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## The role of behavior in determining the identity of the body of children's spaces

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### ABSTRACT

It seems that those building which are used today as places of arts and culture for children is probably designed with less attention to the psychological needs of the users and the impact of the environment on user's behavior and their identities. Then paying attention to the needs and characteristics of the physical environment, to achieve the desired space is importance . It is assumed that users and their behavior, are parts of an overall system that cover place and the environment, human behavior always occurs in a location where it cannot be assessed without considering environmental impacts. This in fact means to believe in interactions between human and the environment so as to say that the built environment has various capabilities in stimulating motivation and the ease of performing the behavior is related to basic human needs, and also it can be added that a sense of human identity with their surrounding physical environment is one of the methods and processes of the environment impact on human. So that a human searches for his identity in the surroundings. Obviously, this research presents a framework that emerged from the field of behavioral sciences, as well as to respond to the impact of the physical environment on the

behavior of how children learn Therefore to generalize these findings to the actual physical specimens extraction of executive component of the objectives of this research are considered. Answering the above question requires a specific way of research. In this association referring to the history of research on the one hand is related to library research that requires getting field information.

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## 1. Introduction

Between changes in the architecture and changes in other areas of Life that is happening there exists a relationship and these changes requires vibrant and alive architecture so it can be held accountable for man needs. Lives necessarily have relation to the local characteristics, and the need to visualize any world should include the expression of these characteristics with the requirements and technology. Architectures are needed to be related to the context and the time to move forward.

Architecture is not limited to providing security and shelter and it pursued other objectives. Architectural in context is to identify homogeneous areas, with the proportion of human-specific functions. In a different interpretation , it appears to be the perfect environment or the intangible spirit of the place to be seen, and in another sense, in addition to the architecture being a shelter, it can be considered as a form of communication symbol. Architecture with creation of beliefs and values of society is in a way the manifestation thoughts and aspirations of the people of that community.

Architecture playas an important role through shaping the space in form of relationships, behaviors and ultimately the quality of life, While urban and architectural spaces in the semi-public building , such as urban stores, cinemas, libraries and cultural spaces are associated with the experience of the city, can play an important role in the identity of location and the authors. To support the features about the architecture it is necessary for the designers to list the real needs of people to increase the possibility of beneficiary built environments.

In this relation it can be said that daily human behavior in interaction with the physical environment is a hybrid relation that is created between the behavior and the shape of the building. On one way this interaction is related to understanding the components of Behavior, including intentions, desires and feelings and for understanding or comprehending the meaning of the body, therefore, it has particular importance . On the other way the forms and meanings in the body of the building affects the lifestyle and behavior of the people. Every aspect alone create large areas and those factors have great importance in the design.

## 2. Identities and architecture

The identity includes issues that have preoccupied the thinker's mind. Identity is often a characteristic or property of man as a social figure that will not be by itself, and it must be created. Therefore identity is perceived as a process of being and becoming. Role in space is an undeniable role of identity. And human with his achieved cognitive of his environment can somehow achieve recognition of himself.

The subject of place identities can be verified not only in urban anthropology, But it preoccupies scholars of the fields of architecture, urbanism. Since the effect of environmental factors on human life reflects the face of environmental messages are recognizable, placing connection with the environment on its vision toward identity through knowledge and understanding of the environment is possible. The identity of location and environment is more related to orgasms of human`s mental and emotional needs than to requirements that directly considers their body. Identity of this component needs to be considered that only one factor in it is not involved, but a group of agents and objects are involved in its

creation. Identity of the built environment is an extremely difficult concept to define. According to Schultz Nurnberg's beliefs the ultimate goal is a settlement authentication. (Schultz, 2002, p 22)

Identity is a concept that is rooted in culture; Rappaport (2005:98) define identity as one of the the main definition of culture. In architecture there are two major approaches this means that there is a physical approach to the concept of structural differentiation medium texture and similarities and common elements within the tissue. Many studies conducted in the history of the ancient cities are based on this approach. In this approach, the physical properties of the concrete have been the base of investigating and as a crystallization of ideas and perspectives of its residents it is surveyed and the concept of "physical identity" can be used instead of Identity.

Another approach is the behavioral science approach that searches identity in human . The researchers of this view looked at human as an organism which is constantly in search of his identity that environmental psychologist's pays attention to the role of environment in this process.

Rappaport is an architect and anthropologist that look at environment with the cultural and social approaches. His research focused on the importance of cultural background in the city figure and the characteristic of the environment that does not change under various conditions or characteristics that allow organisms to distinguish one element from other elements and the urban elements from each other. Two points stated by Rappaport are highlighted such as the identity of a content environment that shows the essence and the nature of itself and that every identity has a boundary that separates it away from itself and from non-self. (Tavalaee 2007: 157)

Kevin Lynch [3], the famous American urbanism stated that the simplest form of the meaning of the built environment limited to the general term is identity, i.e., the meaning of a place. Identity is the extent which a person can distinct a place from other sites, so as distinct personality, which is unique or at least able to own. (Lynch, 2002: 168 169)

According to Christopher Alexander [4] "The identity of each space is the result of events that occurs in there."(Alexander, 2007: 52) Therefore an environment, not only because of a feature of the body, but because of the events that take place there , can have an identity. Structure and architecture plans can be a symbol of special events for people to make sense of their belongings.

Thus, human identity depends on the role and contribution that he has, the identity of a place that he is in fact is synonymous with the sense of belonging to it. Thus humans' part of their identity is from their surroundings .

### **3. Realization of children's abilities and learning requirements**

#### **3.1. Human potential**

One of the striking aspects of human as the basis for the reconciliation of human with environment is intelligence and is an important factor in the differentiating human beings from each other . (Energy, Haji Hussain'nejad and Haqqani 2011: 154) Although the exact nature of intelligence may not be fully known, but when talking about the success of some of students and the lack of other students sufficient progress the main reason come into mind is their intellectual differences. (Saif 2001: 578)

Howard Gardner Contemporary Psychology, for the first time define intelligence as a collection of skill and ability to solve problems or create products in one or more series and stated that people can be different from each other in terms of recognition ability . He believed that it should be noted how people learn the relevant skills and appropriate culture. (Gardner 1993: 36 Him) In his book "Framework Mind: The Theory of Multiple Intelligences " challenges traditional views of intelligence and presents eight different types of intelligence.

According to Gardner, intelligence in different culture appears different. For example, in the culture of America, spatial intelligence probably is shown in painting, sculpture or building geometry, while in Kenya it will be reflected in the ability of individual to recognize animal's and identify various animals from the other livestock . (Saif 2001: 586)

Intelligence linking to the cultural context is one of interesting and important theories of Gardner . According to him, the true intelligent person in various communities and cultures can be different.

Jean Piaget that his theories are cognitive theories of developmental psychology handles a theory of intelligence and development. He knows the aim of developing transformational manufacturing cognitive to achieve abstract thoughts, in which individual through interaction with an actively effective environment, learns environment experience.

According to Piaget's theory the intelligence exist in two forms in all creatures one is in form of organization and another as the environmental compatibility.

Environmental compatibility is a feature that the child is trying compromise to environment he/she is living in it and complies with it. (Moghadam 2000: 28 and 29) In Piaget's theory of cognitive development or evolution the interaction between organism and environment in which it lives is essential. Life in Piaget's view is a creative interaction between organism and environment, without interrupting the flow of life. (Saif 2001: 186) More than knowing child as a passive recipient in biological requirements or stimulating the growth imposed from the outside, he is an active participant in the process. Particularly he believed that the child should be known as a researcher that experience things to see what will happen. (Atkinson 2005: 73 to 74)

Maslow, a humanistic psychologist, believes that all human have special talent to perform certain tasks as they are inherently capable. (Schultz 2002: 355) also he knows desired adaptive behavior as an acquired characteristic and this behavior is a response to a need that its answer is achieved by material or cultural world. (Maslow 1990: 194 and 195) Therefore reconciliation behavior with physical environment is kind of interaction with the environment.

### **3.2. Learning**

Learning is one of the most important things in today's psychology, yet one of the most difficult concepts to define.[7]. The most popular definition of learning is a definition that is suggested by Kymbel. He has defined learning as a relatively permanent change in behavior of the potential (the behavior) that occurs as a result of reinforced practice. (Hergnhan 2000: 18). In fact, He knows this change in behavior resulting from experience emphasizes the importance of it. (Hergnhan 2000: 24 and 25) Since learning to deal with any learning experience may lead to learn does not always need to have an intentional aspect. Actually a lot of Human learning's happen randomly. (Saif 2001: 34) Since the physical environment can perform certain actions and behaviors that can lead to the experience of the environment, the children who have more learning opportunity and experience change more than their same aged children who have fewer opportunities.

Albert Bandura, the Behaviorist, believes that learning is through observation and model or pattern. Basically he believes children's learning happen through observation model. (Schultz 2002: 485 and 486) These models can be definition of environment. Also the possibility to interpret the meanings of symbols, signs and physical components of the built environment is needed so that the hidden meaning of them will be looked familiar and referable to user's experience. Thus increasing schema in children's mind cause raising their level of understanding.

### **4. Identity and behavior of the physical environment**

What is noted as features of environment is essentially the the human impact on the environment. To perceive this feature there are many factors, including perception.

James Gibson by introducing the concept of the ecological psychology had a major impact on the understanding of the relationship between the built environment and human behavior. Ability of the environment to find an object is a place for poor behavior which make it useable for specific actions. Louis Kahn uses the word of facilities and landscape designer and Lancelot Brown uses the words jurisdiction used for the equivalent of this senses. (Lang 2009: 91)

Ability of the environment is divided into two categories: direct and indirect. Direct capabilities are provided by the active environment and things like symbolic meanings that depend on correlation of models to their usefulness and the cultural context are indirect environmental capabilities.

Barker, the founder of ecological psychology theory, examines the behavioral patterns of individual or collective behavior that typically occurs in the environment. He believes that between the physical and behavioral aspects of behavioral appropriateness camp there is a special relationship, which expresses it

with homolog concept. (Lang 2009: 132) Thus it can be stated that this theory is the concept of adaptation with environment as one of the two forms of human intelligence in Piaget's view.

In this respect, to study of positive factors and behavior recognition of environment, understanding the relationship between humans and the environment and the effects that they have on each other is needed to examine survey, attitudes as well as factors such as perception and cognition.

#### 4.1. Perception and identity of the physical environment

Generally perception is the knowledge of the world outside and inside. Architect is one of the fields that its discussion is meaningless without considering humans. Perception discussion in today psychology, entitled as Perception, is based on the achievements of science, and especially physiology in experimental psychology which is suggested. Transferring stimulant effect of sensory receptors to the central nervous system, where the objective is to be followed, is called sense. (Iravani and Khodapanahi 2007: 1)

Perception concept has vast dimensions and meanings. Neisser [8] says "The perception is the process of getting information from the environment around humans. This process is active and purposeful and the perception is a point that knowledge and reality get to each other." (Lang 2009: 97) In any case, the received information by the human senses is conveyed to the brain and cause environmental perception, In fact, feeling is the underlying of the perception.

The human senses can be classified in two categories:

- interval Senses
- Immediate Senses. (Hall 1997: 50)

Visual and auditory senses are used for long distance Processes. Smell is also sometimes in this category. These senses, by the German philosopher Immanuel Kant [9] in the eighteenth century, were called aesthetic senses, because they enable the person in a far distance, note the scenery, art or a musical object. (Bell 2003: 58)

Therefore it is necessary to pay special attention in designing the texture, composition, balance, proportion and everything that is relevant to factors affecting the architectural structure.

Immediate receiver is used to perceive close objects such as touch and taste. Senses of man rarely are used separately and in isolation from one another, because they often go hand in hand and it is important to get a complete picture of the environment. (Bell 2003: 59) visual perception is important for the designer for two reasons: first, this sense gives us the highest amount of information, especially about the scenes, and second, it is the sense that viewers think with it. Because of this reason, active perception is purposeful and guided and the other senses are the index of sight to complete the observation, and to add all the different dimensions to it, and to visualize perception that is reinforced or verified. (Bell 2003: 84)

One of the important relative perception factor of the environment (generally) and man-made environment (particularly), related to the age of people, is quite effective in the context of cognitive relativism. Robert Gateford stated three factors to justify the perceived environmental reasons:

- Personal factors such as personal experience, age, sex, education
- Cultural factors
- Physical factors

Because children are in a great time of learning, they have been influenced by the environment much more than others. And they learn that models and mind schemas that are important tools of the environment recognition are shaped in this era. Perception is different in every human being. Every field and culture has its own references that can be used for designing. These cues as stimulus act that causes the user to understand the environment properly and show good manners. (Matlak 2000: 260) sense stimulus has symbolic concepts: vertical elements are stimulator and horizontal elements are stabilizers.

Angular forms indicate the energy and momentum and circular forms suggests relief. Specific sound and smell senses suggest symbolic meaning and natural substances (water, soil, and plants) and architectural elements (in the arch of the doorway) including such concepts. (Matlak 2000: 260) (Matlak 2000: 260) People shape the physical environment as the graceful flow patterns or desired behavior. Sometimes regular use of the physical environment causes its erosion and reduces the adequacy of the environment to provide behavior. If the environment fails to reach the minimum adequacy, that environment will be released, changed or reconstructed. (Lang 2009: 131)

Considering the current situation of the country, it can be acknowledged that mainly physiological needs, safety needs and the need to belong to a certain extent and dependence, as well as respect for the interaction and social relationships, family and the others environment are provided for kids. Therefore there are other aspects of needs that are relevant to their breeding potentials. Moreover, there is potential in meeting the needs of children and adolescents, which needs proper body and social conditions. Present study was to find conditions that in providing these capabilities and requirements are listed to be effective.

#### **4.2. The relationship between perception, learning and cognition**

The combination of the built environment provides users various things. Combinations of environment, visual and tactile stimulation provide sound and smell motivations. Besides these motivation, Features of built environment support some behaviors and restrict other behaviors. (Lang 2009: 94)

An environment has a potential to provide experience and human behavior. Also Gibson expressed the basic processes of human interaction and the environment in a design that the information obtained through cognitive processes are motivated by the mental schema and driven by human needs. These schemas established a relation between perception and cognition they are partly innate and partly learned. Also the cognitive processes are driven from the emotional reaction (affective) and behavior. Against the processes and reactions the mental schema has been affected as a result of the perceptual subjective behavior. (Lang, 2009: 95) actually according to Gibson view of the perception, reaction, emotional, mental schema, needs and motivations, behavior and cognition, behavior results in a cycle of action and their interaction with each other. (Gibson 1966) In Piaget's theory, Life is a creative interactive flow uninterrupted between the organism and the environment of his life. This interaction and exchange is made between the person and the environment in two ways: One is external that is the same compatibility and the other is internal which is named the organization. (Stringer 2001: 187) Compatibility shows the impact of the interaction between individual and environment. The process of compatibility and adaptation is done either to absorb or adapt. Adaptations occur when a child takes something from the environment and makes it a part of him. According to the psychology of Piaget absorption takes place when a person sees familiar topics in terms of new content, means in a new position having a behavior that in the past position has not done. The adaptation process means that person changed his response according to demands of the environment (Stringer 2001: 187) Two main points in Piaget's research is that Children and adults in terms of thinking and understanding of reality have fundamental and qualified differences. Children understand Reality through their personal experiences with the environment (Stringer 2001: 212). Hence, the true reality of existence of what a child knows is not consistent with reality, but it is an interpretation of reality.

#### **4.3. Identify positive factors in the environment**

A safe area, familiar environment where users feel comfortable and know where everything is supposed to be focused on that space without anyone is being disturbed, not only for the individual but also a group of people is required. Without such an atmosphere relationship with someone would be impossible, because if people do not have their own space they cannot be able to understand their position. It is extremely important that children are able to put building objects in the class of training, in a place that they are safe and apprehend that it will not deteriorated. (Hertz Berger 2009: 28)

Psychological safety is one of the important factors in learning. Therefore the children should feel safe in training environment and be far from the threats of violence to learn.

Unsuitable environment that does not have the ability to practice and dominate the muscle causes retardations of muscle function. (No 1995: 58) Thus the field of this movement practice should be considered in childish environmental designs. The child achieved many skills in the game processes. Thus considering game environment can be the main easy nurturing environment to provide motor skills and physical developments.

Some factors affecting the level of cognitive development of children in the desired area to be outlined is as follows:

Provide a sufficient number of books for children.



- Possibility to carry out educational games.
- The amount of time taken to tell the interesting story for the child.
- The number of adults who deal daily with the child and talk.
- Playmate number of the child. ( No 1995: 185)

So children's existence in the larger community, causes socialization of their words more and considering the space required for a mass child can be an effective step towards the development of their cognitive and speech skills. One way of understanding language for children is to question. Uninterrupted questions of children about anything cause the development of his perception of language.

Each of the components of the above -mentioned needed two places. Initially the occurring behavior that requires little space, second the proper quality that is needed to be learnt since the sentiment. Applied details go to the statue of the elements of visual elements of the environment in which children can field the instrument -making stories and questions in their mind that expressing them helps to upgrade verbal skills or speech of the child.

Because understanding of the emotional needs of the children can help designing a favorable environment for them, we explore a variety of reactions and emotional needs of children that this reaction includes:

**Fear:** When it is not so intense, avoiding risks to children is beneficial. Fear in children depends on several factors such as age, former experience and mental development of the children. Fear of loneliness, darkness, space and strangers high place and loud noises is common among children. (Ahadi 1995: 211 to 213)

So the unfamiliar places and dark creates fear among children and pull them away from that environment. Flexibility and visibility are important factors in maintaining security and preventing fear in children's environments.

**Anger:** Major cause of children's anger is conflict over toys, ignoring demands and being attacked by other children. Therefore attending to the dimensions of space and its suitability for various children cause to avoid the conflict sense of their personal space and thus the emotional reaction, as anger is reduced.

**Jealousy:** Activities that are important in the process of doing them, and thus their result are less important to avoid comparison of children together and prevent simulating their emotional reaction. So how to improve the activities and environments that support these activities, regardless of the space will be a sense of competition and will enable children to learn.

**Curiosity:** Begins about three years as questions, and reached its final intensity at the beginning age of training at six. (Ahadi 1995: 231) this sense, led to search its environment and discovery by the child. Nature gives infinite variety to stimulate the child's sense that he presented. Children must be allowed contact with each other and update operations division that provides mass. Since all children love to play, there's a common interest in a field of children's instrument of social relationships towards each other. Some environments provide children's behavior well. Children are in psychological and mental development and can be in any state of the built environment, for the game. Therefore having the opportunity to explore many things individually provided for kid's boredom is not surprising. (Lang 2009: 137).

## 5. Conclusions

According to a review in the context of research, the results will generally be in the form of following guidelines for the design of the body that can be used:

- For easy readability of the built environment from the user, using a familiar form and referral schemes in mind of children should be considered.
- Privacy and to create optimum privacy for users segregated public spaces, semi-private and public should be noted.
- The complex spaces and components constructing the cultural space should satisfy children's curiosity and encourage them to identify and explore the unknown.
- Since the actual behavior, involved many of the people, the physical environment with the ability of humans should be consistent. Therefore furniture designing and appropriate space

with standards for children's bodies, help the use ability of environments and using area will be extensive.

- Because the factors that affect learning, is creating psychological safety, the readability and clarity of the separation of physical spaces should be considered.
- Because for children`s learning , nothing is not more fun than watching nature therefore providing possibility to close and direct observation for the children through their familiarity with the nature and opportunity to gain experience and explore issues and opportunities in the learning process will be resulted.
- Since the norms, roles and communication processes are learnt, they vary in the different cultures. Human behavior without a relation to the social system could not be understood and culture without reference to a particular geographical land or area is not recognized. Therefore grounds for meanings are so important, and in fact, in the various topics are further confirmed.

Since children`s existence in larger social groups helps them to socialize so the place of this age group first, in terms of behavior occurrence must have a good little feature in addition to that in the used details there will be a sense of belonging and identity for the user.

## References

- Ahadi, B.H., Jamali, S., 1995. developmental psychology (basic concepts in child psychology) , Tehran. Foundat. Press .
- Alexander, C., 2002. Architecture and the secret of immortality (the way of making timeless) , (M Ghaiyoomi Bidhendi ) , Tehran : martyr Beheshti University Centre for Printing and Publishing. Third Edition.
- Atyknun., others, Reytal., 2005. Hilgard psychology, (Baraheni, MN, et al), print growth, Seventh Edition.
- Bell, S., 2007. Landscape pattern, perception and process ( Amin Zadeh, B ) , Tehran : Tehran University Press. sec. edition.
- Energy, M., Hajji Hossein -Nejad, G., Haqqani, M., 2011. Effect of education based on theories of intelligence on academic achievement of Gardner's multiple mathematical knowledge on the first high school students. J. Educat. Leadersh. Manag., Summer 2011 , pp. 153 to 168 .
- Hall, E., 2006. the deer ( Tabibian, M ) , Tehran : Tehran University Press.
- Hergnhan, B.R., Olson, M.H., 2000. Introduction to the Theory of Learning ( Saif Ali Akbar ) , Tehran. Publicat. era, Fifth Edition.
- Hertzberg, H., 2009. Lessons for students in architecture, ( Mir Hashemi, February, Paradise Bakery, B ) , Tehran : Book Arad.
- Iravani., Khodapanahi, M.K., 2009. psychology sensation and perception, Tehran : publisher side, the thirteenth edition.
- Lang, J., 2009. creating architectural theory of behavioral sciences in environmental design ( concrete oven, AR ) , Tehran : Tehran University Press, Fourth Edition.
- Lynch, K., 1997. Theory of shape, (Seyyed Hossein Bahrain) , Tehran : Tehran University Press institutions. third edition.
- Maslow, A., 1990. Motivation and Personality, (Rezvani, A. ) , Razavi Institution Press. second edition .
- Matlak, J., 2000. Introduction to Environmental Design and Landscape, ( Publications of parks and green spaces in Tehran, Iran ), area vice president - education, education, Tehran : Print Mohammad. First Edition.
- Moghadam-Badri., 2000. Application of Psychology in the School, Tehran : Soroush Press. Seventh Edition.
- Saif, A.A., 2001. Educational Psychology, Tehran : Agah Publications. Fifth Edition.
- Schultz, D., Schultz, S.A., 2002. theories of personality, ( Seyed Mohammad Yahya ) , Tehran : Institute publication edited . - Schultz, Christine Norberg, (2002) , Architecture: presence, language and place, ( Seyed Alireza Ahmadian ) , Tehran. architect publicat.
- Tavalaee, M., 2007. the integrated city, Tehran. Amirkabir publication.