

Phenomenology in Architecture A Pedagogical Exploration

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Abstract – In the early 19th cent; Philosopher Edmund Husserl introduced the term Phenomenology in the line of epistemology. With architects like Steven Holl, Peter Zumthor; who are influenced by literary works of theorists like Juhanni Pallasmaa; Phenomenology is opening a new door in Architecture. According to the French Philosopher; Maurice Merleau-Ponty, Phenomenology is the study of essence of the existential environment as perceived by humans, in other words; ‘experience of the lived-world around’. Ponty also adds on to the definition by stating that knowing the essence is not the ultimate goal. Idea is to incorporate that knowledge into the perceivable environment as it exists in relation to human being and in the space-time context.

We do witness the incorporation of this knowledge of phenomenology in space-time and human context in various fields of representation – painting, Sculpture and Architecture. Yet we are figuring out methods to study or analyze this phenomenon. This paper not only addresses the gravity of the situation but also demonstrates ideas that can lead to developing methods for the study of Architectural Experience. Elaboration of the methods is done through discussing processes and final products of Elective and workshops that were conducted on this subject. Learning from Films, studying experience through interviews and further making some attempts at understanding the idea of experience are dealt in detail here

Key Words: *Architectural Experience, Phenomenology, Human and Space*

I. INTRODUCTION

“My perception is [therefore] not a sum of visual, tactile, and audible givens: I perceive in a total way with my whole being: I grasp a unique structure of the thing, a unique way of being, which speaks to all my senses at once”(Merleau-Ponty, 2002). With this Merleau-Ponty¹ establishes that experience is not unidimensional, there are multiple aspects involved. One is still in the process of understanding the multi-dimensional study of Architectural experience. The aspects and the process of architectural experience analysis are still vague due to a

lot of un-explored ground. On the other hand, Neuroarchitecture has had major breakthroughs in tapping human mind, computationally understanding its emotions and argumentatively relating the same to the spatial structure. Since its not easily available, widely used or totally understood one is still trying to figure out tangible and available experiential analysis methods for daily use.

Since Freudian theory of Space, a psychoanalytical aspect got attached to the realm of Architectural experience. It gave fodder to 19th cent; Philosopher Edmund Husserl for his phenomenology discussions. Maurice Merleau-Ponty’s Phenomenology philosophy came closest to Architecture discipline. Picking on Ponty’s thoughts, Juhani Pallasmaa² developed his experience-based architecture design ideas. Pallasmaa connected the dots as left on the board by Edward Casey³ and Norberg Schulz⁴. Casey Says “It is sensible, perhaps even irresistible to assume that human experience begins with space and time and then proceeds to place”(Casey, 1996). Continuing from space-time, Norberg Schulz adds Spirit of The Place notion calling it Genius Loci in his book ‘Genius Loci: Towards A Phenomenology of Architecture’ (Norberg-Schulz, 1979) to the discussion.

These authors through their research have added many parameters to the study of Architectural Experience. “No longer is it a matter of speaking about space and light, but of making space and light, which are there, speak to us. There is no end to this questioning, since the vision to which it is addressed is itself a question. All the inquiries we believed closed have been reopened. What is depth, what is light, [what is being]?” (Merleau-Ponty, 1964). When this is the case one is ofcourse lost between the various elements of space, aspects of human mind and hence the understanding of experience. In this maze came about the workshops and electives on Architecture and Psychology or Architectural Experience. Learnings from these short courses led to a lot of realization and ground work for further research. This paper is constructed using

the output from these short courses but is narrated as development the understanding of Experiential Analysis of Architecture.

II. UNDERSTANDING THE FUNDAMENTALS

The journey began with understanding the fundamental concepts around the study of Experiential analysis. Most courses began by addressing these simple ideas. Though in some cases the theoretical study was delved deeper into a philosophical inquiry.

Fundamental ideas namely; Sensation, Perception, Experience were first defined as explained in the field of psychology then their relevance was observed in Architecture. Lot of literature reading was done to establish this base which was put on paper by students in form of quick notes as seen in

Figure 1. Quick notes is a handy tool for penning down ones' thoughts and understanding through info-graphics.

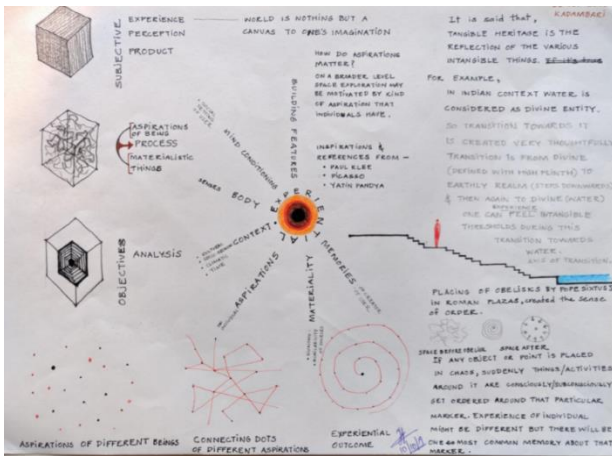


Figure 1: Quick Notes made during Architectural Experience study readings. Source: Kadambari Aute, Urban Psychology Elective, UD - ASAD, Pune, 2019-20

III. ARGUMENTATIVE ANALYSIS OF EXISTING WORKS

To apply the understanding achieved from readings, analysis of an existing site would be undertaken. It could be a building or an interior space, we took up a film set analysis. There were a few conditions to selecting the film. The film-set should be designed to display the emotional conditions of their actors. It should provoke the user or viewer's senses and hence the emotions. Story line of the film (*Historic context, Political scenario, social condition*) should correspond with the set design and simultaneously convey the message through sensory and emotional evocation. Since the dialogue came into being the spatial and facial expressions lost their charm, hence the films to be chosen may be silent ones.

Chosen film was studied based on its impact on human psychology through set design. Yet the challenge was how to break down this study. Through readings one had understood that emotions and senses play a role in experience which is evoked by the elements of a given space. Based on this understanding the space was broken into single or groups of elements which may have

provoked certain emotions. Establishing the relation of the element with the emotion was mainly intuitive except at places where some readings may have provided guidance. As seen in Figure 2 the student has grouped certain elements a led them to secondary emotions that further tie multiple secondary emotions into single primary emotion.

IV. EXPERIMENTAL ANALYSIS OF DESIGNED SPACES – TRIAL 1

From the film study one has intuitively related some elements of design with particular emotions. Yet this is not a full-proof idea so one begins to test it. In this exercise the students designed and built life size, single activity spaces on campus. Elements were chosen based on learnings from previous exercises. These elements would correspond to particular emotions as hypothesized by the students for the space. Figure 3 is one of the student group's study sheet of above stated experiment. They wished to achieve Sadness and fear. Hence a dark hollow with spikes at the outside was designed and built. Its scale was small to constrict the user and evoke seclusion and awe creating. Internal space had only 1 stool and rest was empty. It was also noted what the participants did in the time they were required to stay in the space, were they relaxed and sitting or anxious and waiting to step out. Some participants could not stay in the space for long and requested to step out early; signifying the impact of negativity as meant to be projected by the space.

Data gathering from the participants after the experiment was based on MCQ type questionnaire as seen in

Figure 4. These were also planned based on elements and emotions they would evoke. So for each element four options of emotions were given. Experiment was indeed fun and successful to quite an extent. Most projected emotions were realized to be correct. Yet a question continued, weather the elements could and should be separated and studied as such? Also is experience only about emotions, or is there more to the story? Further elective attempts clarified more queries as we explored.

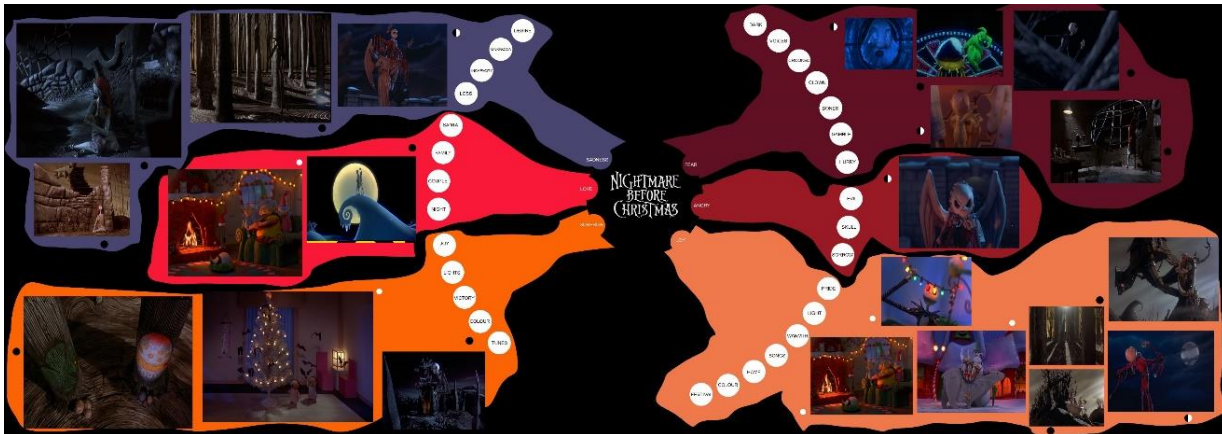


Figure 2: Architecture based experiential analysis of 'Nightmare Before Christmas'.

Source: Ketan Avhad, Architecture and Psychology Elective, 5th yr B.Arch - ASAD, Pune, 2018-19

WHEN AN INDIVIDUAL EXPERIENCES A SPACE, THEY IMMEDIATELY BECOME INVOLVED IN AN ARRAY OF OVERLAPPING PROCESS THAT ALL CONTRIBUTE TO THEIR EXPERIENCES.

DARKNESS
DARKNESS, LIGHT DEPRIVATION LEADS TO DEPRESSION. IT ALSO CAUSES ONE TO LOOSE SENSE OF TIME... ONE OF THE RESEARCH ALSO TELLS THAT PEOPLE TURN TO BE MORE SELFISH AND LESS HONEST IN DARKNESS THAN IN WELL-LIT CONDITIONS AS DARKNESS TENDS TO CONCEAL IDENTITY AND DECREASES INHIBITIONS. SOMETIMES DARKNESS IS ALSO RELATED TO ISOLATION AND PREVIOUS EXPERIENCES WHICH CAUSE ONE TO GET ALERT.

NARROW OPENING
NARROW OPENING AND SMALL SCALE CAUSES ONE TO DEVELOP CLAUSTROPHOBIC EFFECT. IT ALSO LEADS TO ANXIETY IN WHICH PEOPLE EXPERIENCE IRRATIONAL FEAR OF HAVING NO ESCAPE OR BEING LOCKED AWAY INTO THE SPACE.

SCALE
THE AIM OF THIS EXPERIMENT WAS TO FIND OUT THE EFFECT OF SOLID SPHERICAL, SMALL AND DARK SPACE ON HUMAN EMOTIONS. THE TASK WAS TO SLIGHTLY MODIFY EXISTING INSTALLATIONS IN ORDER TO CREATE DESIRED EXPERIENCE. THE DOME INSTALLATION WAS MODIFIED BY CREATING A NARROW OPENING IN ORDER TO EXPERIENCE THE DOME FROM INTERIOR THUS CREATING A DARK SPACE.

SECTION
PLAN

METHODOLOGY:
A SAMPLE OF 10 ARCHITECTURE STUDENTS FROM VARYING GRADES WERE SELECTED FOR THE EXPERIMENT. A VARIABLE OF SOUND WAS INTRODUCED TO SOME OF THE SUBJECTS BY PLAYING MUSIC IN THE BACKGROUND. THEY WERE ASKED TO EXPERIENCE THE SPACE. BASED ON THAT THEY WERE INTERVIEWED FOR THEIR RESPONSE ON THE ELEMENTS THAT LEAD TO EMOTIONS.

ARCHITECTURE AND PSYCHOLOGY
EXPERIMENT ANALYSIS
AAYQAN SCHOOL OF ARCHITECTURE AND DESIGN, PUNE | ILA K, PRATIKSHA U, AKASH J, RADHIKA S, RUTUJA M | FIFTH YEAR

Figure 3: Study sheet of space designed and built by the students on campus. Purposeful elements of design are also highlighted. Source: Ila K, Pratiksha U, Akash J, Radhika S, Rutuja M, Architecture & Psychology elective, 4th Yr - ASAD, Pune, 2019-2020

HYPOTHESIS - THE EXPERIENCE OF THE SPACE WAS ISOLATING DUE TO THE DARKNESS AND THE NARROW OPENING ADDED TO THE EMOTION OF SEPERATION . THE FORM AND SCALE OF THE SPACE CONFINED THE MOVEMENT OF THE SUBJECT TO BE SEATED OR KNEELED WHICH LED TO THE EMOTION OF ISOLATION.

| ELEMENTS | BLACK COLOUR | SHAPE AND FORM | DARKNESS | OPENING |
|--------------------------|------------------|----------------|------------------|-----------|
| SAMPLE 1 NIKITA K | CONFUSED | ISOLATED | FEAR | HOPEFUL |
| SAMPLE 2 NIKITA G | SECLUDED | CONSTRAIN | EXCITING | HOPEFUL |
| SAMPLE 3 AMIT P | | EXCITED | COMFORTABLE | CONNECTED |
| SAMPLE 4 ANIS P | EXCITING | COZY | SLEEPY | |
| SAMPLE 5 SHWETA | EXCITING | COZY | COMFORTABLE | |
| SAMPLE 6 YASHASHREE J | | SUFFOCATED | ISOLATED/LOST | SEPARATED |
| SAMPLE 7 DIVIKA T | SCARED/ RESTLESS | CLAUSTROPHOBIC | | CONNECTED |
| SAMPLE 8 SAVIL K | SAD | ALIEN | SCARED/ RESTLESS | ISOLATED |
| SAMPLE 9 RIYAN H | SECLUDED | SUFFOCATED | DETACHED | |
| SAMPLE 10 SHRADHA H | SECLUDED | CLAUSTROPHOBIC | SCARED | |

ARCHITECTURE AND PSYCHOLOGY
EXPERIMENT ANALYSIS
AAYQAN SCHOOL OF ARCHITECTURE AND DESIGN, PUNE | ILA K, PRATIKSHA U, AKASH J, RADHIKA S, RUTUJA M | FIFTH YEAR

Figure 4: Interview data of the experiment. Source: Ila K, Pratiksha U, Akash J, Radhika S, Rutuja M, Architecture & Psychology elective, 4th Yr - ASAD, Pune, 2019-20

V. EXPERIMENTAL ANALYSIS OF DESIGNED SPACES – TRIAL 2

the question of weather an element can be separately studied in experiential analysis and is experience only about emotions were delved further in this exercise. The quote below by Pallasmaa; begins to elaborate on our quest. In this quote he not only discusses the various elements in relation with each other as creating the experience but also talks about the intangible elements of the space too which contribute towards the experience. Too add on if one reads between the lines, you realize that the whole experience has various emotions but is leading to a single understanding of what one may call as “TIME or NOSTALAGIA”.

“But the walls themselves were the most unforgettable. The stubborn life of these rooms had not allowed itself to

be trampled out. It was still there; it clung to the nails that had been left in the walls; it found a resting-place on the remaining handbreadth of flooring; it squatted beneath the corner beams where a little bit of space remained. One could see it in the colors which it had slowly changed, year by year: blue into a moldy green, green into grey, and yellow into a stale, drab, weary white. But it was also in the places that had kept fresher, behind the mirrors, the pictures, and the wardrobes; for it had outlined their contours over and over again, and had been with cobwebs and dust even in these hidden retreats that now lay uncovered. It was in every bare, flayed streak of surface, it was in the blisters the dampness had raised at the edges of the wallpapers; it floated in the torn-off shreds, and sweated out of the longstanding spots of filth. And from these walls once blue, and green and yellow, framed by the tracks of the disturbed partitions, the breath of these lives came forth - the clammy, sluggish, fusty breath, which no wind had yet scattered. There were the midday meals and the sicknesses and the exhalations and the smoke of years, and the stale breath of mouths, and the oily odour of perspiring feet. There were the pungent tang of urine and the stench of burning soot and the grey reek on potatoes, and the heavy, sickly fumes of rancid grease. The sweetish, lingering smell of neglected infants was there, and the smell of frightened children who go to school, and the stuffiness of the beds of nubile youths” (Pallasmaa, 1992).

Now keeping the idea of experiencing TIME through various tangible and intangible elements constant and emotional variety open ended one begins to develop a test for the same. Students once again design spaces with elements that they believe would evoke the experience of TIME. This understanding comes from readings as quoted above. Yet the elemental choosing is an assumption and not conclusive. The student group built a walk-in back box.

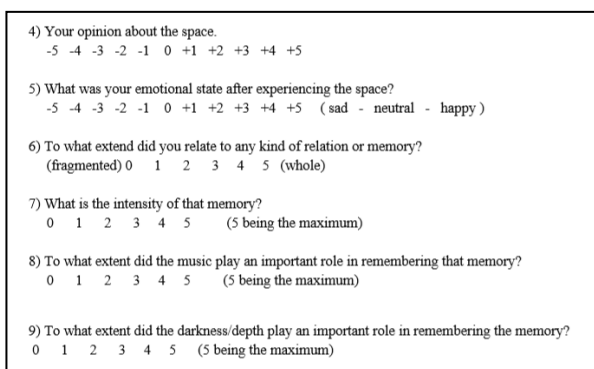


Figure 5: Likert scale-based questionnaire for analysing experience of TIME.

Source: Parth B, Karan K, Rutuja M, Architecture and Psychology Elective, 4th Yr - ASAD Pune - 2019-20

Participant would enter that empty dark box, a music would begin to play in the background. Participant would be expected to stay in there for few minutes. On stepping out their feedback would be taken using a Likert scale questionnaire as seen in

Figure 5. Analysis of the data was done using pie charts as seen in Figure 6, which displayed the impact of various elements at the recollection of past memory or future thoughts hence a realization of TIME.

VI. CONCLUSION

One may have not totally understood yet has observed that there are two characters at play here, the space and the user. “The interweaving between the Knowing subject and the Knowable object is a Phenomenological Dialogue according to Buber. Therefor phenomenological dialogue may be defined as “an exploration and description of phenomena, where phenomena refers to things or experiences as human beings experience them. Any object, event, situation or experience that a person can see, hear, touch, smell, taste, feel, intuit, know, understand, or live through” (Seamon, 2000)” (Kabir et al., 2020). This notion is proposed and now open for further research.

The other criterion as discussion was about the emotions being the only outcome of experience. We moved from there into another idea of generalizing experience. Experience may have types and TIME could be one of them. (Kabir & Singh, 2020) in their research to quite an extent establish the idea of TIME as a type of experience. The paper says “Time’ is hence a cyclic phenomenon that dwells within the Memories of the User and the spatial elements. To experience ‘Time’ one should tap on the memories within them and /or within the spatial elements around. This process emphasizes that only when the user and the Architectural Space have a dialogue with each other; can the user perceive the Nature of Architectural Experiential; in this case ‘Time’(Kabir & Singh, 2020). Further research continues into digging if there are more experience types and how does one study an experience type to then be able to analyse its impact on human.

These two questions raised in this paper open up a huge realm of inquiry and research that is missing in the discipline as yet.

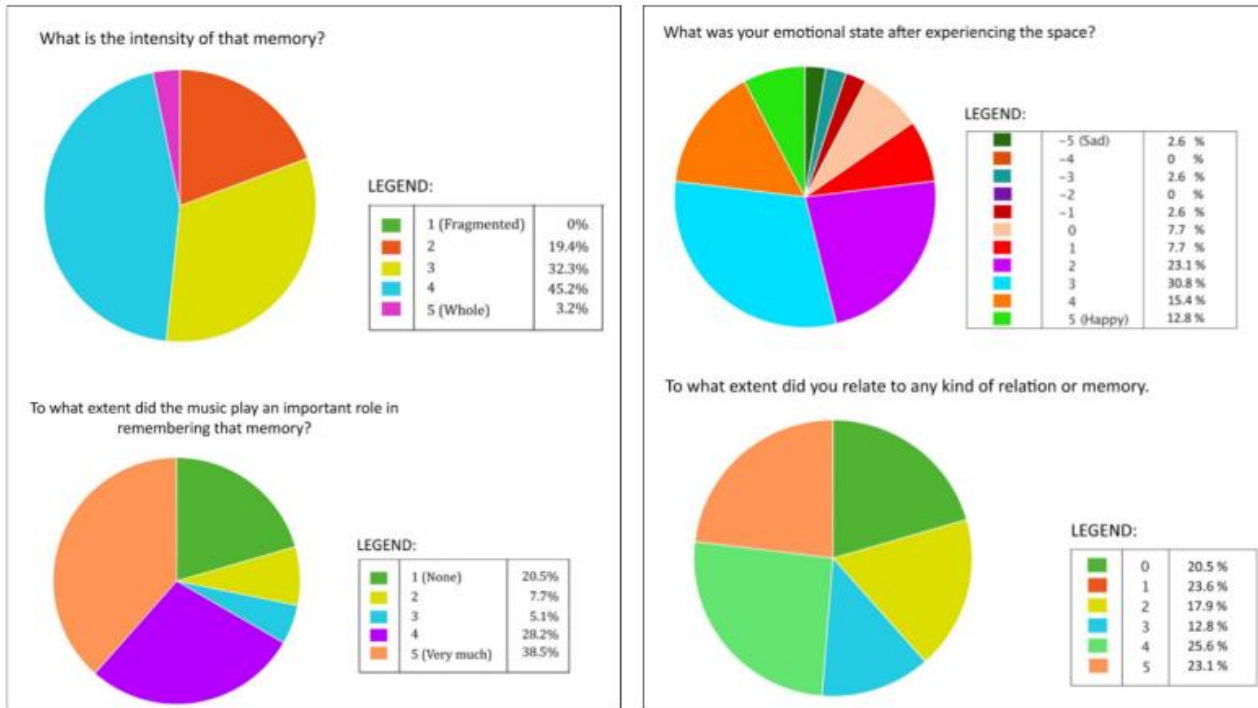


Figure 6: Data analysis of TIME Experience questionnaire. Source: Parth B, Karan K, Rutuja M, Architecture and Psychology Elective, 4th Yr - ASAD Pune - 2019-20

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