

# The Scale of Individual Space in Restructuring Perception of Phobia

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*Abstract- The phenomenon of perceiving space is not inborn. It is created by individuals over time. This is possible via interactions between the individual and the indicators around. The person's perception over time results in the formation of images in the conscious mind and matures into psychological attachment to the place term personalization. The writer calls this creation of boundaries individual space. Since humans react irrationally when moved away from individual space, what scale of space can architects create to solve this disposition? This paper aims to provide space therapy to ameliorate space misconceptions humans generate over time in their stay in a particular place. In order to meet the aims of this essay, a literature framework from 9-books which talks about the theory of space at different dimensions (psychological, sociological, philosophical, analytical and concretization) will be considered as it forms the core of the class presentations/discussions for the course (Spatial Exploration) with coaching of the course Instructor moderating the arguments. Furthermore, develop a model of interactions to buttress the framed argument. The paper concludes with the notion that individual space is constructed by human beings directly or indirectly and manipulators of physical space should take into cognizance the feeling of the users so that they are not aided to remain in their mindset space defect.*

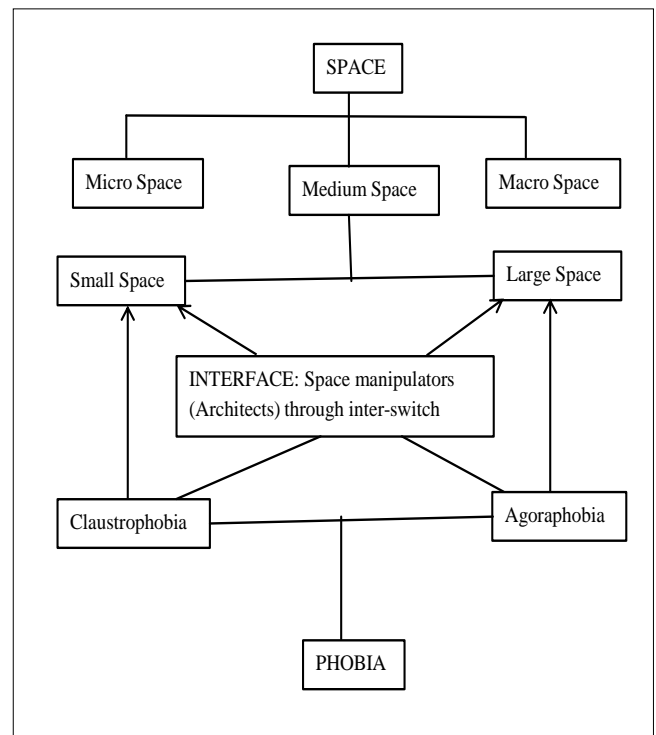
**Index Terms- Individual Space, Scale, Space Perception, Space manipulators.**

## I. INTRODUCTION

The discipline of architecture is not just rooted in art/science but shows dynamics of dealing with human life at different scales in the environment. Apart from the activity of creating: livable and viable spaces for man's use with the available resources [1]. In this paper, the biggest challenge lies in creating functional spaces that meets human's physical needs for shelter and feelings [2]. Space as an umbrella concept entails levels of functionality, visualization, technicality and orientation. It therefore, becomes imperative that the parameters congruent, actually define it in that direction without which, it will be void and endless to imagine. Having this background, it becomes phenomenological supportive that space is the meeting place of natural and man-made things. It can be open or closed, inside or outside, indoor or outdoor, large or small, and private or public [3].

However, the space user (man) becomes the major determinant in apportioning the size of the space due to his cognitive qualities and will-power with the passive technical influence from architects. Man in the environment suffers phobia in his freedom of like/dislike to form individual space.

The focus of this paper is to try to construct a model which can be applicable in restructuring this feeling from man. The Interaction model is shown below in Fig.1.



**Fig. 1: Interaction Model between Humans perception in space**

## II. INDIVIDUAL SPACE

Individual space is referred to as a house which is enclosed, secured, valuable, and comfortable; conditionally structured where memory occurs and time is compressed [4, 5]. It is an affective space likening to turf where man experience, perceives and imagines his being and a domain of familiarity for man [6]. Space in this context is figured as a natural concept which can be understood through complex properties like: direction, distance, shape, area and volume [7]. This implies that, it can be imagined and measured in both perceptual and concrete phases. The hypothesis that space is metaphorically manage as an immovable and stagnant thing thereby limiting it to contingent void of many tangible and intangible constructs becomes a narrow approach [8].

However, spatial crisis seems to occur with time through perceptual attitude in individual spaces that were created for man's living and demands an adjustment in habit to cope in such spaces. Within this benchmark, there is a network which happens between space-space and space-people regarded as space syntax [9]. This is demonstrated in *Fig.1* as space interaction. The Model indicates downward movement from space, in the upper part towards humans' phobia while there is an upward movement of phobia from man in the lower part towards space.

In the similar context, today the passivity of architecture in physical space compartmentalization is mostly undermined by space designers due to capitalist phenomenon of profit ignoring human feelings. This notion is oppose by establishing the premise that enclosed space is a compression of patterns containing diverse languages which evoke people feeling of aliveness and humane qualities [10]. The result is life through space/time greatly influenced by economic and social values, abandoning mental frameworks which in a way interpret space /time with links to scale. Haven established the fact that individual space is defined space where man feels homey, defended, and free from crime, poetically expresses him and exercises full territoriality [11, 12]. It will be out of place to create it without thorough consultation and his involvement in the process.

### III. SCALE OF INDIVIDUAL SPACE

Architectural scale is a concept that qualifies buildings to be understood to humans thereby providing them with a feeling of relationship with the buildings via: force of either attraction or repulsion of our values [13]. Furthermore, remark about the evaluation of the definitions earlier given by other scholars as it relate to size and fitness of part with whole in the built environment. Scale is a function of communication between the user/observer which holds specific evidence to designer's consideration and discrepancies on the use of architectural variables: size, form, color, texture, technology and materials when creating. The individual's ability to make selections based on personal intentions becomes paramount in this discourse. From the above meaning of scale, the writer visualizes space with this potentials of magnetizing properties depending on it magnitude and the perceptual biases of the person as such.

Participation in the presentation sections, about the said books by classmates: This led to the formation of the Interaction Model in *Fig.1*. Focus on this section is narrow to considering space at three scale levels. Thus: Micro, medium and macro levels. Conversely, others dimensions where stated as: inside and outside, indoor and outdoor, but a few. The author of "[2]" highlighted these levels as:

- Micro scale level refers to spaces which are too minute to accommodate human existence.
- Medium scale is the concentration for this essay; is spaces that are relative to human dimensions (scale), therefore possesses the properties of housing human-beings.
- Macro scale levels are too large for human survival, the force of understanding the space is beyond human's habitation.

The writer of this essay argues that within the medium space, there is dichotomy in the form of: large space and small space in responding to human cognitive tendencies. The outcome is called phobia which is simply a feeling of fear of space dependent on the magnitude of the space.

### IV. PERCEPTION

Perception is the ability of the individual to deduce inferences from previous experience to confronting stimuli and formulate patterns and interlinks between the said stimuli [14]. In addition, man and other higher vertebrates interact with the environment more with two frequent sensory systems: Visual and auditory, the other additional three which are minimally used include: Olfactory, gustory and Kinesthetic. In a comprehensive manner [15] summarizes it as the process of sorting out, interpreting, analyzing and synthesizing stimuli by using sensory organs and the brain.

Space perception is also defined as the framework of cues which enables man to be conscious of his position in enclosed space and the objects around the space [16]. The cues are distance and depth which assist in movement and orientation to the environment. The enclosed space in this context is a physical three dimensional space in which man can erect mental pictures. Further details, shows that man's perceptual appraisal is control by visualization in three planes (horizontal, vertical and distance simplified as length, height and width) not forgetting the position of the viewer and the earth gravitational force that acts across the area.

While in the book: "Genius Loci: Towards a phenomenology of Architecture", this space category is defined by floor, wall and ceiling. Another scholar also argues that space perception is cognized via two main components. Thus; Form type and size while other components are subsidiary attachments to the aforementioned [17]. However, for man to function properly on the daily routine of movement, communication, and rest certain amount of presence in a space is required [18].

The above propositions at this point per heads the flow to support the argument that man's mood in individual space regarded as premise is induced with the following reactions: Pleasant, uncertainty, lonely, restless, cozy, and other adjectives that each individual can name which narrows to the feeling of expressing largeness and smallness in an envelope space. The space reactions stated above shows an indication of positive and negative reactions while in medium space (large or small).

#### **Phobia**

The space perceptual state focused in this essay is phobia denoting fear of space weight and representing negative perceptual reaction. It manifests in two levels: Agoraphobia and claustrophobia.

- Agoraphobia is simply the fear of wide spaces including uncontrolled social conditions.
- Claustrophobia is the fear of small (tight) spaces.

Taking you back to *Fig.1*, phobia is at the bottom part of the Interaction Model with direction links to the spaces of defect.

#### **Indicators**

Since these reactions are not inborn, as proven from the correlation of the scholarly literature used above. It means

there are factors which constitute as membrane of communication to implant this kind of space language in users of individual space which then result into space identity. In this Paper, the cues (factors) are regarded as space indicators categorized into natural and man-made indicators.

The natural space indicators are nature based; the space user/designers do not have control over them. The earth's force of gravity is a clear example. In another hand, man-made space indicators are all other elements which the user or space manipulators can moderate in a defined space. This type embodies all the elements of design, principles of design, sensory state coordination of the user and the position of the user. This summary of space indicators brings us to the next discussion on space manipulators.

## V. SPACE MANIPULATORS

It is pertinent to remind designers but with almost emphasis to architects that space is their commodity. Architecture in this sense is rethinking as collective life [19]. Despite the diversity of defining architecture, criticism of projects completed by architects and teaching of the discipline points to the idea that architecture is the creation of a functional object in a functional space. The proponent that human behavior in a space is affected by: the arrangement of furniture in a room, position of rooms in a house and orientation of houses in a city is a pointer [20]. The architect's role in *Fig.1* is that of intermediary between man and space. He manipulates all elements of design through design principles to make architectural space which the writer calls individual space. The task of the architect is the evaluation of all variables consciously incorporating the design tools in a scale of equal objectivity to favor the user.

The topophilia evaluation of individual (his heritage, biological upbringing, educational training, socioeconomic position and surroundings) to space is necessary for the architect so that space allotment and compartmentalization is handling in a friendly manner. Avoiding all levels of space monotony and taking the user via large/small spaces in a particular home can be one sure way of managing space phobia. However, in cases where sufferers are in a critical condition of any phobia type identified, then the Interaction Model in *Fig.1* indicates that transposing the user as shown by the arrows from the initial space feeling (phobia) either large to small and vice versa should be adopted as a control therapy for correction of the fear of space.

## VI. DISCUSSIONS SUMMARY/CONCLUSION

The diagram shown in *Fig.1* above shows the interactions that happen in the environment at habitable space specifically at individual space scale. Space is at the upper region while man's feeling (phobia) is coming from below the diagram. When man's perception reaches the interface, space manipulators (architects) exert freedom to alter the user's space stimuli through design. Practically, this can be achieved via inter-switch. Move the fear sufferer for larger space (Agoraphobia) to small space while the one with the fear of small space (Claustrophobia) is transpose to large space. This transposition of the defect in the run long become a therapy for restricting (correcting) the initial identity. After this exercise, the carrier can freely function in the two scales of

space without fear because his mindset is adjusted by the architect's design.

Finally, the task of restructuring man's fear of space is possible if the architects manipulate the scale of individual space with an understanding of the user's perception and the sensitivity of the composition of the space. Design approach for homes should be more of evidence based and less of abstracting methods. From the perspective of the books on different dimensions of space which formed the background of this discourse, it is vital that while scientific values for space are adopted for the design of space, care should be taken not to neglect sociological, psychological, physiological and philosophical values especially as man's existence in the environment is affected by all spatial values.

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