Phenomenology of sense of place and its constituents in children educational environments

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Abstract

New findings of researchers indicate that the environment and society have formed by the presence of human beings and the man being influenced by its surroundings grows. Childhood is the beginning of the phase in which the man inspires from the environment. It is a point where the bed of education, nurture, and growth must be provided so that the society future can be seen as more active and promising. A child perception of the space is quite different from adults. Thus, to build an appropriate space, the children must be looked upon from a point of view in line with their own experience of world. On the other hand, famous philosophers in the world seek for a new approach to change the human’s views, which is called “phenomenology”. Phenomenology is the interaction of all the senses in the process of perception.

Architecture is one of the most important fields in which phenomenology have captured lots of attention. Phenomenologists of architecture have attempted to present a new and different perception of the architecture and environment, by considering the capabilities of this field in architecturally analyzing the space. To this end, the authors of this research have tried to interpret such issues by using descriptive and interpretational methods in order to explore the design concepts of children educational spaces and the relation of such spaces with phenomenology and sense of place. They seek to interpret the influential aspects of the experts’ theories in the form of design principles for children educational centers.

Keywords: Phenomenology, sense of place, educational environment, child.
1. Introduction
What distinguishes this study from others is that we believe that the child education is better provided when, in addition to the use of appropriate educational programs, exploiting architectural elements and components in body and operational systems is considered. Involvement of all the senses in the environment and providing a free background for any experience are the main parts of the interaction of a child with the environments. The authors believe that the objectivity can be perceived by the spatial experience and can be measured and formed by the aid of existing imaginations in the primary thoughts. Recognizing such imaginations as the scientific background for discovering individuals’ actions and reactions to the environment and understanding their capabilities can bring improvements in future designs and architectural spaces.

It is clear that triggering children’s various senses by the use of architectural elements is considered as most attractive features of architectural phenomenology design. An architectural design for children, having its vital role in the environment and in forming child personality in mind, is of critical importance. Understanding such space by its users facilitates directly experiencing objective world and, in result, forming the world of imagination. Here, the way the children perceive the environment and finding their imagination and thoughts foundation on the basis of which their spatial experience become tangible, is a great help to form especial spaces for them. For this reason, the current study tries to propose some solutions to increase the educational spaces quality, by analyzing the key concepts of and explaining the architectural phenomenology as well as sense of place and its constituents and exploiting the interpreted literature.

1.1 Research method
The method of study is in line with the research aims, i.e, descriptive-interpretational. That is, to form the theoretical research bases, including the information related to the concepts of children educational spaces and their relationships with phenomenology and sense of place, library and descriptive researches were done and the information related to the interpretation and relations between these issues were completed. The aim of this study is to determine the influential aspects of experts’ theories and to recognize them as the basic principles of designing the children educational centers.

2.1 Background of the study
Research and investigation on each place phenomenology in architecture and specifically on the sense of place constituents in children educational environment has a school of thought background as well as a comprehensive and authentic setting. In regard with the research background of reference books, the book Phenomenology of Sense of Place written by Parvin Partoei can be named. Also the book Architecture of Kindergarten, translated by Mahmood reza Saghafi et al., and M. sc thesis of the design of Shahrood children educational centers, written by Mahya Eftekhari are among the first-hand examples of references to be used in research theoretical framework.
2.2 Review of literature
Lots of researches around the world are conducted on the issue of children educational centers and playgrounds. However, no comprehensive research from the architectural point of view and the design principles of children environment as well as from the phenomenology of sense of place and its constituent’s point of view in Iran has been carried out. The studies which are available as the bases for designing the children spaces look at the issue only from a specific point of view (which is creating a playground) and are not comprehensive at all. In most of such studies and books, the issue of children space, and specifically educational centers, has not been scientifically investigated. That is, quality issues are not discussed and phenomenological relationships with the space has not been made clear. In the current research, attempts have been made to take a comprehensive view on the issue.

3. Theoretical Principles
3.1.1 Definition of sense of place
The term *sense of place* is composed of two words: sense and place. The word sense has three main meanings in Oxford Dictionary:
- a) one of five senses
- b) feelings, emotions and affection which is called imagination in psychology
- c) The ability to judge an abstract subject, such as the meaning of sense in the term orientation finding sense.

At the end, sense means a complete or total perception of an object by man. The word sense is closer to emotion, affection, judge, and total experience of place or the ability to create a certain sense or possession in individuals (Zariban and Manaam, 2008). To Relph, place is a composition of natural and man-made objects, activities, performances, and meanings whose experience can be ranged from a room to a continent. Being inside a place can be presented in the form of a body (Sharomi and Partoei, 2009). The phenomena of place, from the phenomenologist Christian Norberg-Schulz point of view, are a complete and inseparable part of being. In this view, place is something more than an abstract location (Partoei, 2008). To Martin Heidegger, “place” and “event” are mostly the same. That is, a place is where being happens (an event which is constantly changing and questionable) (Relph, 2008). The phenomena of place is more than a temporary process. In other words, the man is temporary and in change, the residential places follow the same. This is the place which has the roots of man in and is considered as a center for health, security, communication and at the end, is a point for prevention (Gussow in Relph, 1976). Place signifies the man’s imaginative perception of the environment and their rather conscious feelings about the environment which put the individual in an interrelationship with the environment in a way that his understanding and feeling is woven in the environment meaning context and become consistent with it. This sense is a factor that causes the space to be a place with special sensory and behavioral features for certain people (Falahat, 2005).

3.1.2 Definitions and characters of the sense of place in experts’ point of views
To “Queen Lynch”, sense of place is a factor which bridges the man and place and, hence, makes a unity. Space must have a perceivable and identifiable identity so that it is unforgettable and
evident and, in result, is able to make a sense of place. This can bring the sense of belonging (Lynch, 1997). Also, “Robert Hay” considers the following as the main factors governing the sense of place:
- geographical context of the place
- social status
- the cultural and ethical relations
- the life cycle and stages
- couples’ satisfaction (High, 19990).

Stallo who is an anthropologist states: “belonging to a place is beyond feeling experiences and can be perceived. It includes the cultural beliefs and the activities which relate the man to the environment (Cross, 2001).

Fritz Steele, as a psychologist, maintains: “the soul of a place is a combination of features which give a certain personality to a location (steele, 1981, as cited in Cross, 2001). John Jakson is an expert in landscape who asserts: “sense of place is a sense which a person creates inside oneself, as a result of an event or a tradition. It is kept alive by the sense of retrieval and rereading the events”. Christian Norberg Schulz sees sense of place as phenomena with structural, spatial, and atmospheric values which are perceived by man via orientation perception and identification. Generally speaking, sense of place remains as a dynamic fact throughout all the time (Partoei, 2008).

3.2 Concept of phenomenology
Phenomenology has its roots in philosophy of Edmond Husrel. He believed that the starting point of knowledge is the individual internal experience of the phenomena including feelings, perceptions, and imaginations which become apparent as we focus on an object (Merdit, 2007). Phenomenology attempts to understand man and global issue from the human’s eye and mental point of view and believe that a certain knowledge is the one obtained by mental, thought, and sensory experience (Alvani, 2009).

Phenomenology examines what cannot be touched or experienced by senses (such as values and relations which can be obtained through perception and understanding). This science asks us to look at the world through immediate experiment, without medium. We must be seeking to find awareness and understand the world because the meaning of the universe is represented in it. Space, time, and human relations are important in that we practically make use of them (Fathi-Vajargah, 2007).

Phenomenology studies generally deal with the perceptions or concepts, views and beliefs, as well as feelings and emotions. In this approach, using an interview or cultural products of individuals, such as what an author plans, movies, photos and others, a person experience of a certain phenomenon can be represented. That is, individuals are at the center of attention in phenomenological studies. However, it must be noted that description of one’s own personal experiences is at the center of attention in studies rather than the individuals (O’Leary, 2004).

3.3 Sense of place in phenomenology approach
From phenomenological point of view, sense of place is the meaning of being unite with the place through understanding the symbols and routine activities. This sense can be created in the
place where a person lives and can be extended and deepened by the pass of time (Relph, 2008). Individual’s and collective’s values influence on the sense of place, but sense of place governs the values, views, and especially individuals and social behavior. Therefore, people usually take part in social activities considering sense of place (Canter, 1971). Some places are so attractive which make an indescribable feeling inside the person and make him alive, happy, and interested in returning back to the place and this is called sense of place (Falahat, 2005). In phenomenology of sense of place, experience is the main means of perception. Experiencing the phenomenology of the place refers to the mental purification and attainment to the object’s spirit inside a person who is influential on sense of place (ibid).

3.4 Child terminology and children perception characteristics
According to Moein Dictionary, child refers to a son or daughter who is not still mature. People call a girl or a boy between the ages of three to twelve as a child. Also according to the definition of Islamic Republic of Iran, a child is a person who is not mature. Following the researchers done on the children educational area, it is proved that the children acquire various information from the environment at the time of playing. It is noteworthy that predicting the space perception by the users and the way they deal with the space is very complicated since perceiving the space is a reaction between the space structure which the mind perceives and the mental pattern which tries to make a compliance between space and the previous findings. How the children perception of the environment is objectified in architecture can be a guide to a better design and space formation. Jean Piaget who is the most prominent theorist in children development psychology believes that the children acquire cognition by tuning or organizing the information of the environment. To him, to acquire this ability, the child must pass several growth stages in such fields as emotional, social, mental, and physical growth, each with different features. As the child passes these stages of growth and mental imagination development in relation to basic pictures, he acquires a perception of the world with its special qualities. The most important qualities are:

- sensory perception of a child is a general and vague one and he does not pay a deliberate attention to the environment, except by an immediate trigger;
- sensory perception is slow because it is dependent on the existence of inherent motivation and the amount of the external trigger;
- the child, at the first stage, does not trust on the mental images. That is, he uses his previous experience very scarcely;
- The child is a part of the environment and, thus, life, perception, and continues interaction of neural-psychological and environmental-cultural structures impact on his growth.

3.5 Child and environment interaction
The psychological concept of “environment capabilities”, which was firstly recognized by James J. Gibson, refers to the object body or a behavioral place which is used for specific activities. Gibson came to believe that teaching drawing mostly include pictures and combination of spatial forms, while spatial affordance is more important for individuals. According to him, the capabilities of a built environment are different for each individual as well as each social group
or class. Concept of affordance is useful for analyzing the interaction between urban resorts and creative perception and behavior in children. Psychologist Greeno categorized different levels of environment capabilities into four: potential affordance, perception affordance, application affordance, and established one. This is while a part of environment affordance is physical and physiological and the other part is influenced by the cultural and social factors. For example, climbing a tree is perceivable and attractive for children. However, adults can prevent the child from doing this because of social risks in doing that. Or they can encourage the child to do that in order to develop the child’s courage. In this way, as it is shown in the graph, the environment capabilities can be used to strengthen children probable aptitudes (such as creativity growth).

4. Design principles for children educational spaces
According to the analyses done in the current research, the design principles for children educational spaces by considering the theoretical framework presented in the article body, can be interpreted as follows:

a) Combination and endurance of open and closed spaces (natural space according to the space changeability feature):
In order to achieve this, big jointed doors (which open to right or left or above) brings about the combination of inside and outside spaces and endurance of both spaces. In line with it, the idea of establishing several open spaces sparsely such as yards and patios surrounded by the closed spaces can help the endurance of open and closed spaces.
b) Designing in the form of free and flexible plan includes small walls and elements that separate the space and are movable so that the children can create the space they need by the help of the teacher. In order to achieve this principles, elements and organization must be moveable so that the light walls can be moved, the modular furniture and the like can organized, by the help of teacher, in accordance with the purpose of the lesson of the day. By the flexibility of the performance, we mean the ability to use a space in different times for various purposes. For example a space can be used for different performances such as narrating a story, painting, playing, and the like in different time (with trivial changes). The aim is to create freedom for the children. In order to make the spaces flexible, we can divide the space according to the required performances, in different times and according to the educational programs. The aforementioned feature is called changeability of the open and close spaces. Changeability and flexibility of the spaces can be created by combining open and close spaces or by the help of visual elements of dot, dash or surface. It is noteworthy that creativity is required for changeability of space to be created because if the changeability is not made in a new manner, the space become boring for the children and lacks enough attraction and variety. Thus the changeability should be designed and managed in a way that the changes are novel. It is necessary that the child is able to change the space and use his imagination during playing and space changes and get accustomed to the changes. At the end, the child must be flexible toward changes and this flexibility means finding numerous ways to solve the problems and this is the same as creativity (Taken from Eftkhari, 2014).

c) Creating variety by natural elements (based on the changeability of natural elements)
By using different rarely found plant species, specifically those which change their petals and leaves’ color during the day such as Ahvazi, amethystine, coleus, and the like can make variety in the space and can trigger and boost children’s curiosity.

d) Making plays with natural elements (based on the changeability of natural elements)
In order to use this principle, colorful and mobile screens can be used as the interior window screens. The child can see various colors by moving them. Using shadow maker curtains as the space separating elements allows the children to see the shadow of objects or the forms they have made on them. In this way, the children are brought to play with shadows. Using the aforementioned principles in designing children educational space, the background to develop the child curiosity by imaginative cooperation is provided and as a result, his creativity develops too (Taken from Balestic, 2007).

5. Conclusion
Children like the places with a combination of five sense triggers or places which are involved in their growth. Because of this, designing such spaces can facilitate a range of sensory experiences to be formed. That is, children develop their curiosity and imaginative power and experience the space in such architecture. Freedom in architecture means that the adult structural rules do not limit the children. That is, to prepare a suitable educational space, designing a space can be done based on the children interaction in the activities and we can consider locating mobile and flexible furniture or other changeable architectural elements so that the children can play a role in designing their own space of play. Phenomenology is the interaction of all the senses in perception and viewing several aspects of a building or an artifact. And architecture with
phenomenological view is the one which pay a close attention to the psychological issues. In line with this, creating a sense of place in the place in which the children play allows the children to exploit all the capabilities and develop their creativity. Children use all the architectural pictures based on their immediate intelligence and imagination. Due to their holistic view and high imaginative power, they may perceive the environment and objects very comprehensively and sometime strangely which can be seen and analyzed from their behavior in playground, games, and painting of the spaces. By such analyses, the goal which is better design and even giving identity to the children educational space can be achieved.
References

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