

Architectural Spaces and Its Impacts on the Psychology of Child

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ABSTRACT

Developmental psychology is the scientific study of how and why human beings change over the course of their life. Perceiving Spaces is an ultimate challenge to the children (6-12 yrs.) than adults. They consider themselves as sole users and fail to express their opinions of such spaces. While providing those spaces should be deeply investigated and added with some positive elements by Architect/Designer to ensure the development of child psychology, but unfortunately that remains otherwise uncharted.

KEY WORDS: Tangible, Quantitative, Psychology, Spaces

1. Introduction

Architectural Psychology is the study of interactions and interrelationships between humans and their physical environment. Psychology refers to an individual's experience of the physical environment and the impact of such experience on their psychological well-being. In today's world people are always in constant connection with nature and also still managing themselves to be stuck in life with materialistic and mechanical machinery. To meet these challenges experts have been working on these for decades. This cannot be achieved by designing spaces for adult people or mentally matured. Starting from initial Stages of Developmental Child (6 – 12 Yrs.) can change perspective and attachment with spaces can be real fulfillment.

2. Limitations And Level Developmental Child Psychology

This Developmental Child Psychology needs to be implemented in the design issues. Some imaginative studies of various theoretical analysis based on factors of quality for developmental child psychology in itself works based on a qualitative database achieved from "Intangible clauses of deductions". So final summarizing the topic stops at quantitative aspects which doesn't give measurable output.

Note: Sometimes intangible emotional parameters are more measurable than tangible emotional parameters and variables.

3. Observation

For almost 4 months, I have been going through psychology of children (6 – 12 Yrs.) of developmental stage with many case studies. Crossing several stages, till adolescence their brain undergoes drastic changes with sudden and life impacting situations which make them feel strongly bound to those emotions till their death.

4. Case study:

4.1 ARCHITECTURAL AESTHETICS IMPACTS ON CHILD PSYCHOLOGY

Division of children age groups: age - six to eleven

During this age period children are in school aged. In this period children begin their education, extra-curricular activities. They have such a speed mental growth and get in to world. They also start thinking logically and show more dignity, better vision of understanding of surroundings socially and psychologically. Sometimes act like adults even.

Piaget and Bruner are two theorists working on Cognitive Developmental Theory. Hence, they classified this age in to following [1]

1. The sensory-motor stage (from birth to age 2)
2. The preoperational stage (from 2 to age 7)
3. The concrete operational stage (from 7 to age 12)
4. The formal operational stage (from 12 to adulthood)

To reach the child's potential, appropriate environment is defined in the given stages. With the application of the child's skill and intelligence, this environment enables for the child to work hard and complete any given task. During this stage, the child seeks creativity which is helped to develop by working with peers and socializing. A child's environment must be able to provide a base to increase their creativity.

4.2 PSYCHOLOGICAL IMPACTS OF ARCHITECTURAL DESIGN

These days we have better vision of human evolutionary basis for many of those psychological and psychological responses to Design. We're having better opportunity to create such an architecture which is not only for aesthetic purpose but also most favorably psychologically beneficial.

It is also important to consider that we reconsider the societal ingrained constructs those are mislabeled architecture design as a simple art, thereby getting off the meaningful legitimacy it deserves a field that has the potential for real society benefit.

4.3. CHILD ORIENTED ARCHITECTURE FROM THE PERSPECTIVE OF ENVIRONMENTAL PSYCHOLOGY

With the definitions and concepts by former British Prime Minister and writer ‘WINSTON CHURCHILL’ the psychology of environment came up in late 1960’s. Psychological study has a very close relation with architecture. He said “WE SHAPE OUR BUILDINGS THEREAFTER THEY SHAPE US”

Sad part is that we fail to consider the user in architectural spaces, especially if they are children. It is really necessary to consider children during different stages of development while also keeping in mind the psychological growth and perception and their attachment towards spaces.[2]

- Creating spaces based on children’s age and releasing energy.
- Using architectural forms appropriate to children.
- Using various open spaces that stimulate the sense of curiosity in children as well as releasing energy.
- Using spaces that create the sense of belonging to a space.
- Establishing spaces in which children feel secure and fearless.

4.4. FACTORS OF PLACE ATTACHMENTS THAT EFFECTS PERCEPTION OF THE USER IN NATURAL SETTING WITH REGARDS TO ENVIRONMENTAL AND SOCIAL CONDITIONS

A host of meanings that people associate with social environment were cast a light upon with research associated with place attachment Human-place bonding with place attachments is two-dimensional namely- Place Identity and Place Dependence



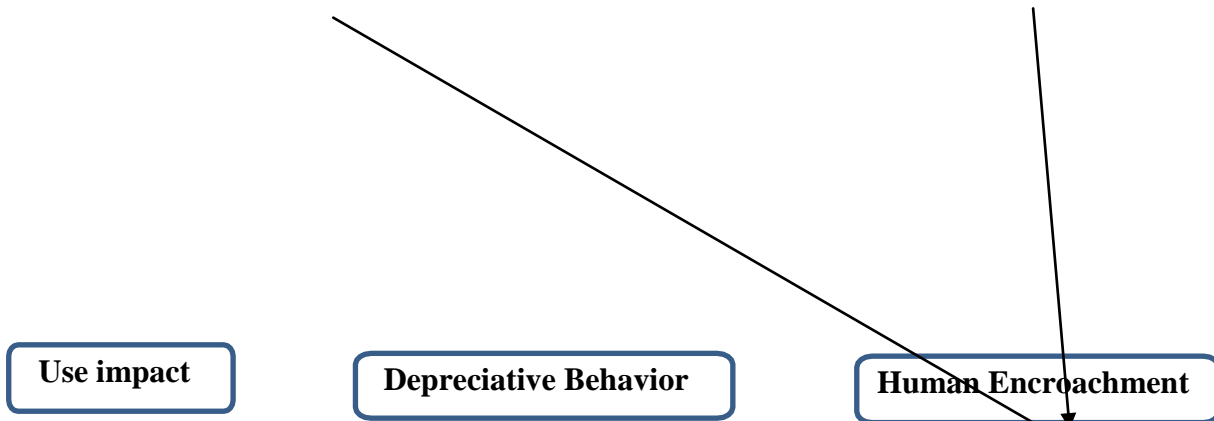


Fig 1- Place Identity and Place Dependence

4.5 ARCHITECTURE IN SHAPING CHILD PYSCHOLOGY

Grabbing main lead points to start the psychology of child in developmental stage for creating better spaces to change their brain storming to next level.Theorist Paiyage named four factors that help child’s mental growth as following:

1. Emotional feelings which are motivations for learning;
2. Physical growth which child can gradually understand more
3. Experiences which child learns to find out for themselves
4. Social exchange or effective interaction with others especially parents, teachers, andplaymates.

Emotional parameters and emotional variables are inbuilt tangible and intangible things.Those are distinguished by categorizing with tangible and related to child developmental psychology.



Fig 2- Tangible Parameters

5. Briefing emotional parameters:

5.1.Sense of cognition of a place:

1. Grasping or understanding memories that formed on visualizing a place or other objects.
2. Landmarks which makes an average observer to recognize or memorize easily.
3. Road Networks to Landmarks includes an additional strength to make space interest

5.2.Sense of Security:

1. Enclosures consists of Boundaries and which depicts specific dimension to it.
2. As per their Anthropometries of that enclosures decides the comfort levels in children and tackles their psychic sense.
3. By planning secure and comfort elements in the enclosures or any recreational space makes special bonding with those spaces and attachments.

5.3.Sense of Attachment:

1. Recognition and Acceptance are twins’ senses to form cognition.
2. Cognition and security combinedly create an ATTACHMENT to a specific space and feeling of belongingness in children.
3. Belongingness starts in children when they enact themselves as a part of surroundings.

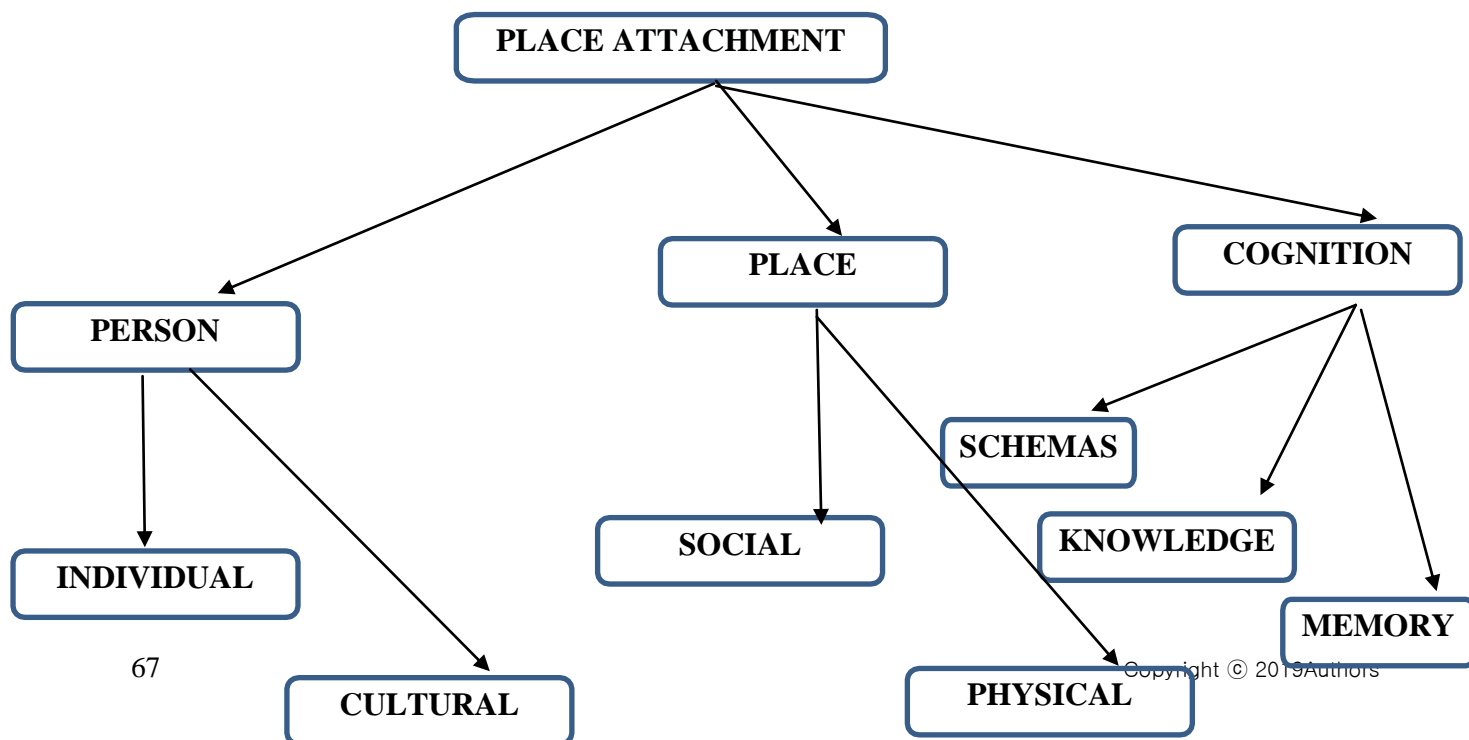


Fig 3 - Place Attachment

5.4.Sense of Mingle (SOCIAL INTERACTION):

By gaining COGNITION, SECURITY AND ATTACHMENT senses, it is easy to clear sense of insecurity and strangeness with space in children.Perceiveness, Recognition and Acceptance are terms in children makes them to feel and experience the space of their own.

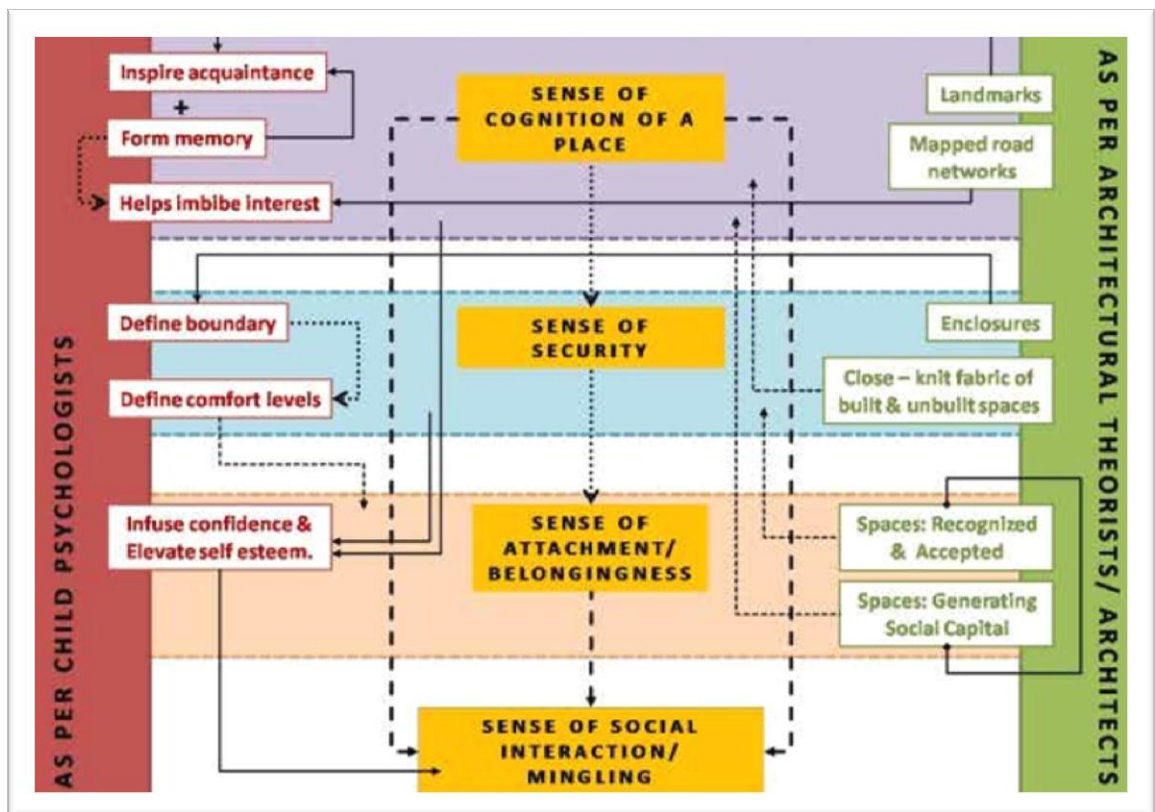


Fig 4 - Sense of Mingle^[4]

6. Briefing emotional variables:-

1. Landmarks
2. Mapping and road networks
3. Enclosures
4. Proxemics
5. Belongningness
6. Space definitions

6.1.LANDMARKS

In fact, noticing part in landmarks variables maximum children recognize temples, sculptures and super markets are with in arrange for children 9 – 12 yrs. Other hand age group from 6-8 yrs. Sticks to the symbols and elements.Children later on stages like advance level in developmental stage 10 – 12 yrs. They start relating and recognizing the landmarks vaguely.Landmarks are merely representation that helps with recognition. As per theorist PAIGE The concrete operational stage of children can handle individually but with lack of freedom of decision making. Soon in the later stages like FORMAL OPERATIONAL STAGE they get a better vision for decision making as well independency.

6.2.MAPPING AND ROAD NETWORKS

Generally Mapping of road networks used to locate the landmarks and way to go through particular way for proper destination.This is maintaining reality for children between 6 – 12 yrs.The beginning stage of cognitive stages like 2 yrs. (Pre operational stage) commences have ability to trace out the symbols, where children in between 9 – 12 yrs. can auto analyze pathway their using to get to the regularly used spaces.Children below 9yrs shows dependency to towards parents, guides and teachers.Children above 7 yrs. used to map the elements that they use and creates some imaginative pictures in their brain to remember.In one of the case studies it stated that 9 yrs. below children consider PAVILION as an UMBRELLA. In this case they just only consider its shape note its function or actual image.

6.3.ENCLOSURES:

Enclosures define boundaries to create secureness for children inside the box.Children between 6 – 12 yrs. used to pick out partial enclosures like FENCES and natural enclosures like HEDGES as their boundaries.Children between 9 – 12 yrs. wanted need enclosures as panoptic with refence to the whole group.Finally, for children below 9 Yrs. are not much satisfied with enclosures on majority basis like 97% andEncourages only open and semi open spaces.

6.4.PROXEMICS:

Proxemics is the study of human use of space and the effects that population density has on behavior, communication, and social interaction.In 1966 anthropologist Edward Hall

coined the term “proxemics,” an area of study that identifies the culturally dependent ways in which people use interpersonal distance to understand and mediate their interactions with other people.^[3] Children between 6 – 12 Yrs. are school aged as already in the above case studies. The distance spaces like schools, residences are less likely than open and recreational spaces. As per child psychologists Dr. Harish Shetty and team all of have common opinion to speak about the significance of unstructured activities on overall psychological health and runs as follows.^[4]

1. Unstructured activities. (sports, games) for children boost up to next level development
2. They learn to make decision and resolve issues within them not like lazy and its increases their sense of self.
3. For designing these kinds of unstructured activities in open spaces can help us to achieve evolution of their inner self development.

Children between 8 – 11 Yrs. wanted mainly to play in open spaces with slides jungle gyms, swing cradles etc. by putting these elements in those open spaces creates more attachment to them to increase sense of self.

6.5.BELONGINGNESS:

Belongingness comes under intangible variable where 6 – 12 Yrs. children relate and animate themselves in the space and make them bound with that space by achieving above tangible variables. Developmental children are interested in realistic play structures than strange usages like computer and abstract mechanical devices. Children 6 – 12 Yrs. are not interested to use those kinds of mind-bending stuff at their age group because, they have short span of attention. So artificial play structures are elements of surprise being exhausted soon fail to capture child’s interest.^[4]

6.6.SPACE DEFINITIONS:

Space is common measurable parameter in architecture. When spatial parameters from the point of psychology are to be approached. According to sociologist EDWARD T HALL whenever there is clubbing of relationships, it falls under domain of either social space or personal space or both. It also depicts the socio-personal space for child during 6 – 12 Yrs. is hypothetical for them to decide even to think. Personal space is much flexible than social space in late childhood phase. Finally, space definitions conclude that children from 6 – 8 Yrs. to 9 – 12 yrs. evolve to social space gradually with spaces being constant. Later on, personal

space on that age group slowly compromised slowly to gain social space. ^[4]

Conclusion

The final achievement of this paper portray evolution of different developmental stages of children reveals basic mind set towards spaces that they get in. Lack of sensitive design spaces for children makes their imaginative power and process of grey matter growth less. To demolish that fact working on the basis of the emotional parameters and variables of child makes a designer to make belongingness and fearless sense of spaces in future. Children developmental stages are the minute shock circuit for their brain which makes them to start new thinking process or decision-making skills. As in the shoes of an architect within the budding stage itself should take care of spacing and bounding children's brainstorm with better designed psychological manipulating spaces. Final add on for Psychology related architecture is people simply misapprehend roots and depth of architecture as a simple art form. Proper acceptance of architecture still not found in society. But gives a benefit and satisfies psychologically as well as in an art form too.

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