From the Movement in Architecture to the Phenomenology
The haptic site and kinesthetic architecture

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I   INTRODUCTION; AWARENESS OF THE RESEARCH METHODOLOGY

Architecture is a very complicated field of study. It usually struggles with multiple disciplines. Among the parameters of etic and emic, some method of analysis, for example, interviewing the users is more subjective and to the side of emic, some methods are more of objective observing and analysis, such as using axonometric drawings from a distance. Also, varies disciplines are often crossing each other within these parameters. Wandering through it without a guideline would be dangerous of not reaching the focus and depth of the research question. For this reason, it is crucial to apply the appropriate methodology to position ourselves with regards to etic and emic. This will help to form a focused trajectory that has a greater opportunity for the depth of engagement and ensure the architecture result represents the original contribution to knowledge (Lucas, 2016, p.7).

There are multiple relationships between context, methodology and architectural theory. Perhaps the most popular way of designing is "context-led research". However, this usually requires a given project to design. My graduation project didn't start with an assigned site and design task at first, instead, I began with the interest in the theory of *liminality* or *liminal space* (spaces in-between). Further, it has developed into a discovery of *haptic architecture* related to material culture and *choreographing architecture* related to the space-body-mind method. For purification sake, I would like to first explore with a focus on the interplay between methodology and architecture theory to reach an in-depth creation, but in a later process examine in its context. Thus, I am going through a "theory & methodology-led research" process shown in the diagram below.
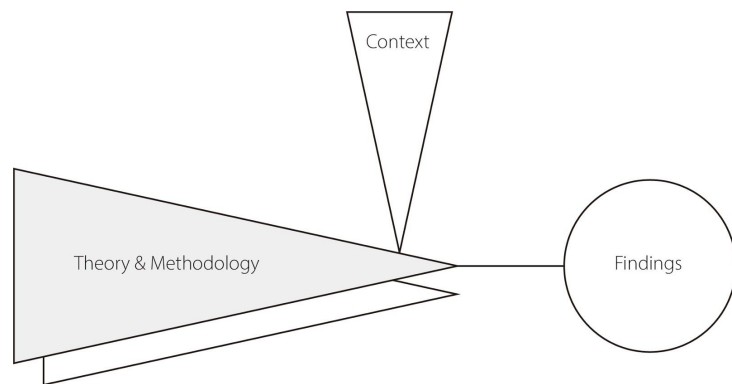

Diagram of "theory & methodology-led research"

II   RESEARCH-METHODOLOGICAL DISCUSSION

A process of framing the research question
In between capitalism west and socialism east, as a Balkan country, Macedonia is struggling between utopian and dystopian tension. Facing a devastating economy and unbalanced development, the wish to join the European Union still seems unrealistic. Struggles between different ethnic groups and different religions constantly fragmenting the city of Skopje. And such divided ideas have led to architectural forms that physically manifest these different ideas becoming chaotic and contradictory as well.

The city of Skopje can be seen as a hybrid political space in which everyday life goes on and occupy the in-between space. At intersections of political and social tension, liminal space is positioned on a boundary or threshold which provides a stage for everyday life practices. The idea of liminality highlights the space of possibility in which citizens can reshape their political identities. Therefore the meanings of politics are opened, revised and extended, forging a new politics that "in the spirit of solidarity and in the fact of oppression, traverses the web of group differences, but without suppressing them."

Regarding our definition of liminality as an in-between state of transition, we have identified places as liminal space. The lowered ceiling at hydrometeorological building changed the presence of the landscape into a linear view; along the axis of climbing up to the entrance, space in-between enhanced the feeling of the beautiful city imagery and allows people to linger around. The passway through the "city wall" connects the city centre to the residential courtyard; the deem light of the passage creates a sense of danger and a hope for the pedestrians to walk faster towards the direction destiny.

To conclude from the spatial studies, phenomenologically, liminal space emphasizes the *senses* of the place. Socially and culturally, because of the in-betweenness, liminality exists as a *transition from one reality to another*. On the other hand, I noticed that liminal spaces always stay anonymous in the city. Liminality mostly considered to be leftover or latent, and fail to generate a focus in eye. For this reason, liminality can be very passive. Thus, I have framed my research question as: *staying on the limit of visibility, how we could turn the passive liminality into an active transition.*

Methodology, terminologies and alternatives:

The curiosity was launched by Arakawa and Madeline Gins' exploration on the "ubiquitous site" (Arakawa, & Gins,1994) and "salience and blindness" (Marie-Dominique, 2016). They have several works that experiment with our issues of perception and create exercises in physical experience, where "the balance between self-consciousness and the perception of one's body is broken down"(Website, 2010). According to Gins' writing about Helen Keller, in the notion of the blind perception, "either there is no distance or full of distance"(Gins, 1994), the blindness creates a background that only allows active experience otherwise the context can not give rise to any senses. Without the occulent focal-point, liminality indeed creates a sense of blindness - it strongly depends on bodily experience. And the blind condition instead stimulates a person's instinct and sensitivities to interact with the site.

The research question thus probes into the history and precedents of how movement is related to the human body and architecture. This notion is further elaborated into two aspects: the kinesthetic empathy investigating the relationship between body and space; and choreography capturing a break down of the movement in sequence. On the other hand, liminality refers not only on an operative function but also to an essence. As already barely visible, liminality considers and responds to our non-visual sensibilities, which might be described as "genius loci". Phenomenology implies reading and understanding beyond visual context, to finally uncover "the spirit of a place" (Schulz, 1980).

III   RESEARCH-METHODOLOGICAL REFLECTION

Movement in Architecture
It is important to know the development of the movement in architecture as a general background then I would finally position myself along the parameter. The notion of kinesthetic empathy was initiated in German aesthetic theories in the late nineteenth century. The study of aesthetics investigates the ability in architecture to express motion. Art historian Heinrich Wölfflin established contemporary concepts of movement and the perception of form in an influential depiction of Baroque architecture (A. B. Biren, personal communication, 2015).

" *Wölfflin noted that the Baroque is marked by a certain number of material traits: horizontal widening of the lower floor, flattening of the pediment, low and curved stairs that push into space; matter handled in masses or aggregates, with the rounding of angles and avoidance of perpendicular; the circular acanthus replacing the jagged acanthus, use of limestone to produce spongy, cavernous shapes, or to constitute a vertical form always put in motion by renewed turbulence, which tends to spill over in space, to be reconciled with fluidity at the same time fluids themselves are divided into masses.*" (Deleuze,1993)

Wölfflin, philosophically addressing the movements appeared in all arts since modern time. His student Sigfried Giedion afterwards made movement essential in his conviction that modern architecture was critical for historical development, making the space appropriate medium of architecture and allowing us to experience it empathetically through movement. Giedion applied

Wolfflin's analytic notions of art history to the promotion of modernism, making connections between Baroque movement and Le Corbusier's architectural promenade in his influential book Space, time and Architecture of 1941(A. B. Biren, personal communication, 2015).

In the era of modern architecture, the concept of movement has been addressed in architecture discourse including the architectural promenade (Le Corbusier), architecture as events (Bernard Tschumi), architecture as animate form (Greg Lynn) and more recently in computing through responsive architecture (Nicholas Negroponte)(A. B. Biren, personal communication, 2015).

Architectural promenade
"It is impossible to comprehend the Savoie house by a view from a single point; quite literally, it is a construction in space-time. The body of the house has been hollowed out in every direction: from above and below, within and without. A cross-section at any point shows inner and outer space penetrating each other inextricably." (Giedion, 1967, p.529) The architectural promenade allows an experience through a hierarchy sequence of architectural events. It is important for creating spatial narratives in many modern buildings.

Architecture as events
In Bernard Tschumi's Manhattan Transcripts, he explored the entangled relationship between architecture, choreography, events and movement, all of which are independent but in relation to each other. *"It is not a question of knowing which comes first, movement or space, which moulds the other… After all, they are caught in the same set of relationships; only the arrow of power changes direction"* (Tschumi,1994, p. 74)

"Rather than merely indicating directional arrows on a neutral surface, the logic of movement notation ultimately suggests real corridors of space, as if the dancer has been carving space out of 'a pliable substance'; or the reverse, shaping continuous volumes, as if a whole movement has been literally solidified, 'frozen' into a permanent and massive vector (Tschumi, 1994, p.10)."

Architecture as animated forms
In Greg Lynn's Animated Form, he discussed the characteristics and functions of time, topology, parameters, and pointed out that these are the aspects that reveal the virtual possibilities of designing for animated form. The dynamic forms of architecture are further developed in his paradigmatic work embryological house. The animated form is explained in a digital form and subscribe it to computer language mainly.

There is also a wider range of discussion in choreography and movements in all arts. Eadweard Muybridge's photographic studies captured the movements that human eyes cannot distinguish; the importance intervals and rhythms were highlighted through the work of John Cage and Karlheinz Stockhausen. A transdisciplinary approach can be used in drawing art inspirations into choreographing architecture. Influenced by his wife Anna who is a dancer-choreographer, Lawrence Halprin's work was all about choreographing the landscape. For example, in his Keller Fountain Park, Lawrence broke the landscape into platforms of different heights and choreographed the movement of water into a series of smaller waterfalls that have different velocity.

Phenomenology
The term phenomenology doesn't provide a certain method, but a style of thinking, "an ever-renewed experience having different results"(Website,2014). It has no particular method of doing something but requires a constant exchange in the position of conceiving and perceiving. It is important to address that I am not making any efforts to formulate a philosophical argumentation in phenomenology but to use it as a guideline for the design.

In the book Genius Loci: Towards a Phenomenology of Architecture, the author poetically depicted many architecture examples and describe it according to his own sensitivity and perception. The "phenomena" of a place consists of the people, the animals, the trees, the buildings, the roads, the wind, the sun, the moon, the colour, the texture, the material… The concrete things form the "environmental character" of a place, and in general, a place is given an "atmosphere". While different people may have different opinions in reading the "atmosphere" of a place. But the characteristics of the place could be categorised by their "environmental character". Therefore, first of all, according to the site I choose, I will take a number of practical references while developing my project. Secondly, standing on an "etic" aspect, I will use multiple media such as modelling, photographing… to examine my work during the process.

IV   POSITIONING

The city of Skopje is built-in Skopje valley, along the course of Vardar river. The Kale Fortress hill stretches from the northern high mountains towards the flat band of Vardar river. It is a potentially haptic and multi-dimensional site in the city centre identifiable from its topographic nature. From a social and cultural perspective, it is a place where different ideologies collide, concentrating both the postmodern contemporary art museum and the yellow limestone fortress built in 6th century AD on its top, and performing as a watershed of riverfront building and the old Turkish town. I notice that the site is problematic in terms of its lack of connection to the city, but it is potential in many ways that it can be activated.

I will position my research and design with regard to the research question (liminality) methodological context(movement in architecture and phenomenology), and the site (Kale Fortress) I have chosen:

Movement: as a critique of the archaeological site
The thick limestone walls, built on the steepest side of the hill overlooking the other side of the river, the small windows… all of which serve a defensive function in ancient time. Since the city has already united and developed as a whole nowadays, the defensive gesture of the fortress seems to be fragmenting itself away from the rest of the city. The movement around the site would, therefore, change the defensive forces into forces that could recenter the archaeological site as a place of treasure in Skopje.

Phenomenology: from autonomous purity to contextural specificity
It is more of a reflection than a critic to the existing theory about the movement in architecture. Opposed to the solid image of a building, movement in architecture usually encourages a fluid unconventional form. Many researches insofar use digital models as a tool to fully explore how forms could be set in motion and interact with the human body. Such as Greg Lynn's embryological house, the abstracted results appear as a purified autonomous aesthetic, disregarding the complexity of the context. Phenomenology, on the contrary, contextualised the architectural forms as "environmental character" within its complex phenomena. The integration of the two methods allows me to stand on both of the "etic" and "emic" aspect.

The limit of liminality
There are circumstances that liminality disappears when it is given a function. As we have discussed in early researches about the passway of Skopje Citywall, liminality corrupts when the passway turns into a fast food store. Liminality only exists in a fragile situation where no ideology could be identified, when no one could specify the place as itself. Correspondingly, the design should all in all, as an in-betweener, stay nuanced.

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