space of campus, due to its university context, only forms social behavioral contexts relevant to students and university.

In terms of the timeframe, it can be said that the different timeframe during the year creates different activities in this places. For instance, in period of exams, this place is used 24 hours a day for study of students, but in normal times, this space is used as a place for college students to relax between classes.

In terms of flexibility, a flexible design is a design that requires no physical changes to provide the current patterns of behavior in different times. Such a space is called a multifunctional space with a fixed face. A high school auditorium and gym classes at a time may be used in other communities. Robert Venturi believes that the multi-functional building have some benefits. A room can have different functions one time or at different times. In the first case, the behavioral bases are adjacent. In the latter case, the place switches to the desired location temporarily. Placement of doors, windows and furniture affect the flexibility of spaces like dorm rooms very much(Lang, 1987).

The central space of campus is not predetermined. After the university authorities put some tables and chairs there temporarily, gradually some students sat on there and studied or did their projects. As a result, the tables and chairs remained in place and the students changed their layout according to their own desires. They actually changed the internal structure of this space, have discovered the required functionality. This property indicates the environment is flexible. So that the previously described, in a flexible environment, with no physical changes, we can achieve our required behavior. Accordingly, the following behavioral patterns formed in the space: meeting of the teachers and students, using the Internet, Book exhibitions, art workshops, students' arts performances and ritual ceremonies. In addition, contracture, meaning the appropriate link between behavior and context, happened in this space, with occasional visits, group and individual study and previous appointments.

In Table 1, according to the features of behavioral setting described by Lang, the central space of the Kish International Campus of University of Tehran as a behavioral setting is checked.

Table 1: Characteristics of the central space of the Kish International Campus of University of Tehran as a behavioral setting

Image	Case	haracteristics
	Related to students and university	Specific behavioral context
	Students to relax between classes Study time	Specific timeframe

	<p>meeting of the teachers and students, using the Internet, Book exhibitions, art workshops, students arts performances and ritual ceremonies</p>	<p>Permanent and temporary behavioral patterns (adjustability)</p>
		
		
		

	Occasional visits Predefined visits One-person and group study	costructure
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Conclusion: Characteristics of behavioral settings in university environment:

Different structures or models of physical environment provide different behaviors, and features that affect a particular individual or group, depend on complex factors such as predisposition, competency and efficiency, and cost of every behavior. It can be said that the physical environment has a demanding quality.

Case study emphasizes the fact that the central space and the environment and the capabilities it provides to sit in, invites people, to sit and gather in this atmosphere. In addition, there were also students who spent even the resting time between classes with friends off campus, restaurants, biking and....

However, due to the issues raised on behavioral settings and by the case study, it can be said that a behavioral setting in university environment has various components are presented and studied in the following table.

Table 2: Characteristics of behavioral environment on university Campuses

Students break, previous appointments, solo or group singing lessons, occasional visits, feasts and mourning ceremonies, workshops and exhibitions, meet the teachers and students	Recurrent and repeatable activity or current pattern of activities
Create a central aperture as a space node with platforms and tables to sit	Specific design of the environment or physical environment
The mentioned spaces have capabilities necessary to carry out the activities above	A compatible relationship between these two elements or contracture
Different periods during the year create in different activities for these places.	Specific time period

A behavioral setting at the university enables students to achieve satisfaction, and this satisfaction differs for different students. For example, a behavioral setting can lead a student to self-actualization; this place can meet the basic needs of the other students. Also a behavioral setting can conduct different needs of a student at different periods of time.

Given the issues raised, parameters can be named that are influential in converting a public space in a university to a behavioral setting. The factors are listed below.

- 1 – Breadth of vision around (vision and landscape)
- 2 - Good facilities (couch, chairs and tables, lighting, fountain, shade trees, flat terrain for hiking)
- 3 – Being close to the entrance door
- 4 – Supervision of authorities and users for security reasons
- 5 - Flexibility of the environment (possibility of adding removable benches or other environmental factors)
- 6 – being cozy
- 7 - The continuous use
- 8 – Existence of enough space for specific activities
- 9 - Quick access to important places of university campuses such as libraries, office and...

If the university campus designers analyze the environments are converted to behavioral setting or scope of students, they would found what makes this success is only meeting “normal and primitive expectations of people.” If the environment does not meet the students' needs and does not have the flexibility to be changed according to students' needs, these spaces will be converted to a deserted area the students use them as the approach and commute space.

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