TAMIL LITERATURE AS A TOOL FOR EXPLORING EMOTIONS IN ARCHITECTURE

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Abstract:

Architecture can have a profound impact on human emotions and behaviour – a quality that is underexplored when compared to say functionality and aesthetics. However, history is replete with examples of master pieces in architectural space-making that have consciously orchestrated spatial experiences that make the work memorable. Literature also influences human emotions, but this is more explicitly acknowledged and applied in literary works.

In this paper, we present the results of an experimental process used by the author – as part of my Pre-Thesis Studio as a second-year student in the master's program in Architecture – to translate the study of emotions by Kalki Krishnamurthy in his renowned novel Ponniyin Selvan into a study of architectural (3D) spaces.

Keywords: Emotions in architecture, Space and emotions, Art and architecture, Process in architecture

Introduction:

Architecture caters to various aspects of human need – physical, functional, aesthetical, and psychological. Whether we realize it or not, the space within buildings can have a profound impact on human emotions. Different spaces impact human emotions in different ways – based on the interplay of the various qualities of the space. Mastering these qualities and understanding the collective impact that it can create on human mind and emotions can elevate the architectural experience to a whole new level. Yet, it somehow feels that the profound effect that architecture has on human emotions is often ignored, or at least not contemplated enough when compared to the more practical or tangible aspects of architectural design such as function and aesthetics.

Creators of literature on the other hand seem far more conscious about the impact of text on human emotion. They are aware that reading literature is an emotional experience, and consciously hone their writing skills to create a deeply immersive experience. Tamil literature provides abundant examples of such evocative writing that explores the array and depth of human emotions through the careful orchestration of text. For example- The literary works of the famous Tamil poets Bharathiyar and Bharathidasan have played a significant role in evoking the patriotic spirit millions of Indians during the freedom movement. Bharathiyar is equally renowned for his emotionally moving poems about love, romance, spirituality, and social issues. Bharathidasan used his words as a socio-political tool.

Taking inspiration from my own spatial-experiential journey of the Thanjavur Brihadeswara Temple and the equally immersive emotional experience of reading Amarar (late) Thiru Kalki Krishnamurthy's epic Novel Ponniyin Selvan, I was tempted to explore the idea of exploring the relationship between architectural space and emotions by using Tamil literature as a generative tool. In this paper, I describe the process I used to explore emotions in the chosen literary work and then translate it into architectural (3D) space and share the results of my experiment.

About the text used in this experiment:

The Ponniyin Selvan by author Kalki Krishnamurthy – regarded as one of the greatest texts in Tamil literature was selected as the root text for the experiment.

It is a historical fiction novel written by Indian author Kalki Krishnamurthy between the years 1950 and 1955. It ispopular even to this day owing to its well-crafted plotline and the immersive nature

of its narration. Set in the 10[th]century Chola empire, the story takes the reader through the struggle for succession in the Chola kingdom. The author has successfully immortalized several characters of the Chola dynastythrough his brilliant writing – from the Chola Emperor Sundarachozhar, his eldest son and crown Prince Aditha Karikalan, his daughter Kundavai, to his youngest sonArulmozhivarmar, who was later crowned as Raja Raja Chola I down to several lesser-known personalities associated with the kingdom.

Each character in the plot may be seen as a study of anemotion – from compassion, love, and devotion, to rage, misery, and wretchedness – embarking the reader on a journey of myriad emotions.

Relationship between Space and Emotions in Architecture

Several live examples demonstrate that architectural space profoundly impacts human emotions and behaviour. history is replete with examples of masterpieces in architectural space-making that have consciously orchestrated spatial experiences that make the work memorable. Theoretical studies on the other hand have isolated the various aspects of architecture that influence emotions – such as form, spatial quality, pattern, light, texture, movement, etc. (see chart below)
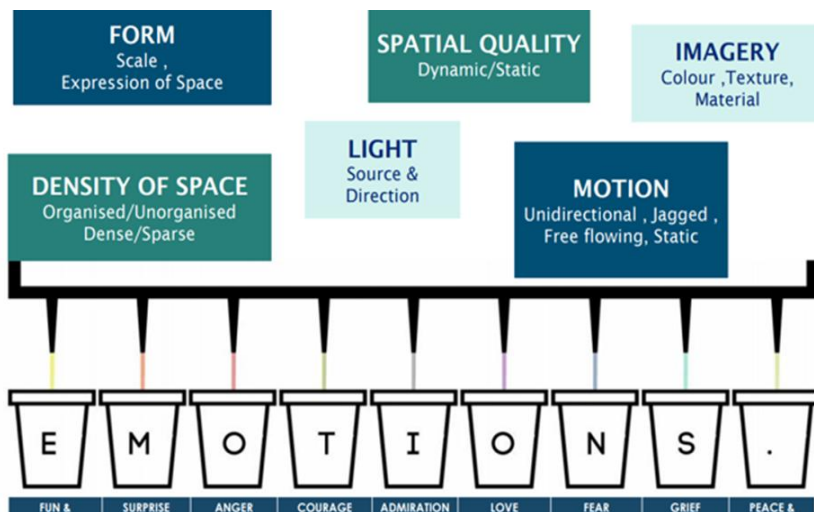
The Process used for translating the emotions in literature into architectural form and space:

Through a process of successive steps of abstraction, the emotions of select characters were extracted from the plotline and then converted into 2D and then 3-dimensional/architectural form and space.   Text □
Storyboard/Plotline □ Characters/ Emotions □2D Abstraction □ 3D forms/space

Step 1: Storyboards were developed to explore the interplay of characters and identify the emotional highlights in the plotline.
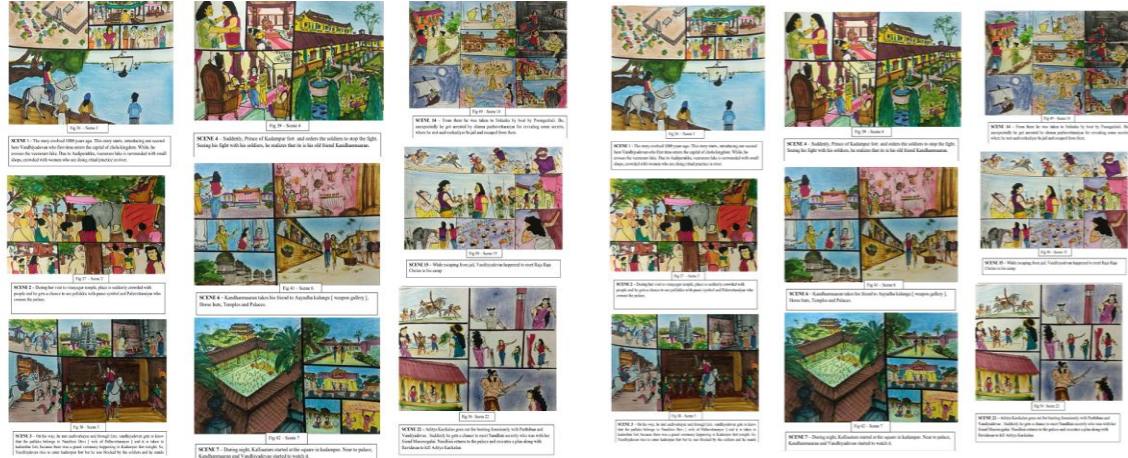
Fig 2 : Story board sketches highlighting the major key events of the Novel "Ponniyin Selvan"

Fig 2 : Story board sketches highlighting the major key events of the Novel "Ponniyin Selvan"

Step 2: The emotions of selected characters were isolated from the plotline with the help of the

Table 1 : Source : Geometric elements as a collection from Landscape Architecture by John Ormsbee Simonds, that contains 48 Mood Lines could be taken as a tool for the process of generating 3d forms from 2d shapes

storyboards.

Step 3: The emotions were converted to 2D diagrams through a process of abstraction.

- Cunning Intelligent women
- Beauty compared with charming devil
- Soft spoken but fire at heart

NANDHINI

Nandhini belongs to Pandya Dynasty and Marry Pazhuvettaraiyar for a reason. This character is one of the powerful fictional character in the Novel and it doesn't have any history connected to it. She is one of the Antagonist in this novel, yet another beautiful woman next to Kundavai and Cunning Intelligent Women. Her beauty is compared with the Charming devil as she seems to be soft spoken women, but fire at heart to destroy the Chola Dynasty and execute her plan through Pazhuvettaraiyar

Dynamic (directional)
Jagged
Natural +Artificial(cool)

Non-Reflective/ Smooth
Plaster
White

Artificial (Warm)

Reflective / Smooth Polished
Glass Acrylics
Red Black

Dense Unorganized

DISTORTED CURVE ANGLES VARIATIONS

- Leader
- Brave , old & strong warrior
- Courage

PAZHUVETTARAIYAR

He is the leader of Chola Kingdom's Army and performs all the Conspiracy to capture Chola dynasty. He is being depicted as a brave, old and Strong Warrior and his age close to 60 and married to Nandhini. Nandhini uses her beauty to attract Pazhuvettaraiyar and try to fulfill her wishes through him.

Static (confined)
Unidirectional/Nil
Natural + Artificial
Rough , Earthy
Exposed concrete wood
Grey
Sparse Organized

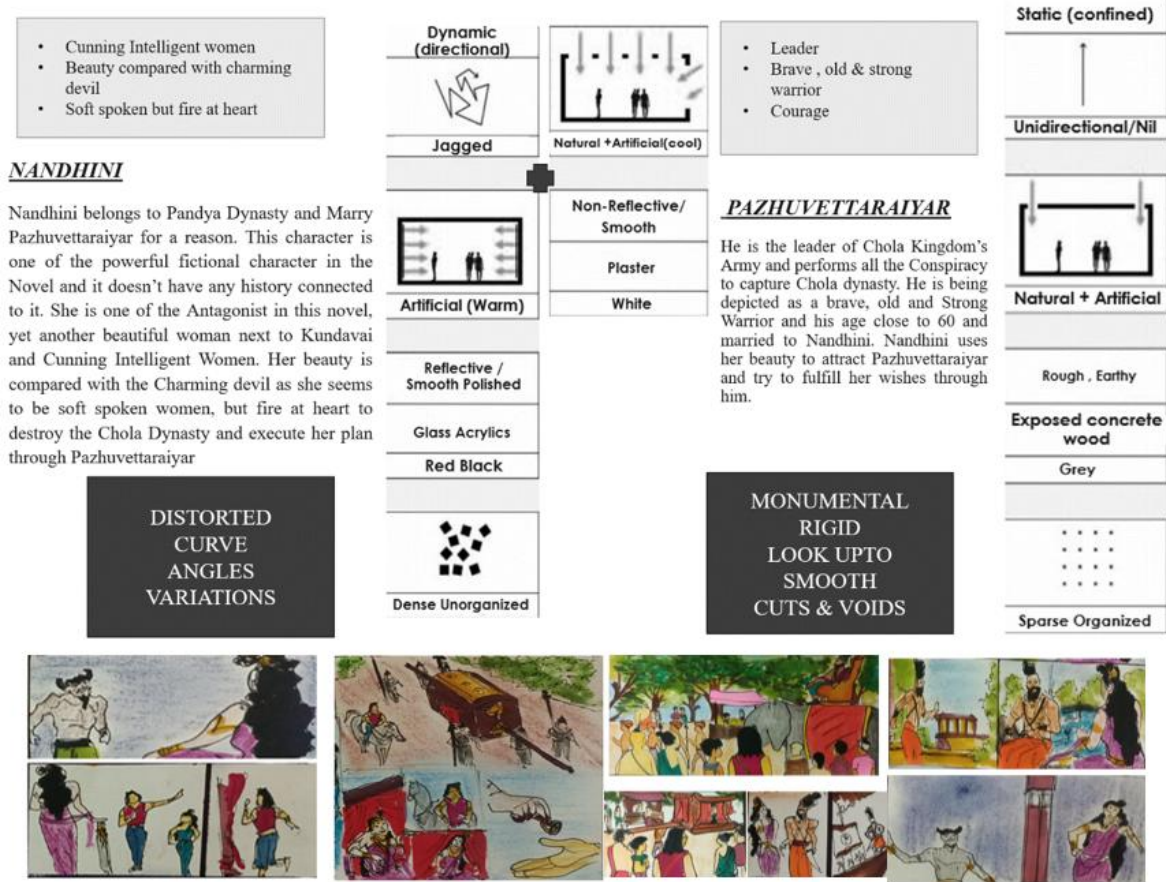MONUMENTAL RIGID LOOK UPTO SMOOTH CUTS & VOIDS

Fig 3: The process used to derive the architectural space and form of these two Antagonist of the Novel

The story board sketches were useful to highlight the common yet unique thing about the story was the emotional play of each character throughout the plot . So the emotions of characters were converted inro diagrams and explored in architectural forms in the below format ,
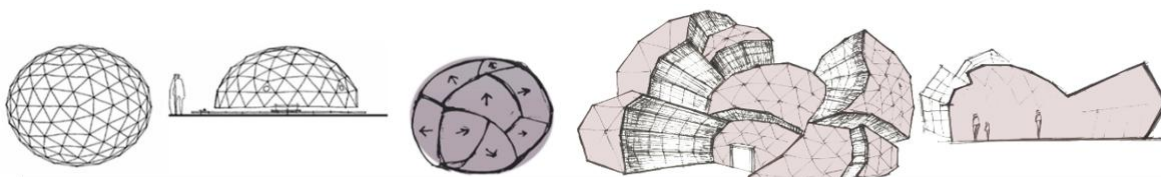

Fig 4: Nandhini- Antagonist character abstracted from the emotions from Novel "Ponniyin Selvan"

Storyline text -- Characters emotions -- Abstraction into 2d -- Converting into 3d formsA sphere or a figure like dome expresses – perfection , smooth surfaces "and a circular shapes are much friendlier shapes. The half-circle is sensitive, vulnerable and easily influenced. It represents things that are under change or going through a phase.

The soul is the bearer of the personality; an experiencing, growing and passing expression of the true self. Source :(The Planetary Glyphs by Andrew J. Bevan, QHP, DMS Astrol. (c) 1993)

A sphere when shattered or broken forms sharp edges or corners, becomes smooth outside but rough in the inside . Similarly the Antagonist Nandhini's character in the novel represents a Beautiful soft women in the outside yet a Cunning intelligent with rough thoughts in the inside.
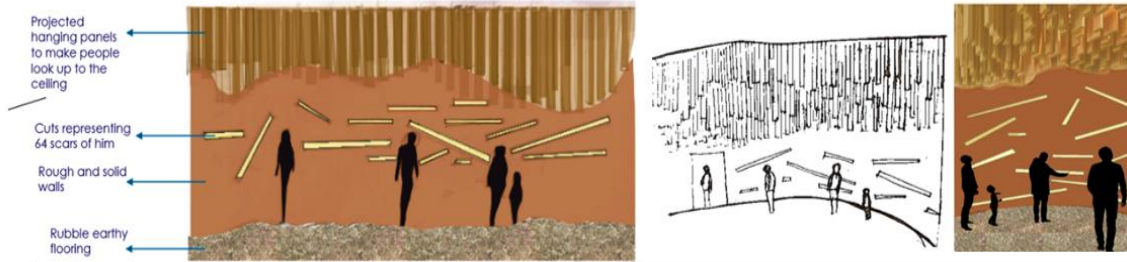
Projected hanging panels to make people look up to the ceiling

Cuts representing 64 scars of him

Rough and solid walls

Rubble earthy flooring

Fig 4 : Periya Paluvettaraiyar- Antagonist character abstracted from the emotions from Novel "Ponniyin Selvan"

Step 4: The 2D diagrams were furtherconverted into 3D form and space. Sketching was used as a tool for visualization in this stage.

Fig 5: The sectional volumes representing the forms of Nandhini in upper level and Periya Paluvettaraiyar in the underground level

The above process and methods used for visualizing the Antagonist characters is similarly applied for the Protagonists of the Novel and experimented with 3d forms through sketches.

Fig 6(a) : Vallavaraiyan Vandiyadevan - Protagonist   *Fig 6(b) : Poonguzhali - Protagonist*   *Fig 6(c) : Aazhvarkadiyan Nambi - Protagonist*

Dynamic (flowing) / Free flowing

Natural + Artificial / Smooth

Fig 6(a,b,c): 3d form results of Protagonist characters applying the process experimented as shown in figures (3,4,5)

Fig 6(a) One of the main Protagonist of the Novel VallavaraiyanVandiyadevan - A character of whose path throughout the plot is a mystery with suspense elements , excitement and have no idea about what happens next . A way finder throughout the novel & saviour of the Chola Dynasty from threats . Fig 6(b) She is called the Princess of the Ocean a young fiercy women who faces every single situation in

the plot with no fear. Fig 6(c) A man full of curiosity Aazhvarkadiyan Nambi who wants to know about all the secrets of Chola dynasty , fun-filled jovial character and a honest spy who travels along with Vandiyadevan in the storyline.

Conclusion:

In this paper we present the results of an experimental approach that can help identify and extract key emotions from an array of emotions expressed in a selectwork of Tamil literature, andthen applying it to the creation of architectural (3D) form whose spatial quality not only expresses but also evokes the corresponding emotion in the observer. The process uses a combination of intuitive sketching and abstraction to achieve the results.

The process was found to be effective in identifying, extracting, and applying emotion from a select work in Tamil literature to 3D architectural form and space. Though the experiment was carried out using Tamil literature as the basis, it should also work for other language texts.Although it was not within the scope of this paper to verify the results of this exploration, further studies can help by creating life size installations to do so. We suggest the use of 3D printing technology to test the results and iterate the same for greater impact.

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