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Liminality In Architecture

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LIMINALITY IN ARCHITECTURE

by

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Abstract

This thesis investigates the concept of liminality and how it may be represented in architectural design. Architectural design of liminal space can augment spatial experiences and lead to self-awareness in relation to self, space and the environment.

Liminality is a journey of different moments which can influence a person to discover something new about themselves and the world around them. A design proposal of a bridge at Bayfront Park, Hamilton, is presented as an architectural representation of a liminal experience.

One of the challenges of this thesis and in the understanding of the concept of liminality is that different states are experienced differently by individuals. A liminal journey within the context of Bayfront Park may lead to a better sense of one's awareness in relation to themselves, the space they are in and the environment that surrounds them.

Dedication

This thesis is dedicated to my father, Mohamed Ibrahim, whose unconditional love and support motivate me always to become a stronger and better person. Without his motivation this would not have been possible. Babaya, I love you dearly and I hope to always make your proud.

This thesis is also dedicated to my dear husband, Mohamed Wahba, whose love and appreciation have given me comfort and strength through many tough days and nights. I owe my deepest gratitude to you. Thank you for always being by my side, all the sacrifices you made during this graduate program, and your countless reviews, company and moral support during late nights of work.

Acknowledgement

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- Carl Jung

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Thesis Statement

This thesis investigates the concept of liminality and how it may be represented in architectural design. Architectural design of liminal space can augment spatial experiences and lead to self-awareness in relation to self, space and the environment.

1. INTRODUCTION

The purpose of this thesis is to investigate the concept of liminality and how it may be represented in architectural design. It presents a real-world adaptation of the proposed architectural intervention to show-case liminal spatial experiences.

The investigation focuses on liminal spatial experiences and their effect on self-awareness.   According to Carl Jung, there are two mistakes which we as individuals do: we provide no ritual space at all in our lives, and/or we stay in it for too long. Jung states that there is a 'need to accord space, time and place for liminal feeling'; the acknowledgement of one's experienced changes. A 'liminal feeling' is the identification of being and awareness according to circumstance, which provides clarity and confirmation to a person seeking life purpose.

To address the aforementioned statement, an architectural intervention is proposed to provide an environment conducive to catalyzing a liminal experience. The proposed conceptual design therefore encompasses the representation of various liminal spatial experiences. The design process builds on the definitions of the experiential states within liminal experiences, namely the states of: *separation, dissolution and dissociation, abstraction, blurring, integration and aggregation, and layering*. The proposed intervention ensures an experiential journey that includes a majority of these states, with the motivation that they may augment one's spatial experience and lead to their self-awareness in relation to themselves and their surroundings environment.

1.1.   Thesis Roadmap

The thesis document is structured as follows. Chapter 1 introduces the motivation behind the work done in this thesis, and provides the reader with a general understanding of what liminality is. Chapter 2 reviews the literature of liminality. It begins by defining the ritual

process and all its phases, of which one is the liminal phase. This chapter also explores liminality through the lenses of philosophy and psychology. The review also covers examples of liminality in arts and architecture.

The design philosophy and methodology are explored in Chapter 3. This chapter begins by establishing concepts adopted from Chapter 2. The methodology defines and explores the different experiential states of liminality. It also discusses the transitions between these different states and the accompanying experiences. Finally, the chapter concludes with a set of proposed guidelines to direct the site selection process, which is explained in the next chapter.

Chapter 4 starts with site selection, which is a walk-through of the guidelines established previously. Bayfront Park in Hamilton, Ontario's industrial area is the chosen site; it is a 40 acres revitalized lake front park which is located in between Hamilton's industrial and conservation area. The design process starts with a site analysis exercise (contour analysis, accessibility, etc.), which introduces the site design concept and provides an interpretation of liminal spatial experiences in the form of architectural elements (park intervention elements and water intervention elements). The design is then formalized and illustrated in a set of architectural drawings (plans, sections, and elevations). The proposed design is visually represented in the form of artistic renders showing different experiences for the proposed architectural intervention.

The findings from this design exercise are summarized in Chapter 5. The architectural interpretation of liminality is discussed in light of the design proposal.

2. LIMINALITY AND ARCHITECTURE

2.1.   Liminality Defined in Ritual

2.1.1.   Arnold Van Gennep- Les Rites de Passage

The 'liminal state' was first defined by the ethnographer and anthropologist Arnold Van Gennep in 1909 in *'Les Rites de Passage' (The Rites of Passage).* He introduced this term as an anthropological concept describing the middle state within ritual passage. The 'liminal state,' as he defined it, refers to "in-between situations and conditions that are characterized by the dislocation of established structures, the reversal of hierarchies, and uncertainty regarding the continuity of tradition and future outcomes" (Horvath, 2009; pp 3-4).

Social and Culture

Van Gennep begins his text by differentiating between two worlds; the profane (secular) and the sacred (religious). Even though different worlds, he states that within them, there are similar attributes; they both have transition points which all persons must go through at one point or another during their lives. He emphasizes that this transition is so great that a person "cannot pass from one [transition point] to the other without going through an intermediate stage" which fulfills certain conditions, guidelines and/or rules (Gennep, 1960; p 1).

He investigates this concept by looking into semi-civilized cultures where taboos and 'the sacred' are a rule of law. He also looks at the individuals that belong to such culture who identify life as a series of passages from one stage to another. Therefore, stages such as being born, giving birth, hunting, social puberty, marriage, parenthood, and death take on special meaning that are considered holy and take on special qualities that are enveloped in ceremony (1960; pp. 2-3).

In such cultures, every change in a person's life involves a transition between the sacred and profane, which are to be regulated and guarded so that society as a whole will suffer no discomfort or injury (1960; p. 3). Here, the essential purpose of these ceremonies is to enable

the individual to associate their passing from one defined position to another as a significant event, and as an event that validates this transition.

From observation of semi-civilized cultures, Van Gennep explains that every transition has a three-fold structure: 1) preliminal rites (*rites of separation*), 2) liminal rights (*transition rites*), and 3) post-liminal rights (*rites of incorporation*) which are made up of the following components:

1) *Pre-liminal rites* involves a metaphorical "death" of the initiate where they are forced to leave something behind by breaking free from previous practices and routines (Szakolczai, 2009; p. 147). An example of this is the initiation of "youngsters into adulthood." This phase requires the child to go through a separation from their family, which marks their "death" as a child (2009; p. 148).

2) *Liminal rites* involve "the creation of a tabula rasa, through the removal of previously taken-for-granted forms and limits" (2009; p. 148). It "implies an actual passing through the threshold that marks the boundary between two phases. The term 'liminality' was introduced in order to give title to this passage" (2009; p. 148). This rite, Van Gennep warns, can be destructive because it allows for considerable changes to be made to the identity of the initiate. He describes that this phase comprises symbolic behaviours signifying the detachment of the individual from an earlier fixed state (in the social structure) to an ambiguous one where he or she lives outside the normal environment and is brought to question him or herself and the existing social order. In this stage, the initiate comes to feel nameless, spatio-temporally dislocated and socially unstructured (Thomassen, 2006; p. 322).

3) *Post-liminal rites* is the incorporation of the initiate into society with a new identity, as a "new" being (Gennep, 1960; p. 21).

Van Gennep viewed rites of passage as an essential ingredient in the rejuvenation of society because they highlight and validate changes in a person's status. Hence, he argues that they serve to preserve social stability by easing the transition of cohorts of individuals into new statuses; in part, this transition is a social acknowledgement of aging. Furthermore, as individuals are born and age, their positions in society change. In the absence of rites of passage, he says, society would be fraught with conflict as individuals either struggle to assert new social statuses or resist these statuses.
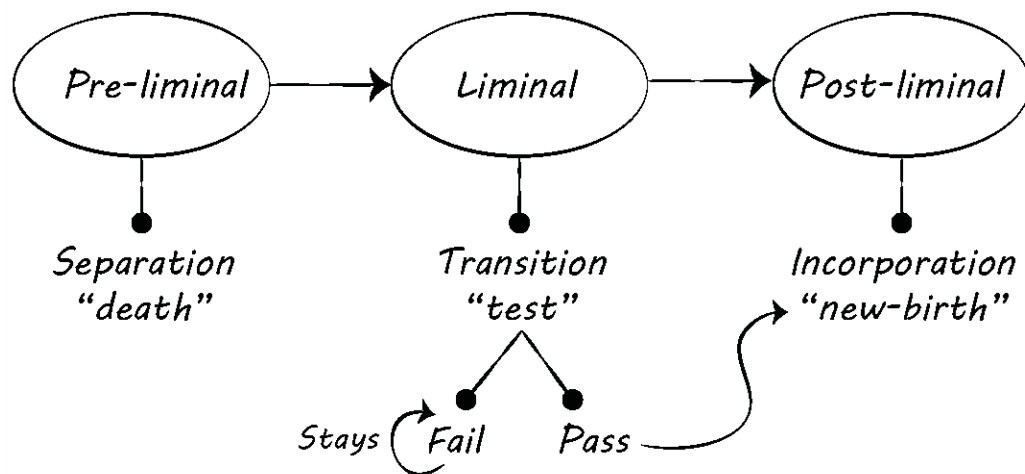
Figure 1 Diagrammatic Summary from *Les Rites de Passage* (diagram by author)

Literal: The Territorial Passage:

A frontier, an imaginary line connecting milestones marked by an element of nature or landmark, has a physically and magico-religious quality (Gennep, 1960; p. 18). A person passing through a frontier finds him or herself in a special situation for a certain length of time; they wavering between two worlds. It is this situation which is designated as a liminal transition. This symbolic and spatial area of transition may be found in a more or less pronounced form in

all the ceremonies which accompany the passage from one social and magico-religious position to another.

H. Clay Trumbell sites an example when General Grant, the 18th president of the United States (1869-1877), went to Asyut, Egypt:

> "…a bull was sacrificed as he disembarked. The head was placed on one side of the gangplank and the body on the other, so that Gerenal Grant had to pass between them as he stepped over the spilled blood. The rite of passing between the parts of an object that has been halved, or between two branches, or under something, is one which must in a certain number of cases, be interpreted as direct rite of passage by means of which a person leaves one world behind him and enters a new one (Trumbull, 1896; pp. 184-196).

Another example is the Triumphal Arch of Constantine in Rome, which is a free standing structure composed of a round-topped arch and a square entablature, which is ornamented and decorated to carry a message and record a war-victory. The Triumphal Arch of Constantine generally functions as a portal, entrance and a gate to the city. It was erected for the victor to pass through (this threshold) - marking his return home (Zaho, 2004).

It is important to note here that liminality does not only relate to social or cultural transitions, its definition has extents which include physical markings. The examples stated above are not solely in reference to a territory but also relate to objects that mark a transitory moment. Van Gennep emphasizes a 'ceremonial sequence' which demonstrates the importance of an 'unfolding' change, and the idea that the 'sacred is not an absolute', but rather an alternating value, an indication of the alternating situations in which individuals find themselves at different points in their lives (Bookrags, n.d).

2.1.2.   Victor W. Turner

Victor Turner rediscovered the term 'liminal' and 'liminality' in 1967 in his book *'The Forest of Symbols*, which includes an essay, entitled *'Betwixt and Between: The Liminal Period in Rites de Passage.'* He confirms Van Gennep's definition of society as a structure of positions of which each marks a change in an individual's status. These changes are marked by a ritual which comprises three phases: 1) 'preliminal' (separation), 2) 'liminal' (margin or transition) and 'post-liminal' (aggregation, incorporation or integration). He focuses on the liminal phase and argues that liminality "...served not only to identify the importance of in-between periods, but also to understand the human reactions to liminal experiences: the way liminality shaped personality, the sudden foregrounding of agency, and the sometimes dramatic tying together of thought and experience" (1969; p. 81). He differentiates between a state (a relatively fixed or stable condition) and a transition (a process, a state of becoming, and a transformation). He refers to the preliminal as a phase of separation comprising symbolic behaviour signifying the detachment of the individual from an earlier fixed point in the social structure; a state. Furthermore, he describes the liminal period as a state and a transition; a state because it is a stable condition, and a transition because it has a time frame. He states that during the "liminal period the state of the ritual subject (the individual) is ambiguous, he passes through a realm which has few or none of the attributes of a past or coming state." Finally, the ritual subject (the individual) is "consummated in a stable *state* once more and by virtue of this gains rights and obligations of a clearly defined and structural type (personae), and is expected to behave in accordance with certain customary norms and ethical standards" (1967; pp. 4-5).

Much of Turner's text focuses on defining the individual's experience in the liminal phase. He calls this individual, "liminal personae" or a "threshold person". He defines this individual to be invisible and have a twofold character: "they are at once no longer classified

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and not yet classified." He or she is differentiated raw material and a transitional being who has nothing. "They have no status or property, insignia, secular clothing, rank, kinship position, [and] nothing to demarcate them structurally from anyone else. Their condition is the very prototype of sacred poverty" (1967; pp 4-5). Hence, a liminal persona is ambiguous, lost and vulnerable. His or her sense of identity is dissolved and brings about disorientation. Within this, Turner recognizes that there is great possibility of new perspectives for such personae. Turner posits that, if liminality is regarded as a time and place of withdrawal from normal modes of social action, it potentially can be seen as a period of scrutiny for central values and axioms of the culture where it occurs- one where normal limits to thought, self-understanding, and behaviour are undone. In such situations, "the very structure of society [is] temporarily suspended" (1967; pp. 8-9).

According to Turner, the liminal period is very powerful as it has a very distinct energy. It is a period with great potential to damage a person or show him or her great possibilities. All liminality, according to Peter Homas, author of '*Jung in Context*', must eventually come to an end and dissolve. "It is a *state* of great intensity that cannot exist very long without some sort of structure to stabilize it...either the individual returns to the surrounding social structure...or else liminal communities develop their own internal social structure, a condition Turner calls "normative communitas"' (Szakolczai, 2009; p. 142).

Communitas and Liminoid Phenomena

As people distance themselves from mundane structures and inscribed social identities- a homogenization of status occurs; 'communitas,' which is a Latin term coined by Turner, meaning community (Homans, 1979; p. 207). Turner defines this term to refer to individuals experiencing the liminal stage together. He states that during the liminal stage, normally

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accepted differences between individuals, such as social class, are often de-emphasized or ignored; hence, producing a social structure of communitas, which is based on common humanity and equality rather than recognized hierarchy. In this sense, communitas has positive values associated with it; good fellowship, spontaneity, warm contact, non-hierarchical, and undifferentiated social relations' (Thomassen, 2009; p. 15). The formation of communitas is, perhaps, a phenomenon.

Turner also coined the term, *liminoid,* to refer to experiences that have characteristics of liminal states, but are optional and don't involve a resolution of a personal crisis (Douglas, 1984; p. 104. Turner, 1974; pp 53-92). For example, a graduation ceremony might be regarded as liminal because a student is between school and work, while a rock concert is liminoid. The liminal is part of society, an aspect of social or religious ritual, while the liminoid is a break or escape from society- part of play which does not mark the end or beginning of anything.
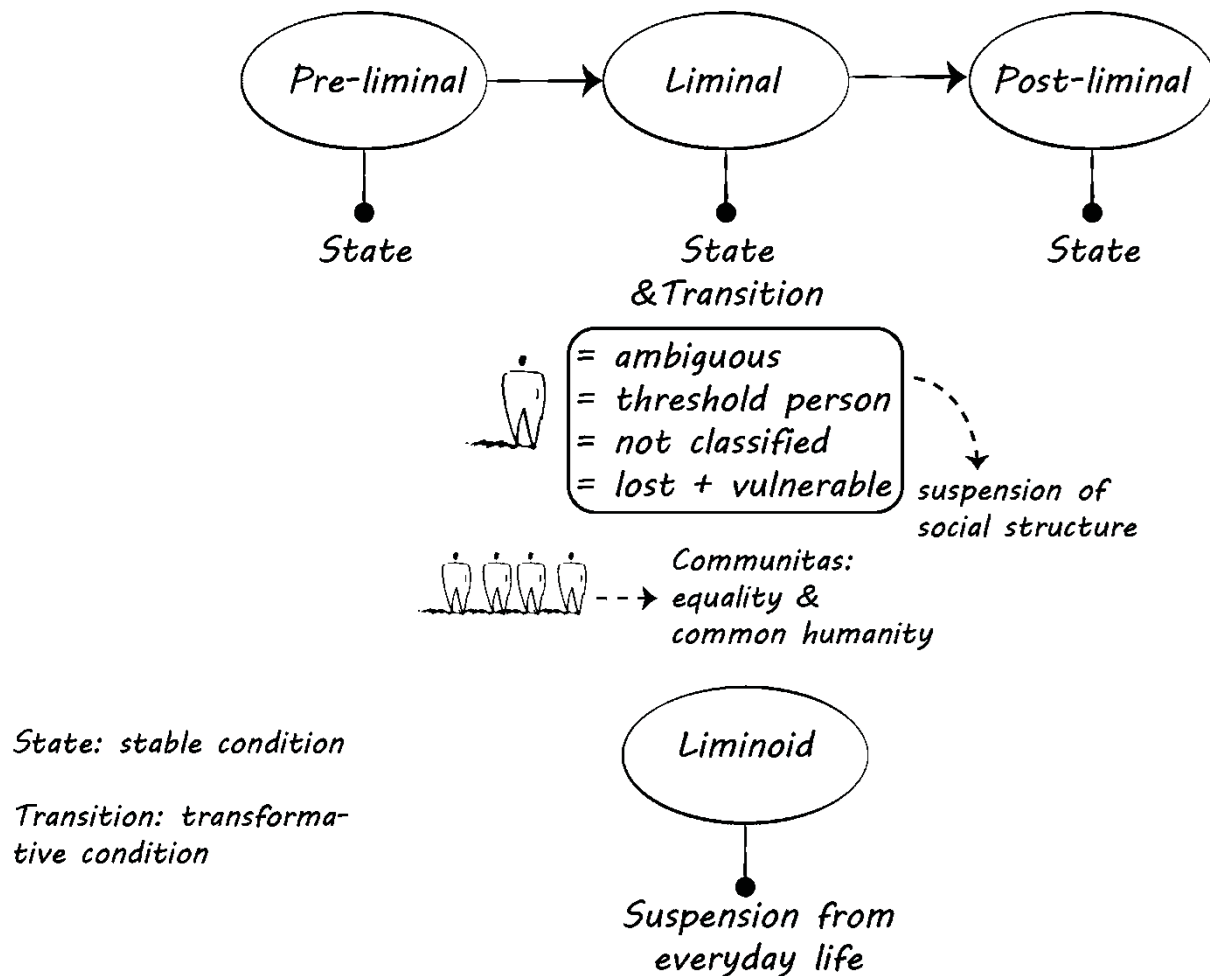
Figure 2 Diagrammatic Summary from *Betwixt and Between* (diagram by author)

Commonalities in Van Gennep's and Turners explanations of the liminal process are that liminality is a state in-between the two states of separation and integration, and therefore has an initiating and terminating point. The initiation is marked by the leaving behind, or disownment of a previous state, which is then followed by the liminal state that involves a change in a person's social status and marks a rebirth for him or her. In the liminal state, a person's status is ambiguous where he or she may feel confused, dislocated, unclassified within society, neither here nor there, lost and vulnerable. This state of being could be destructive or constructive;

destructive because it can permanently confuse a person, and constructive because it can provide new opportunities, new roles to take on within society, and new self-discoveries. As illustrated below in (Figure 3), the liminal phase is an amalgamation of different experiential states that a person may experience.
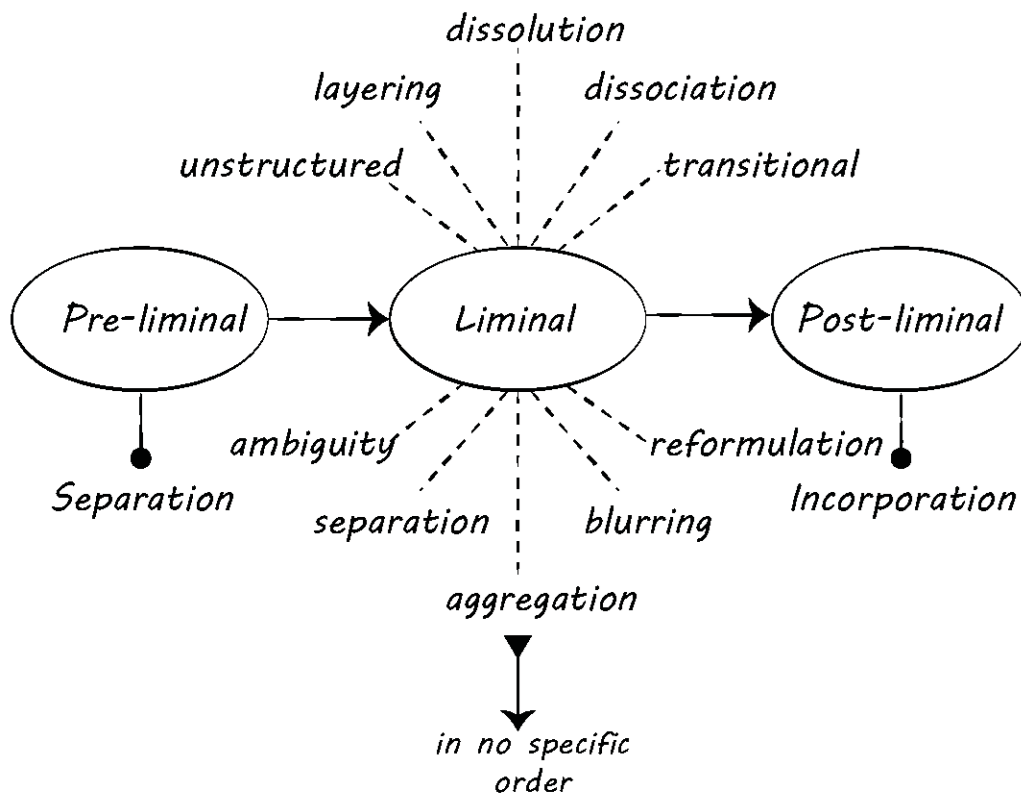
Figure 3 Diagrammatic Summary of 'liminal' from Les Rites de Passage and Betwixt and Between (diagram by author)

2.2. Liminality Defined in Psychology and Philosophy

2.2.1. Carl Jung

Liminality as a 'test' process is a means to discover one's individuality, as defined by Carl Jung, a psychiatrist and founder of analytical psychology. He explains that 'individuation begins with a withdrawal from normal modes of socialisation, epitomized by the breakdown of

the persona; liminality' (Homans, 1979; 207). Using his definition, liminality is a means of being self-realized and distinctive amongst others. Thus in the same way Van Gennep and Turner's concepts of social liminality define status in society- Jung redefines the movement of a person through the process of individuation (Miller *et al,* 2004; p. 104). Individuation can be seen as a 'movement through liminal space and time, from dissociation to integration. He explains that what takes place in the dark phase of liminality is a process of breaking down- in the interest of "making whole" one's meaning, purpose and sense of relatedness once more' (Young-Eisendrath *et al,* 1997; p. 244). "In general, it is the process by which individual beings are formed and differentiated [from other individual beings]" (Jung, n.d.). Furthermore, individuation, as a liminal process, is a search for self-totality and being aware of one's relationships with everything that lives; other individuals, nature and the cosmos (The Individuation Process, n.d.).

According to Jung's theory, there is a 'need to accord space, time and place for liminal feeling' (Shorter, 1987; p. 79). He describes that there are two mistakes which all individuals do: 'we provide no ritual space at all in our lives...or we stay in it too long' (Bly, 1991). Jung believed that a human being is inwardly whole, but that most of us have lost touch with important parts of our selves. In order to be individual and achieve individualization, one ought to contact and reintegrate our different parts, including our experiences, values, and perceptions. The goal of life is individuation, the process of coming to know, giving expression to, and harmonizing the various components of ourselves, which he refers to as the truth. Each human being has a specific nature and calling which is uniquely their own, and unless these are recognized, a person can become sick. When this fulfillment is achieved, the experience of the 'Self' happens, which is a state of awareness of one's unique nature and their intimate connection with all life. He argues that this founding can yield a sense of 'unity' and acceptance of life as it is, and not as we might think we want it to be (The Individuation Process, n.d.).
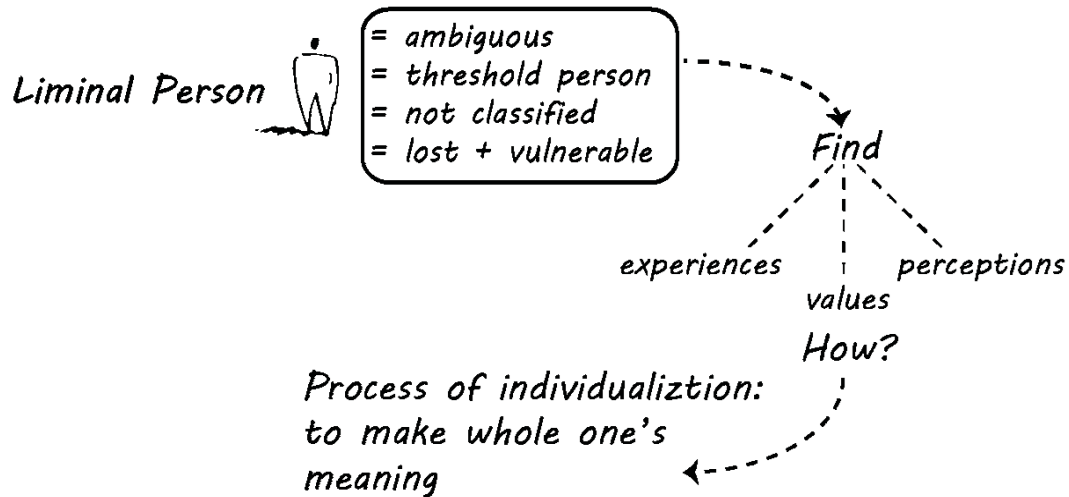
Figure 4 Carl Jung Individualization Process (diagram by author)

To see a World in a Grain of Sand
And a Heaven in a Wild Flower,
Hold Infinity in the palm of your hand
And Eternity in an hour.

William Blake

2.2.2.   Heidegger

In the text Being and Time (1962), the German philosopher Martin Heidegger (1889-1976) argues that a person, as an individual, and the world are not separate from each other, one is neither a function nor a reaction of or to the other; rather, a 'person-world' is an ultimate recognition of 'being' within the context of the world (VonderBrink, 2007).

Within his text, he embarks on a journey of understanding language. His ontological approach to 'being' begins with his definition of the German word, *bauen*, meaning building, as "dwelling". He states that dwelling is the purpose of life, guarding and nurturing the 'fourfold' (the representation of person as part of nature; earth, sky, divinities, and mortals). The idea of dwelling here entails guarding and nurturing this relationship of person and nature, which can be

done through *bauen*; building: nursing and nurturing the things that grow (nature), and constructing things that do not grow (architecture). Here, it can be inferred that the concern of architecture is to construct things that will allow dwelling, that is, that will allow for the relationship of person as a part of nature to become "unfolded" (VonderBrink, 2007).

Heidegger says that the existential purpose of architecture is to make a site become a place, that is, to uncover the meanings potentially present in the given environment. Therefore, the ethical obligation of architects is to construct 'things' that will allow for a relationship between humans and nature (Anand, n.d.).
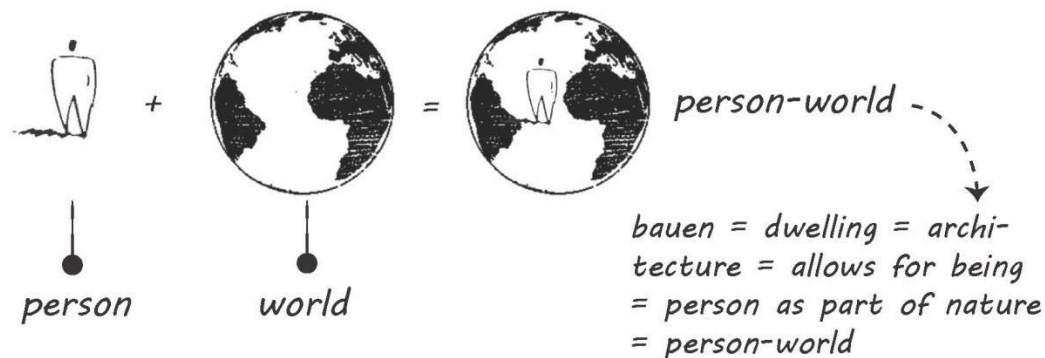
Figure 5 Diagrammatic Summary of Being and Time (diagram by author)

2.2.3.   Maurice Merleau- Ponty

The French philosopher Maurice Merleau-Ponty (1908-1961) concentrates on the importance of the body and perceptual experience. He places one's being in the world and his or her self-awareness, as an objective engagement with the world, where the body is the objective intermediary between what Heidegger speaks of as the person-world relationship.He argues that the mind's access to the outside world arises from the body's movement in it, which involves a movement of it: "Visible and mobile, my body is a thing among things; it is caught in the fabric of the world, and its cohesion is that of a thing" (VonderBrink, 2007). A famous

example, provided by Merleau-Ponty is that of a blind person navigating with the aid of a stick, where the stick is an extension of his arm.

Merleau-Ponty, along with the French author, Henri Bergson (1859- 1941), in the text Matter and Memory (1892) state that: 'the objects that surround [the] body reflect its possible action upon them.' Here, their argument places an importance on perception leading to the conclusion that the objects that surround the body and the interaction of the body with them is the ultimate root of knowledge of the world. The body, here, acts as the medium of communication of the mind and the world. A person's physical engagement with the things that surround them provides the source and the limits of their understanding of those things ad the world. Hence, as the body provides knowledge of the world, the external world presents knowledge to the body (Vonderbrink, 2007). This argument reemphasizes Heideggar's notion of a person-world relationship.
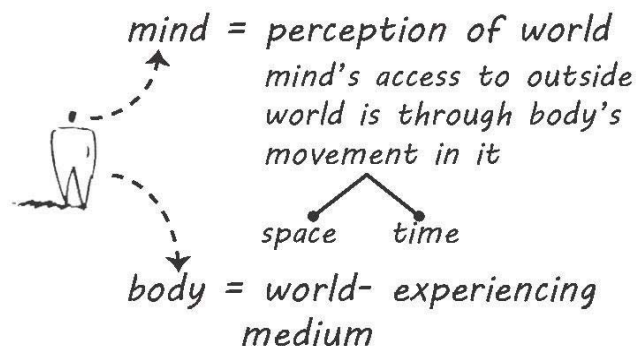
Figure 6 Diagrammatic Summary Matter and Memory (diagram by author)

2.3.   Liminality Defined in Art

Certain works of art have mysterious qualities, which do not necessarily follow any form of logic, and are indescribable, but rather have the power to connect with an individual to a timeless paradigm. Different forms of art can allow glimpses into one's inner-being, revealing to

them a dialogue of or with their 'Self' (as defined by Jung). John Berger, an art critic, suggests that art can reveal to oneself a hidden desire which can open doors into what he calls an "invisible heaven," which can be found in an object as simple as a pebble held in one's hand. Quoting Simone Weil, he says "When we know how to turn whatever happens, no matter what it is, into an object of desire…" This desire "pierces through time to find eternity behind it" (Berger, 2001; p. 11). This event, which he relates to, has a distinct energy which entails an initiation. According to Merleau-Ponty, this involves "not the position of a content, but the opening of a dimension that can never again be closed, the establishment of a level in terms of which every other experience will henceforth be situated," which he calls the invisible of this world (Ponty, 1968; p. 151).

Merleau Ponty describes the energy traveling between an artist, the viewer and art- as visible and the invisible, where there is a dependent relationship between the former and the latter- one which reveals the other and brings it to life. He calls this birth a secret discovery which allows for self-realization and self-discovery; a further understanding of one's individuality (a process which Jung defines as essential to understanding oneself).

Jung describes two different kinds of attention: a narrowly willed, penetrating kind of focus, in which 'things' and the self are grasped separately, and a wider, unfocused, diffused attention, which 'brings remarkable changes in perception and enrichment of feeling", making the intense reality and significance of the world more accessible (Jung, 1963; p. 22).

2.3.1.   Alberto Giacometti

Jean Genet describes the movement of Alberto Giacometti's work as an oscillation, out of everyday time and space, between a boundless past and a boundless future," as he attempts to work a fragile reality of the everyday ephemera… of human interaction and existence."

Giacometti's statues, he said, work by virtue of stillness, an absence of time which allows for the viewer to fall into reverie, to experience being in relation to an immutable and mature nature restoring in us the kinship of objects and existences- an inner revelation of what is most irreducible in a human being, their 'Self'(Genet, 1958).

Figure 7 Alberto Giacometti- The Forest

Figure 8 Alberto Giacometti- Walking Man

2.3.2.   Olafur Eliasson

Olafur Eliasson is an artist who centers on the sensorial perception, often implying natural phenomena. Eliasson re-contextualizes elements such as light, water, ice or mist in order to create special situations that alter the viewer's perception of space and themselves. He

does this by merging nature within the built space, and, therefore, creating hybrid space (Eliasson, n.d). His works are created with overt neutrality. In this way, his work has the effect of purposelessness, like found objects. So, the exhibit itself, becomes a natural experience. Thus, the relationship between the user and the object is just that; an experience with a *found* object. (This follows Merleau Ponty's theory about perceived experience). He explains that the object being perceived comes about on the basis of a cultural or ideological supposition;

> "…there is, of course, the tendency to see the environment as natural – or as a given. But that is an understanding of things based on culturally-, religiously-, and ideologically-formed structures. The danger I see in that is the opportunity for the exercise of power over people made possible precisely through this relationship with the "world" which, in a strictly scientific sense, is mistaken" (Bessing, n.d.).

His exhibitions are ways to probe the users to think about what the constructs of everything else might be made of whether it is a room, a gallery space, an artificial sun (Figure 9) or a colossal waterfall from a bridge (Figure 10). Through his creations of semi-totalitarian structures, he aims to promote awareness, entice curiosity for the found object itself, and other 'worldly' things that surpass the object- and perhaps give rise to a question, "what does it mean to be in this space and within this context?"

Figure 9 The Weather Project at Tate Modern, London 2003
(http://www.olafureliasson.net/works/the_weather_project.html)

Figure 10 New York City Waterfalls, Eliasson
(http://www.nycwaterfalls.org/#/about_the_waterfalls/Eliasson_on_Waterfalls)

2.3.3. Andy Goldsworthy

Andy Goldsworthy is a British sculptor, photographer and environmentalist who produce site-specific sculpture and land art situated in natural and urban settings. His works involve the discoveries of materials and their potential within the contexts and time in which they are found.

> "Looking, touching, materials, place and form are all inseparable from the resulting work. It is difficult to say where one stops and another begins. Place is found by walking, direction determined by weather and season. I take the opportunities each day offers: if it is snowing, I work with snow, at leaf fall it will be with leaves, and a blown over tree becomes a source of twigs and branches (Reidelsheimer, n.d.).

Through his work with materials found in nature, he feels that there is something to be discovered and opportunities for learning more about the material. A natural material found in a certain place, as he defines it, is composed of a relationship that was made in layers over time, and the return to that same place is to recognize the changes that were made overtime. Hence, *change* is a factor that plays a major role within the construction of his work. When he speaks of change, here, he is referring to weather conditions- which eventually destroy his work. He embraces failure and destruction of his work as a part of his work. In this sense, his work is everlasting as part of a lifecycle of change.

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Along with change, light, growth and decay are energies which he taps into his work. He emphasizes on the "shock of touch" which he unveils as he digs through the surface of the earth to discover something new about the process of life within and around the material he is working with. The energy and space around a material are as important as the energy and space within it. The weather is that external space made visible. "When I touch a rock, I am touching and working the space around it. It is not independent of its surroundings and the way it sits tells of how it came to be there. In an effort to understand why that rock is there and where it is going. I must work with it in the area which I found it in" (Reidelsheimer, n.d.). Goldsworthy says that to become aware of a material, one ought to understand the changes through which it undergoes. These changes are caused by nature. So, in order to understand a material, nature and source must be understood.

Recurring forms in his work are a ball patch, line, hole, arch, and spire. The most revealing of which is the hole to which he says, "Looking in a deep hole unnerves me. My concept of stability is questioned and I am made aware of the potent energies within the earth. The black is that energy [absence of color] made visible" (Reidelsheimer, n.d.). Here, he refers to an invisible realm that is defined as an absence of a visible (color) and tapped into through his work.

> "My touch looks into the heart of nature. These things are all part of a transient process that I cannot understand unless my touch is also transient- only in this way can the cycle remain unbroken and the process be complete. All my work still exists in some form or another- may be the eventual or never-happening change with the work is the completion of the work" (Reidelsheimer, n.d.)

Figure 11 Andy Goldsworthy- Rowan Leaves Around a Hole, 1987

Figure 12 Andy Goldsworthy- *Pebbles Around A Hole*, 1987.

Figure 13 Andy Goldsworthy- Woven Silver Birch Circle, 1985.
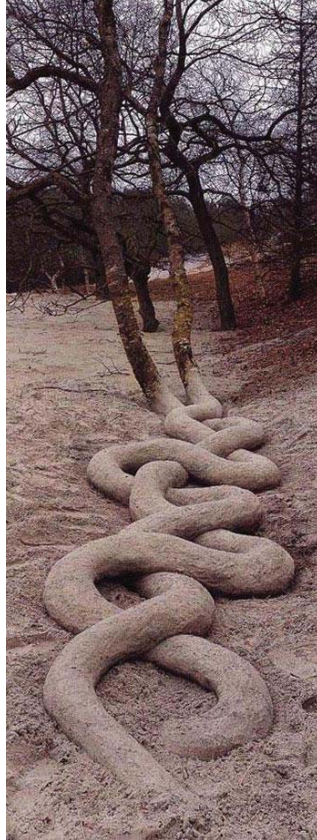
Figure 14 'Incredible Serpentine Tree Roots, unknown date

2.3.4. Richard Serra

"To see is to think and to think is to see."- Richard Serra

Richard Serra is an artist who draws, paints and sculpts. He is famous for using non-traditional materials within his sculptures; such as, fiberglass, steel, and rubber. He is best known for massive self-supporting sculptures made of rolls of cor-ten steel. He composes *minimalist* constructions that emphasize the weight and nature of the material and enhance user experiences with the sculpture by means of allowing the user to walk through and around it. He also considers the nature of the material and the natural changes it goes through overtime. (For example, his exterior steel sculptures go through an initial oxidation process, but after 8–10

years, and, eventually, the patina of the steel settles to one color that will remain relatively stable over the piece's life.) (Richard, 2007).

Figure 15 Intersection II

Serra's cor-ten steel site-specific installations are frequently on a scale that dwarfs the observer. Serra's works often challenge viewers' perception of their body in relation to the interior spaces constructed, and his work often encourages movement in and around his sculptures. His monumental arcs, spirals, and ellipses, engage the viewer in an altered experience of space; taking the viewer on a journey of compression or containment (walls that bend inward) and release (walls that bend outwards). He believes that through the play of sculptural volume, he can alter one's perception and take them into new undiscovered territory; to have a private encounter with the form. In this sense, his works account for experiencing time and space through movement, which he refers to as 'moments within the volume.' (This concept is in reference to Meraleau Ponty's theories of perceptions and experience.) (Richard, 2001).

Serra talks about pushing the boundaries of engineering through his work with steel and allowing the viewer to be part of this. He states that when working with free-standing sculptures that weigh a ton, he is defying preconceived notions of the gravitational force on the object, and by allowing the viewer to take a moment with the sculpture (by walking through and around it)- he is creating a private participation with and into the object and sculpture's energy (Serra, 2007).

Intersection II, completed in 1993, is a simple sculpture composed of four identical cortex steel slabs, each measuring 13 ft. high by 50 ft. wide and weighing about 30 tons. All slabs are made of conical shapes comprising 3 different juxtaposed shapes and spaces; a contained elliptical space at the centre and two flanking passages. As a person walks through the centre, they may feel contained because sound is limited in this space and the slabs curve in around him or her. As the person exits the space through the back and walks into the passage on the right, they may feel more compressed and contained as the space rises vertically while leaning in. Finally, when the person exits again and takes the passage on the left, they may feel imbalanced as the slabs draw closer to one another at ground level, and gradually open up towards the sky. As they open up, they may feel released and free.

As a person journeys through, he or she may feel...
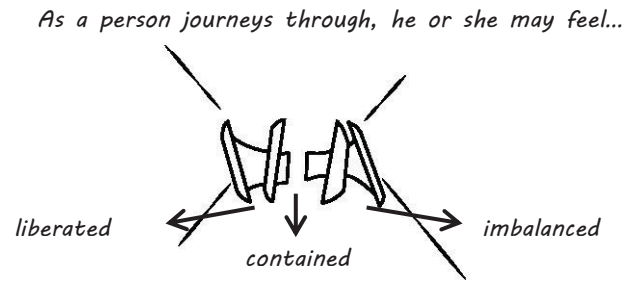
liberated   _imbalanced_

contained

Figure 17 Richard Serra- Intersection II Analysis (drawing by author)

Extensions of Serra's intentions of experiencing space and time can be seen in his works, Torqued Torus Inversion (2006) and Band (2006). These works are curvy, have no straight lines, and all the walls cave inwards, enhancing the feeling of being compressed within the space.

Torqued Torus Inversion has two torqued ellipses connected by an 'S'- shape which forms a passage that reverses itself back into its own form. A person experiencing it through movement may feel that he or she is walking in the same direction; however, they are not. The non-differentiation of material, character and composition for the experiencer may suggest a sense of loss and placelessness,

The Band project is a snake like passage way, about 700 ft. long. This piece is about a constant shift between walking inside and outside the form. The form's architecture and constant shift between inside and outside enhances one's understanding of the volume of the inside and outside spaces; hence creating an emphasis on it rather than the volume of the room which it is in. He states, "The sculpture creates new architecture within the space. When you walk into the piece you are dealing with the sculpture volume not the volume of the room (Serra, 2007). With this in mind, his sculptures have causality (a de-constructivist approach).
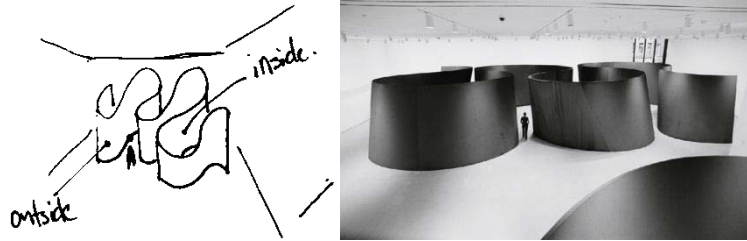
Figure 18 Richard Serra Band Project Analysis- Author

While these spatial experiences happen to the individual, perhaps triggering a different perception of space, the material of the form also undergoes a change through the natural process of oxidization. Serra emphasizes that he is aware of the change that happens to the material; thereby he dismisses the element of surprise as one experiences the material and, subsequently, the space over the lifespan of the material. This was shown in Intersection II, where experiencing its changing slabs will always have the same effect on the individual; that is, taking them from inside to outside. This is where Serra concretizes and gives form to an object that evokes a feeling on an individual; therefore, solidifying previously phenomenological perceptions of art; art is used as a "vehicle to make spatial experience understandable," Serra says (Serra, 2007).

2.4.   Liminality Defined in Sacred Architecture

"When guardians of the threshold take on monumental proportion, as in Egypt, they push the door and the threshold into the background, and prayers and sacrifices are addressed to the guardians alone… A rite of spatial passage has become a rite of spiritual passage."- Van Gennep (1960, p. 40)

Liminality in historical architecture is about differentiating between what Van Gennep called, the profane and the sacred worlds. In any rite of passage, he says, that "so great is the incompatibility between the profane and the sacred worlds that man cannot pass from one to the other without going through an intermediate stage". This liminal stage that bridges the two

states must be transformative in nature in order for the rite to be complete. (1960, p. 1). To illustrate a literal transition between these two worlds, three examples are illustrated below: 1) The Temple of Karnak in Luxor, Egypt, and 2) the Acropolis of Athens, Greece. Within these examples emphasis is made on the three-fold structure of the ritual process: 1) Separation, 2) Transition, and 3) incorporation or integration.

2.4.1. Karnak

The ancient Egyptian religion was a complex system of polytheistic beliefs and rituals which were an integral part of ancient Egyptian society. It centered on the Egyptians' interaction with a multitude of deities who were believed to be present in, and in control of, the forces and elements of nature. The myths about these gods were meant to explain the origins and behaviour of the forces they represented. The practices of the Egyptian religion were efforts to provide for the gods and gain their favour (Allen, 1989).

Formal religious practice centered on the pharaoh, the king of Egypt. Although he was human, the pharaoh was believed to be descended from the gods who acted as the intermediary between his people and the gods, and was obligated to sustain the gods through rituals and offerings so that they could maintain order in the universe. Therefore, the state dedicated enormous resources to the performance of these rituals and to the construction of the temples where they were carried out. Individuals could also interact with the gods for their own purposes, appealing for their help through prayer or compelling them to act through magic.

The Karnak Temple Complex, in Luxor, Thebes, Egypt, houses the Great Temple of Amun and comprises a vast mix of temples, chapels, pylons, and other buildings. The area around Karnak was the ancient Egyptian *Ipet-isut* ("The Most Selected of Places") and the main place of worship of the eighteenth dynasty Theban Triad with the god Amun as its head. The

key difference between Karnak and most of the other temples and sites in Egypt is the length of time over which it was developed and used. Approximately thirty pharaohs contributed to the buildings, enabling it to reach its size, complexity, and diversity. Few of the individual features of Karnak are unique, but the size and number of features is overwhelming. The deities represented range from some of the earliest worshiped to those worshiped much later in the history of the ancient Egyptian culture (Wilkinson, 2000).
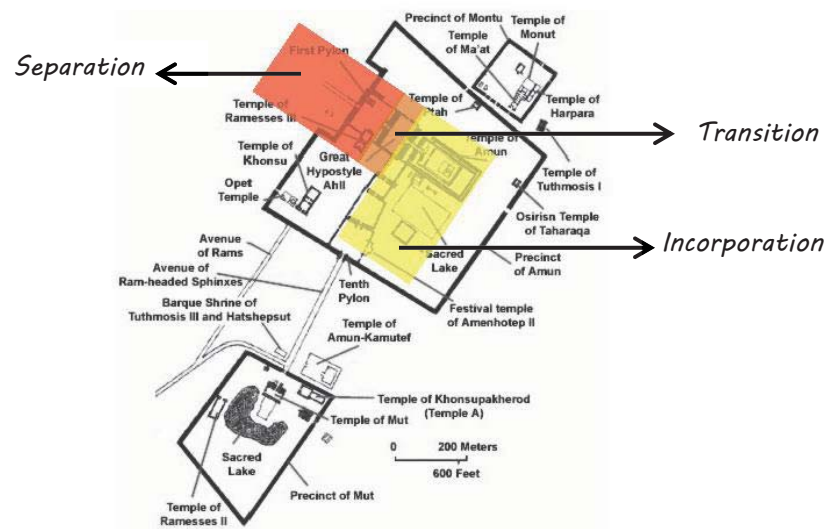

Figure 19 Temple of Karnak Analysis

The Karnak Temple Complex is a vast open-air museum and the largest ancient religious site in the world. It is believed to be the second most visited historical site in Egypt, second to the Giza Pyramids in Cairo. It consists of four main parts, the Great Hypostyle Hall, the Precincts of Amun-Re, Mut, and Montu. There also are a few smaller temples and sanctuaries located outside the enclosing walls of the four main parts, as well as several avenues of goddess and ram-headed sphinxes connecting the Precinct of Mut, the Precinct of Amun-Re, and the Luxor Temple (Traunecker, 2011).

Two famous aspects of Karnak are the ram-headed sphinxes and the Hypostyle Hall in the Precinct of Amun-Re. The ram-headed sphinxes create a walking corridor marking the entry to the temple. These are statues of massive scale and abnormal features which rest on a line of individual pedestals carrying a lion's body connected to a ram's head. This colonnade of ram-headed sphinxes act as guards to the temple overlooking the person going into the temple and intimidating them in scale to break them down; showing them their place and size in comparison to the gods, the temple and marks their entrance into a the god's sacred realm. This corridor concludes with a massive tapered wall leading into the Hypostyle hall, which is 5,000 m^2 and has one hundred and thirty-four massive columns arranged in 16 rows. One hundred and twenty-two of these columns are 10 m tall, and the other twelve are 21 m tall with a diameter of over 3 m. This hall is like a forest of pillars, which represents the reeds of the swamp out of which the Earth arose at the time of creation (Temple of Amon - Karnak, Egypt - Great Buildings Architecture., (n.d.)).

The scale of these columns in comparison to a person is humungous. Being confronted by these, after being overlooked by the ram-headed sphinxes, an ancient Egyptian is bound to feel small, ambiguous in relation to the context, and very vulnerable. This procession through the temple is a layering of experiences, where one's size is almost diminished and broken down to a minute scale in comparison to the temple and its gods.
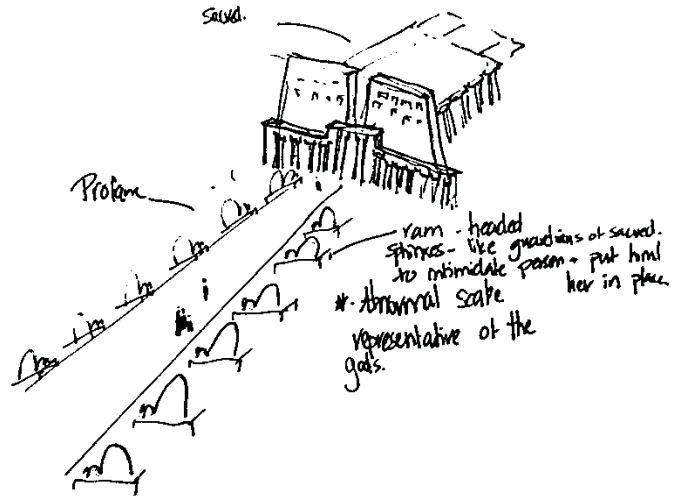
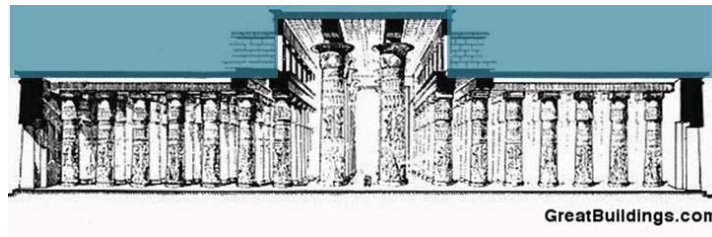Figure 20 Sketch of Karnak by Author (Left) Procession through Temple (Right)

Figure 21 Section through Hypostyle Hall showing elevation changes (blue)

2.4.2.   Acropolis

The Acropolis of Athens's architecture, also exemplifies a distinction between the profane and sacred world. Within the Greek context, the sacred world is a world of perfection, the world of the gods, and to be within the sacred world is to be within the presence of their perfection. Therefore, meticulous attention in Greek architecture is evident. J. Wincklemann, in the 'History of Ancient Art,' argues that when 'something' is 'perfect and/or beautiful', the mind can survey and measure it with a glance, and comprehend and embrace it in a single idea; but the very readiness with which it may be embraced places it before the individual in its true greatness- the mind is enlarged at that point, and elevated by the comprehension of it (Winckelmann, 1972; pp. 18-20).

30

The Acropolis (from the Greek *acros*, meaning high or upper and *polis,* meaning "city) of Athens is a steep-sided hill supporting several temples, precincts, and other buildings (Sacred Spaces, n.d.). The entrance to the Acropolis begins with a zigzag ascension of elevation layers to the propylaea, a building housing a sacred space. Here, the two wings of the building comprised extend out, as if to pull the visitor into the space, enclose them and create a zone of separation from the profane. Upon ascending through the Doric and Ionic colonnade of the propylaea, the occupant has entered a zone of transition in which they are not yet a part of the sacred temple precinct, but they have been removed from the profane world. Upon passing through this colonnade into a porch that leads to the Acropolis, the person has entered a zone of incorporation which includes a number of sacred buildings. At this point, the person is within the sacred realm of the gods, and, thereby, incorporated. The diagrams below show this transition process through a layering of elevations which create a separation from the profane, and the sacred realm of incorporation through a transitory passage.
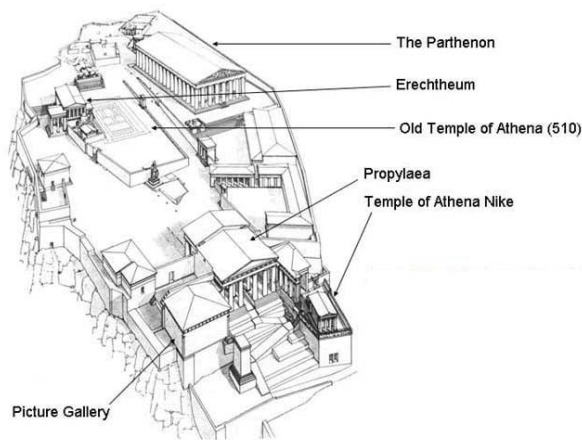
Figure 22 Overall view of Acropolis

Figure 23 Layering through landscape towards

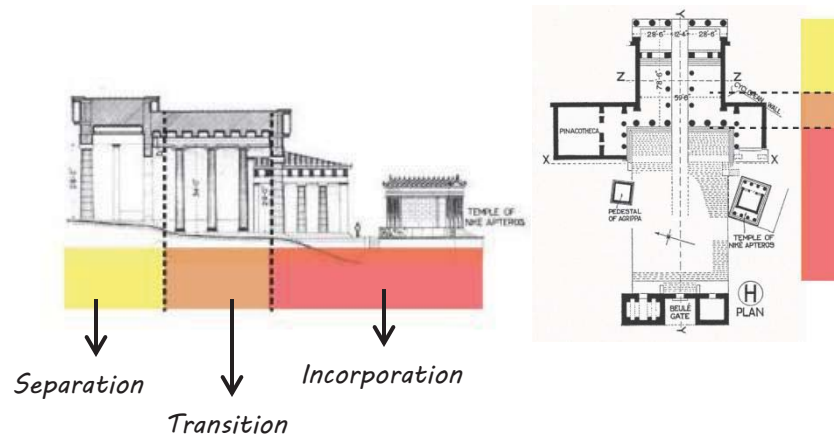Separation

Transition

Incorporation

Figure 24 Section of Acropolis showing elevation changes (blue) and liminal process (left) + Plan of Entry (right)

The concept of *blurring* in liminality is introduced in the propylaea in order to create an ambiguous space; the propylaea building, overall, is a space for procession into the Acropolis and a distinct space separating the sacred and the profane, which is emphasized through the combination of both Doric and Ionic columns which results in an ambiguous reading of the building. Prior to the propylaea, the Doric and Ionic orders had not been combined in the same building; the Doric order was predominantly used on mainland Greece while the Ionic order was used in Asia Minor. In addition, the Doric was associated with a separation from the land, the vertical, and enclosure, while the Ionic was used to represent a connection to the landscape, the

horizontal, and procession. The architect employs the Doric order on the exterior of the building to emphasize the separation between profane and sacred while using the Ionic order inside to emphasize the processional importance of the space. In addition, the Doric columns are spaced irregularly, a spacing usually reserved for the Ionic, so that the center bay is larger, again creating an ambiguity between enclosure and procession. The combination of these orders shows how preconceived understandings, symbols and images can be dissociated and recombined to express new meanings.

In addition, the change in elevation is used to heighten the awareness of this transition. The architect placed steps between the zones of separation and transition and between the zones of transition and incorporation to emphasize the threshold to the sacred space. To further emphasize the change in elevation marking the transitional space of the Propylaea, the pediment of the building is stepped (fig 23). These elements of the Propylaea illustrate the zones of separation, transition, and incorporation that are present in order to transform the occupant as they move from the profane to the sacred.

The Temple of Karnak and the Acropolis possess the three-fold structure of the liminal state. Each separates the individual from the profane world by transitioning them to be incorporated into a world of sacredness. These transitions between one state and the next are emphasized through the architectural language of procession shown through the change of elevations, the exaggeration of scale, and the combination of different architectural elements to enhance an experience; for example, blurring.

3. Design Philosophy and Methodology

3.1.   Establishing Concepts

Below is a list of the established concepts adopted within the design philosophy and implementation, referencing the concepts illustrated in Chapter 2:

- C1- Arnold Van Gennep and Victor Turner- Liminality is an in-between condition that has obvious starting and ending points of which each must be dramatic enough to mark that a transition has occurred. The 'in-between state' between those points is odd, in that it is the stripping down of previous associations, and it is disorienting because it does not offer a sense of future identity or a known sense of direction. Therefore, liminality must have a terminating point. Liminality has the following experiential states: transition, separation, integration, aggregation, layering, dissolution, dissociation, blurring and abstraction.

- C2- Carl Jung, Martin Heidegger, and Maurice Merleau- Ponty- The purpose of liminality and liminal experience is to become aware of one's relationship(s) with everything else. This is done through the recognition that a person is not separate of the world; person-world relationship is the recognition of being within the context of the world. To dwell is to 'be' and dwelling (architecture) is the medium through which this relationship of person and world can be nurtured. The body is a medium of perception of the world. To 'be' and be self aware is the objective engagement with the world. The body is the mind's access to the world, and this arises from the body's movement in it.

- C3- Alberto Giacometti and Olafur Eliasson- The stillness of an object offers the absence of time and allows for one's falling into reverie. The experience of the found object can be intensified through the abnormal and unexpected context in which it is found.

- C4- Andy Goldsworthy- The sense of place can be emphasized through the utilization of the materials found in that place. Time and its effect on this material can be observed through the embracement of change. Change is a layer that adds to the history of place and an agent of creation in the making of the material.

- C5- Richard Serra- Volumetric expressions within a given space can alter an individual's feeling of that space. The simple inward and outward tilting of a volume can bring forth a feeling of containment and/or freedom. The interchange between the two alters one's understanding of space and enhances their understanding of the volume and the space which it creates.

- C6- Temple of Karnak- Exaggerated scale and the combination of abnormal qualities in an element sets the stage for a significant event or presence.

- C7- Acropolis- visual access and prolonged procession into a threshold further separates the experience of the individual from the outside and inside world. It sets the stage that what is coming is worthy of prolonging.

3.2. Liminal Experience: States and Representation

The liminal state is an amalgamation of different transitory experiences, which includes the states of (in no specific order) transition, separation, aggregation, integration, blurring, layering, abstraction, dissolution, and dissociation.

The architectural interpretation of these states begins by defining what these states are - see Table 1 below.

Table 1 State Definitions

State	Definition
Transition	Movement, passage, or change from one position, state, stage, subject, concept, etc., to another; change
Separation	Point of parting

Dissociation	State of withdrawal from any previous associations, detachment, segregation and distancing
Abstraction	State of being taken away/ separated
Layering	State of overlapping elements that laid on top of another or spread over a surface
Blurring	State of confusion, indistinctness, obscurity in vision
Aggregation	State of being in collection of an overall whole
Dissolution	State of broken-up assemblies, dispersal of components or organization
Integration	State of being combined with the whole

Similar definitions are then combined to make up single states. Their opposing states are also identified in the Table 2 (refer to Figure 24 for graphical representation of this).

Table 2 Similar State Combination and opposite states

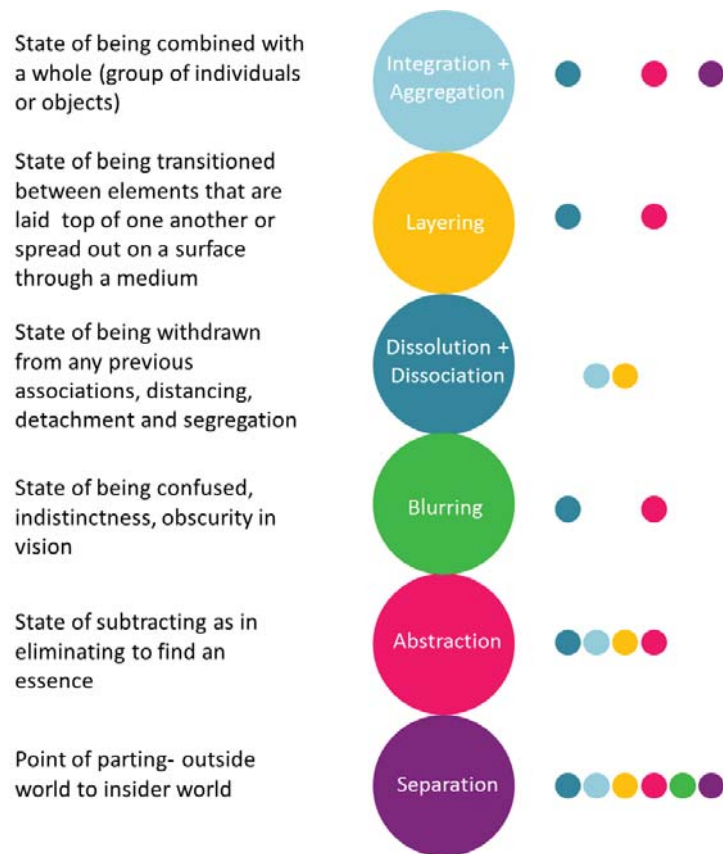| States combination based on similar meanings	State definition	Opposite state
Integration/ Aggregation	State of being combined with a whole (groups or individuals or objects)	Dissociation and dissolution, abstraction, separation
Layering/ transition	State of being transitioned between elements that are laid on top of one another or spread out in a surface through a medium	Dissociation and dissolution, abstraction
Dissociation and dissolution	State of being withdrawn from any previous associations, distancing, detachment and segregation	Integration and aggregation, layering
Blurring	State of being confused, indistinctness, obscurity in vision	Dissociation and dissolution, abstraction
Abstraction	State of subtracting as in eliminating to find an essence	Dissociation and dissolution, integration and aggregation, layering and abstraction
Separation	State of parting-outside to inside world or vice versa	Dissociation and dissolution, integration and aggregation, layering, abstraction, blurring, separation

State of being combined with a whole (group of individuals or objects)

State of being transitioned between elements that are laid top of one another or spread out on a surface through a medium

State of being withdrawn from any previous associations, distancing, detachment and segregation

State of being confused, indistinctness, obscurity in vision

State of subtracting as in eliminating to find an essence

Point of parting- outside world to insider world

Integration + Aggregation

Layering

Dissolution + Dissociation

Blurring

Abstraction

Separation

Figure 25 Graphical summary of state definitions and their opposites.

Referring back to section 3.1 (Established Concepts), C1 states that liminality is an in-between condition that has obvious starting and ending points of which each must be dramatic enough to mark that a transition has occurred. Because liminality can be disorienting to the individual experiencing it, it must have a clear starting and end point. Therefore, the state of separation must exist at the beginning and end of the liminal journeying experience.

To illustrate this, Figure 25 shows the state of separation at the start and end of this transition experience. Shown between these two points are the experiential states which an individual may experience as they transition through liminality. (These are not shown in any given order)
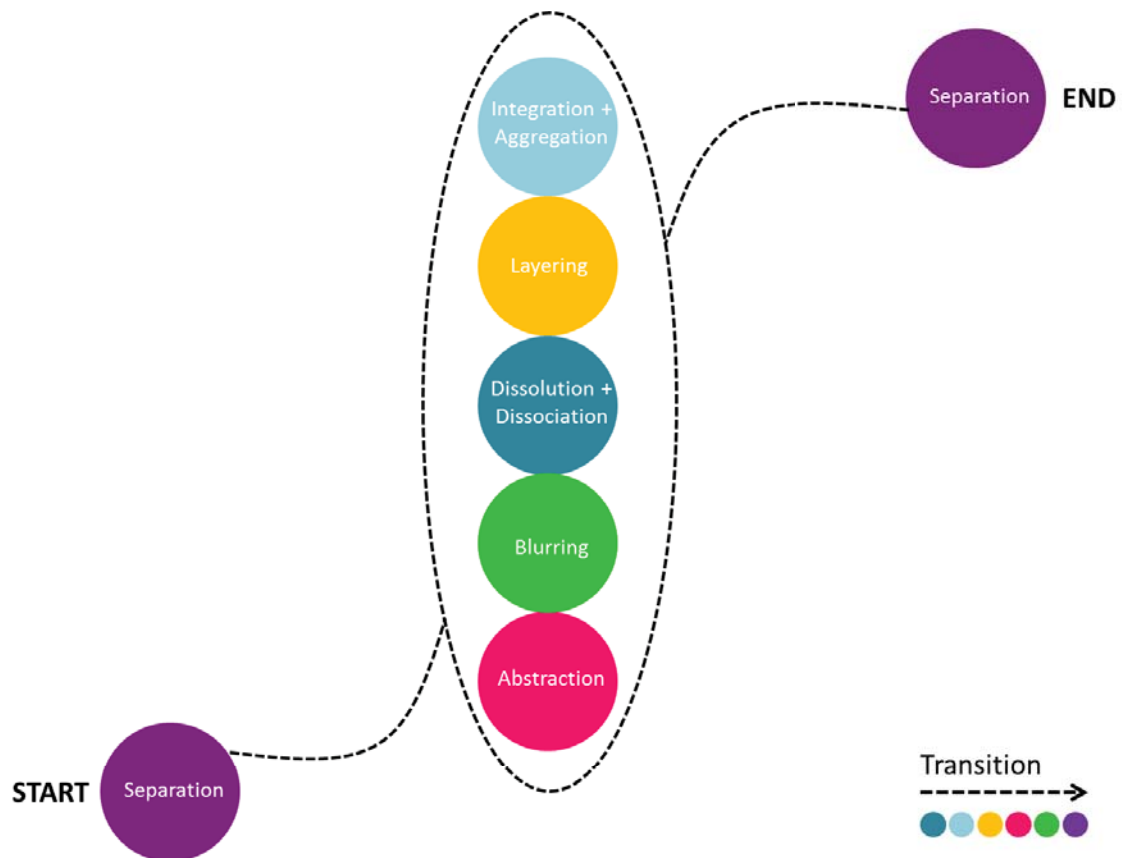
Figure 26 State allocation in space

In reference to Table 2 and Figure 24, which define each state and identify each state's opposing state- variations of the potential combinations of these states are explored in figure 26 and 27. Figure 26 models an alternatives tree showing the initial state of separation and its extended potential subsequent states. It shows the state of dissolution and dissociation as a potential subsequent state of separation. Furthermore the state of layering is once shown as preceding the state of abstraction and following the state of dissolution and dissociation, at another instance adjacent to integration and aggregation, and at another point following the state of abstraction.
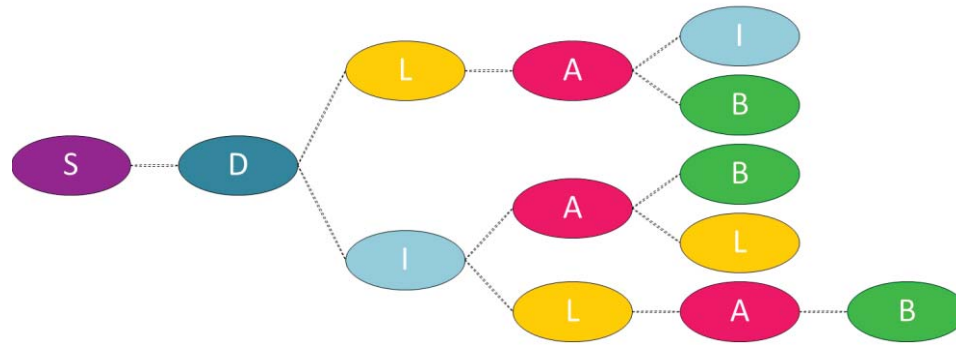
Figure 27 Alternatives Tree 1
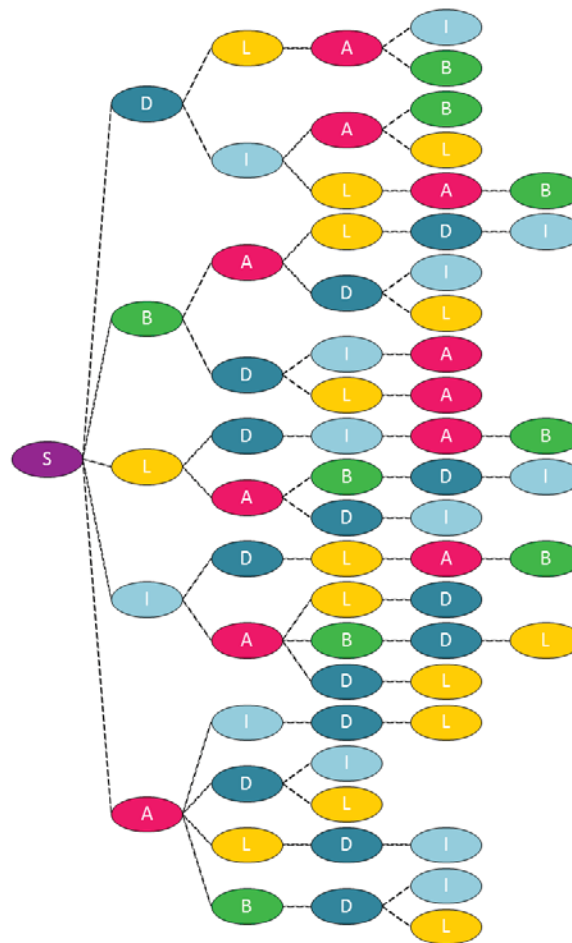
Figure 28 Alternatives Tree- showing all 5 states

Figure 27 illustrates the state of separation and all its potential subsequent states and their adjacent states. Two observations are made when looking at this figure (summarized in Figure 28):

1)   Not all the states include all the experiential states of liminality. For example, in the subsequent state of layering, the state of blurring is missing (This is represented with a blue line).

2)   There is a forced path which includes a pre-determined sequence of states. This is shown with a red line in the subsequent state of dissolution and dissociation.

3)   Shown with thick black lines are states that include subsequent states with a great variety of optional experiences, making this a fulfilling experiences with freedom of choice and transition between one state and the next. The subsequent state of blurring here demonstrates the best scenario where there is a great amount of choice.

With all these observations, it becomes evident that individuals can be guided through different states (sequential) or allowed the freedom to experience them as they wish (optional). Also, this diagram reveals that separation's subsequent states of layering, integration and abstraction are not preferred as they do not allow for the experience of all the states, and a person experiencing these states, will bypass some of the stages.
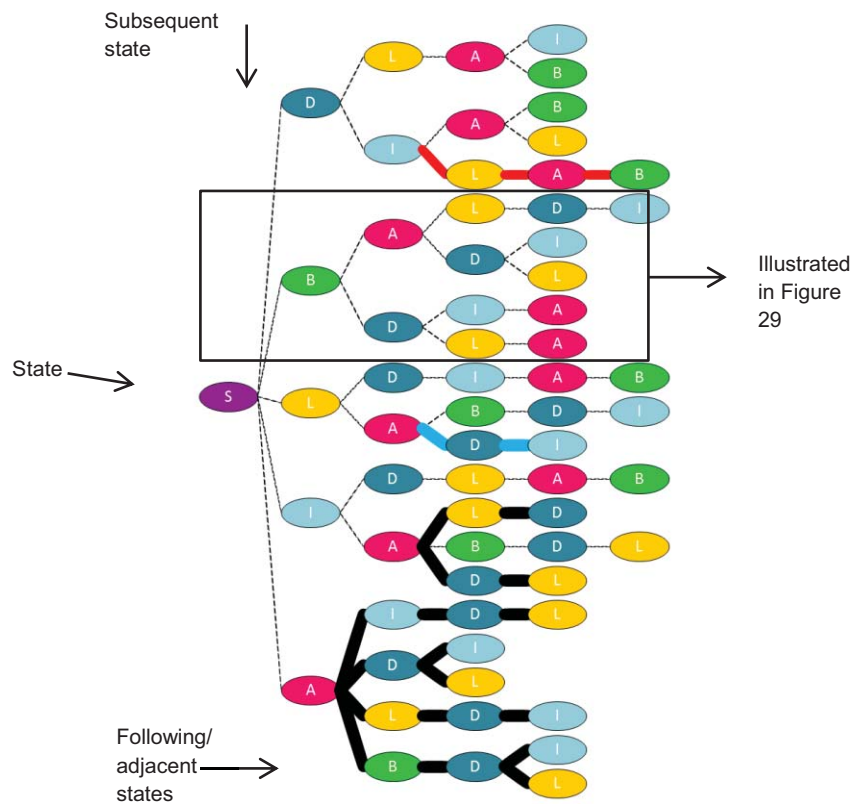
Figure 29 Alternatives Tree Analysis
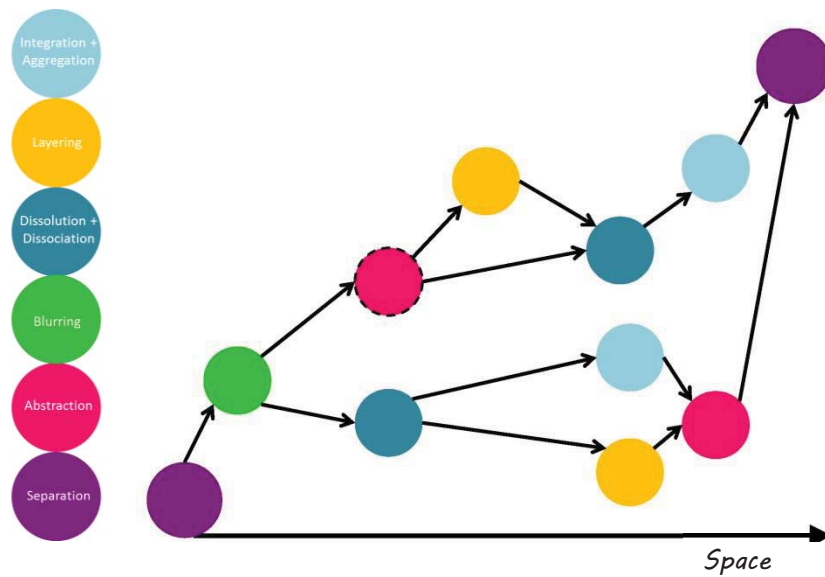
Figure 30 Preliminary state organization

41

Figure 29 illustrates the best option as mentioned above by showcasing it in a tentative theoretical spatial environment. This scenario includes the start and end states of separation, and the subsequent state of blurring with two options: 1) with the following state of dissolution and dissociation, followed by the state integration and aggregation, or layering, and, finally, abstraction, and 2) with the state of abstraction leading to the state of layering or dissociation and dissolution and then integration and aggregation.

From here, the architectural representation of each state is conceptually defined in the forms in which it can exist.

Table 3 Architectural Representation of States

States	Architectural Representation
Integration/ Aggregation	Public seating, public gathering areas that accommodate groups
Layering/ transition	Corridors, walkways, level changes, changes of elevation, paths, elevators, escalators, stairs
Dissociation and dissolution	Physical barriers, walls, partitions, columns, physical obstructions, interruptive objects
Blurring	unexpected objects or findings that are out of context, a visual deterrence, a visual obstruction, heavily frosted glass, screen
Abstraction	Reflection moments , platforms that allow for opportunities to ponder and reflect, lookout points,
Separation	Isolated spaces, space for an individual,

The example shown below is a space which combines the states of integration and aggregation because it allows more than one person to be in this space, blurring because it obscures one visual access to the outside environment, and separation because it separates the individual from the outdoor environment.

Figure 31 Spatial State Experience- State of integration and aggregation, blurring and separation

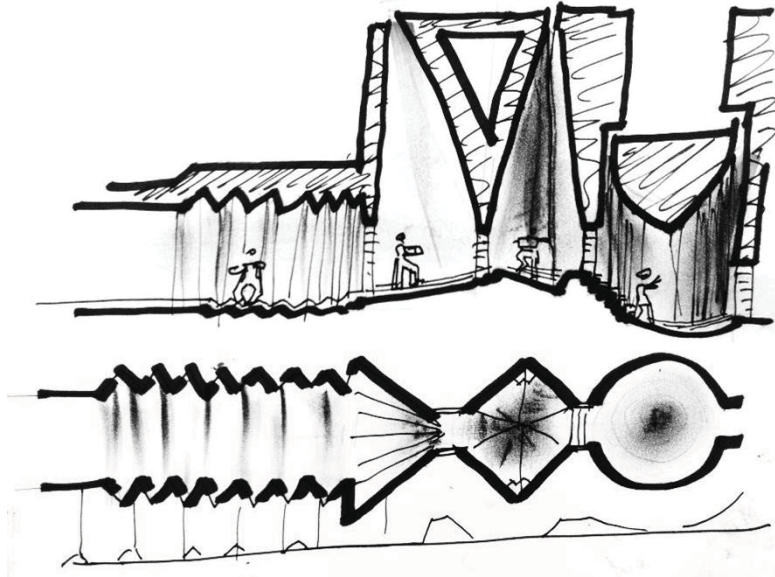

Figure 32 Spatial State Experience- State of abstraction, separation

Figure 33 Spatial State Experience- State of layering, abstraction, blurring, separation
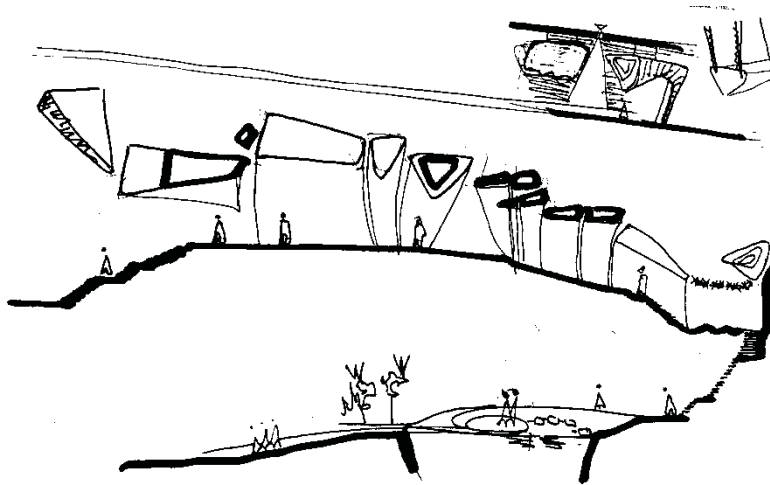
Figure 34 State Experience- Journey

3.3.   Guidelines for Site Selection

Following the establishment of conceptual principles as outlined in Chapter 2, and the design philosophy and methodology explored in chapter 3, a set of guidelines need to be established to guide the process of site selection. The site needs to possess certain attributes and characteristics to allow and support liminal spatial experiences using the afore-mentioned concepts and elements.

The proposed guidelines to enable the qualities necessary for liminal experiences within in a site are as follows:

- Liminality, as originally defined, occurs within the context of ritual. Therefore, the site in which liminality occurs must be within a setting that allows for ritual to happen; such as in a temple, park or a meditative space.

- Liminality is an in-between state that has an odd characteristic. It is an ambiguous state of being neither here nor there, and because it can be a period of great scrutiny, as described by Victor Turner in Chapter 2, section 2.1.2, the site ought to be clearly identified as a space in between two distinctive spaces.

- Because liminality is a condition of being on the threshold, the site ought to possess an edge condition. This edge condition needs to be drastic enough to make an individual feel vulnerable; hence, it needs to be in a dramatic setting of dramatic conditions. This can be exemplified through the combination of opposing conditions; such as, land and water, water and air, land and air, or land, water and air.

- Referring back to Heidegger's term 'person-world,' it is preferred that the site be in a natural setting. Because just as a person cannot disassociate themselves from the

world, they cannot experience self-awareness and the sense of being outside the context of the world.

- It is preferred that the site exist within an open space to spatially and programmatically allow for different state experiences to happen, while accounting for different experiential choices by the individual.

Shown below (Figure 34-36) are preliminary design experiments of how the concept of liminality can be represented in architectural design. The chosen site for this intervention is Cootes Paradisse in the Escarpment of Ontario. (Figure 34) suggests a journey within the landscape that has a beginning and an end. The beginning may start from water or land or end at water or land. The design also suggests a densification of experiences in between.

Figure 35 Preliminary Investigation, Cootes Paradise, Escarpment, Ontario

Figures 35-36 depict some of these in-between experiences.
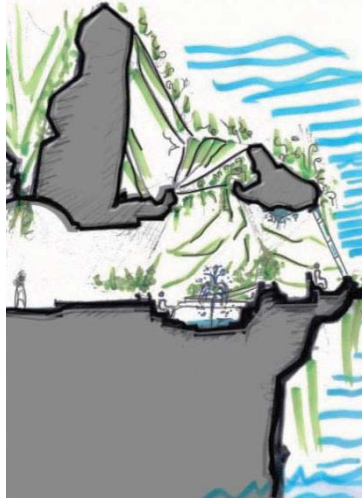
Figure 36 Preliminary Investigation, Cootes Paradise, Escarpment, Ontario- Section

Figure 37 Preliminary Investigation, Cootes Paradise, Escarpment, Ontario- Perspective Section

4. Liminal Architecture: the Bayfront Park Design Proposal

Bayfront Park responds to all the site selection guidelines listed in Section 3.3. Being a park, it is a setting which allows for ritual to happen. It has an 'odd' characteristic because it is located between Hamilton's conservation and industrial area, and neither belongs to one more than the other, but has an identity of its own as a space in-between two distinct and opposite contexts.

Bayfront Park, almost an island, is surrounded by water and therefore has an edge condition which brings together the opposing natural elements of land, water, and air. The combination of these elements in such a setting makes Bayfront Park a unique space that is on the threshold of these conditions and classifies it as an in-between space. Finally, a park setting, such as that found in Bayfront Park allows for Heidegger's 'person-world' relationship to exist; a space where a person can *be* within the context of the word (nature) wherein he or she can experience their surrounding environment and *be* within the context of it.

4.1. Site Location, Surrounding Context, and Existing Condition

Figure 38 Bayfront Park- Hamilton, Ontario

Bayfront Park is a 16-hectare (40-acre) park found in the West-end of Hamilton Harbour near Bay Street North in Hamilton, Ontario, Canada. This formerly vacant land was transformed into a versatile green space in the summer of 1993. It has 1,800 metres of shoreline and a protected sandy beach area which integrates a fish habitat, naturalized area of shrubs, trees and wildflower. The park has a public boat launch, fishing opportunities, and numerous benches and picnic tables to offer restful settings and room for leisurely activities. The contour of the park (Figure 39) allows the upper plateau to be used as an expansive lawn area, and includes a natural grass amphitheatre. A six metre wide asphalt pathway provides opportunities to engage in a variety of leisure activities including cycling, skating and jogging, while enjoying views of the surrounding harbour area, making it a popular spot for walkathons. Gravel and crushed stone multi-program pathways circles the park and extends to Waterfront Trail which connects to adjacent parks, such as Pier 4 Park. Other pathways located along the lower shoreline offer visitors a quieter, more restful waterfront journey, as well as close proximity to fish and waterfowl. A parking lot, with 250 spaces, is also available for easy

access. The park is the site of a variety of concerts and summer festivals such as Aquafest, Festitalia, and Canada Day.

Figure 39 Bayfront Park- Existing Park Activity and Program
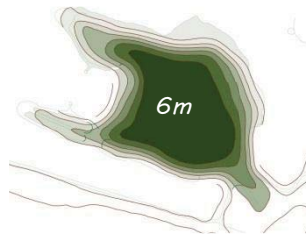
Figure 40 Bayfront Park- Existing Site Contours (0-6m)

Figure 41 Bayfront Park- Existing Walkways

Figure 42 Bayfront Park- Existing Trees

Figure 43 Existing Nodes

Figure 44 Bayfront Park- paths along water

Figure 45 Bayfront Park- beach area and connecting path

Figure 46 Bayfront Park- entrance landmark

Figure 47 Bayfront Park- adjacent marina of Pier 4 park

Figure 48 Bayfront Park- folly

4.2.   Design Intervention and Approach

Bayfront Park has an interesting physical feature at the North West edge of the site. The two points at the edge mark a start and an end to a journey waiting to be told; an opportunity here to represent liminal architecture is evident. This journey begins by clearly identifying each of these points as either a start or end point. A connection between these two points is where the journey is made. At approximately the mid-point of this connection, is where the liminal phase is suggested. This phase is a dense experience of liminal states, and to allow for the maximum amount of experience over space and time, this phase ought to be multi-leveled. To separate the individual from ground and water at the start point, an elevated structure is necessary and to return them back to ground from water, a grounded structure is suggested. The connection from land to land over water, suggests a journey through a bridge structure.
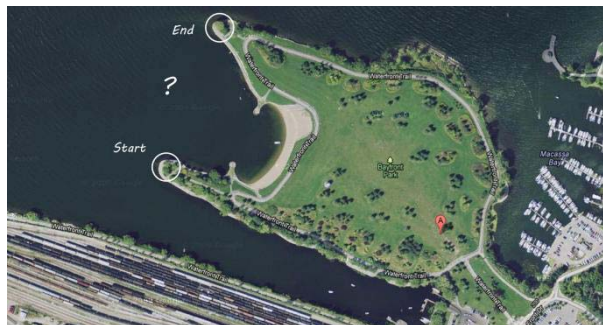
Figure 49 Bridge- start and end

Figure 50 Bridge- connection
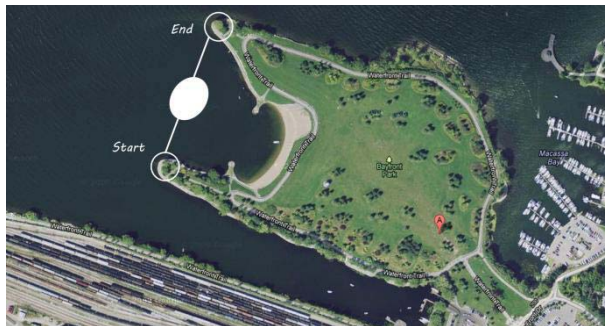
Figure 51 Bridge- mid-point liminal state
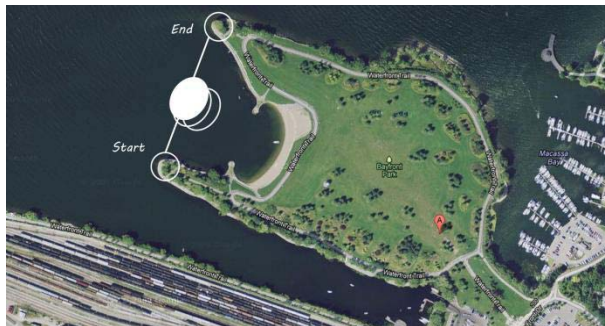
Figure 52 Bridge- multi-level liminal state
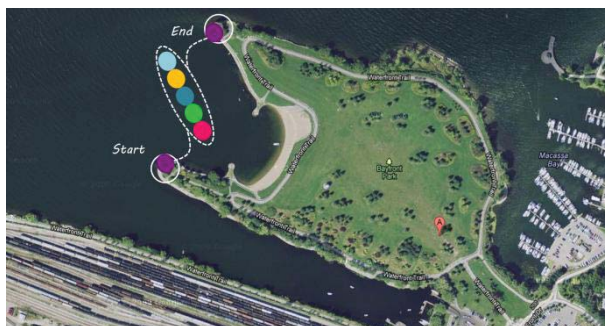
Figure 53 Bridge- original liminal definition diagram

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4.3.   Design Proposal

This design proposal is a 2-part design composed of a bridge element and a park element. Initially the design proposal only included the bridge, but then the realization was made that the main access point to the bridge is through the park. Therefore the design proposal extends into the park.

The approach for designing the park is to create a journey that foreshadows some of the bridge elements and language throughout the journey of the park leading to the bridge. This is done through the recreation of the entrance to include elements of the bridge that hints at what is follow. The entrance branches into different walkway experiences through the park which are interrupted by small liminal moments which mimic the language of the bridge.

Figure 54 Proposed Site Plan

Because the design of the bridge is an overall architectural representation of liminality and liminal state experiences, it is explained first in the subsequent section.

4.3.1.   Bridge Plans and Experiential Sketches
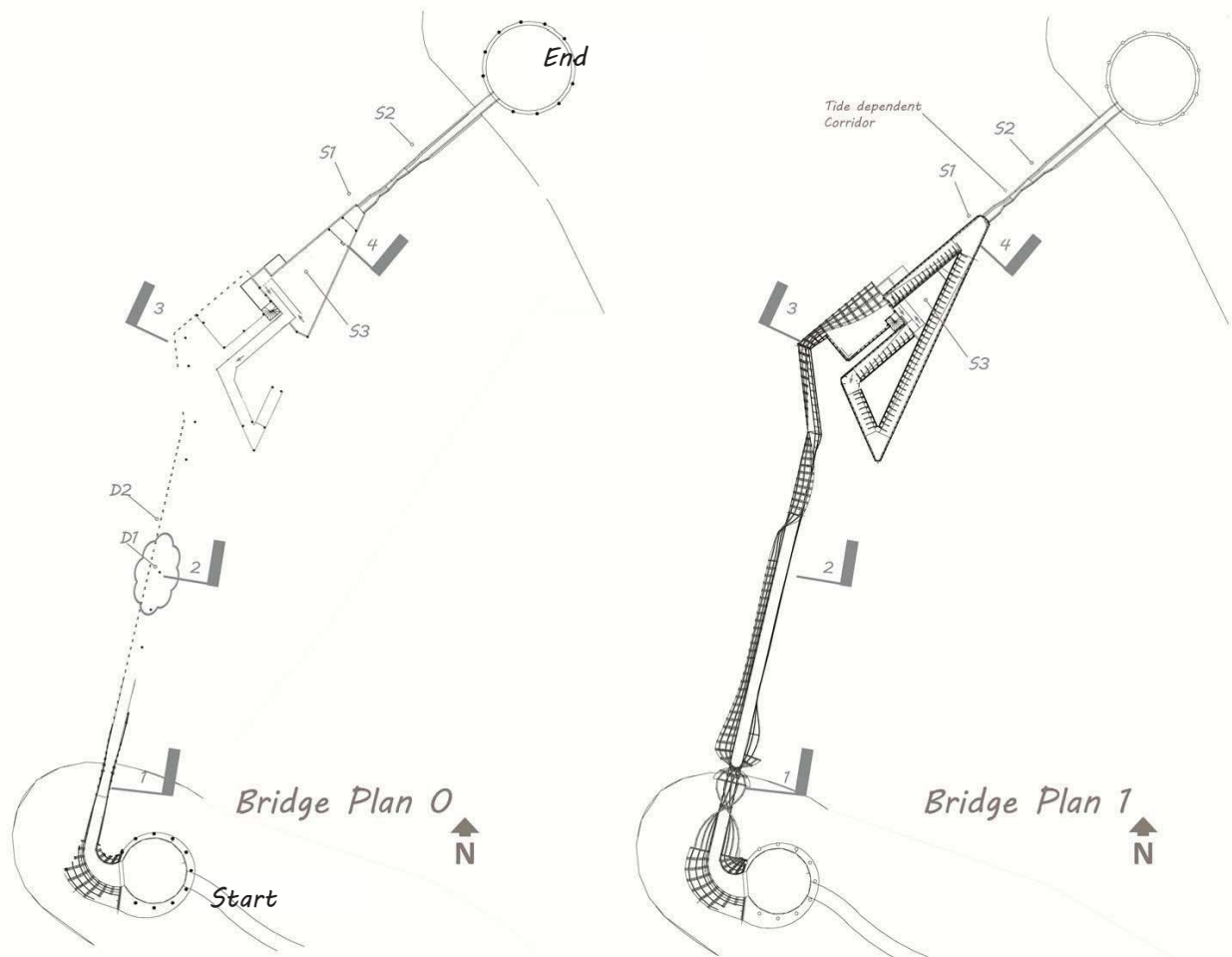
Figure 55 Bridge- Proposed Plans

The bridge design is explained through a journey process. One of the paths of the park leads to the entrance of the bridge. This entrance point marks the separation state of the individual from the outside world and into their journey through liminality. This starting point is marked by a circular display of columns which are at a similar scale to a person. Upon entering

within the context of these columns, a person may feel within the context of their presence. To further welcome him or her in, these columns are met with the bending outward of steel members that gesture for a person to proceed. This procession marks a physical separation from ground and water. The structure here ramps up and lifts the person away and incorporates them further within the context of the bridge. At this point, an elevated ramping corridor encourages a person to proceed further towards the highest point of the bridge. At this point is a flat surface with a lookout point, water and the surrounding environment at a distance to the left, and a view back to Bayfront Park to the right. If a person wishes to proceed further, he or she begins a journey of descent to the lowest point of the bridge, where there is an empty room. This room is almost completely submerged in water and is meant as a reflection space. At this point, a person may feel vulnerable, neither here nor there, within an unfamiliar context. He or she may choose to go back to where they started from or to stay and reflect on the journey they just made or may choose to proceed further. If they choose to proceed further, a small opening in a wall provides an entrance to the exit corridor (Figure 55). The exit corridor begins with a dark tapering space with a high ceiling, walls and limited access to light from above and at a distance. The light at a distance entices a person to proceed further (Figure 56), and as he or she proceeds through these walls start to come down to form railings from which a person is elevated to the same level as the surrounding water and to a point where they are walking on water and finally on land (Figure 57). Similar columns as the ones found at the entrance mark the exit to signify that a journey has been completed.
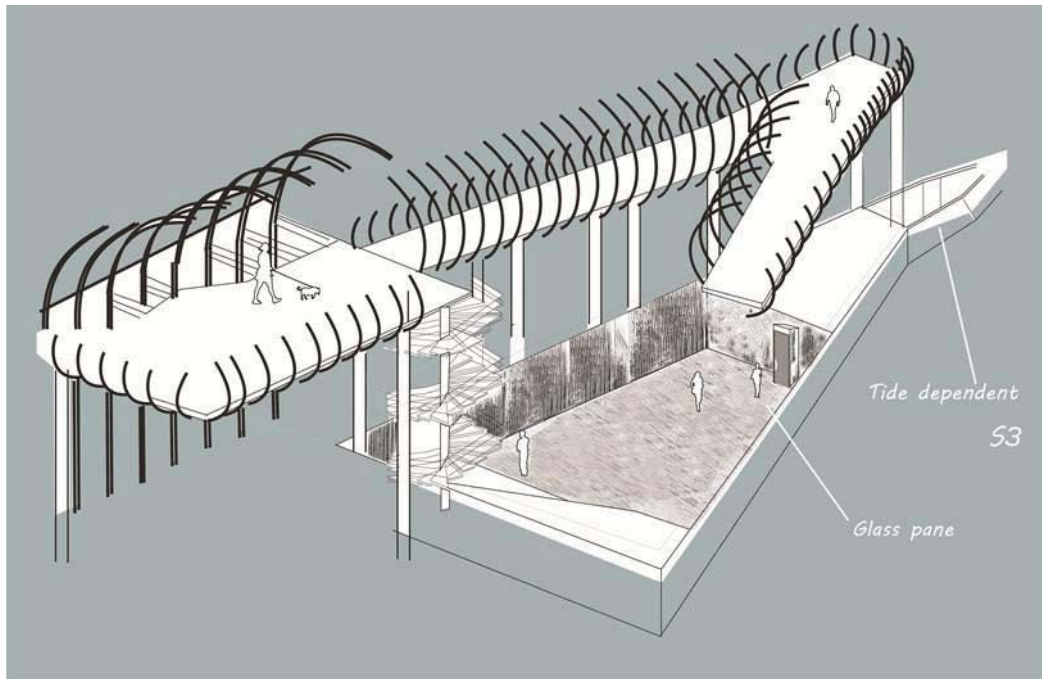
Figure 56 Exit Corridor- Experiential Sketch 3
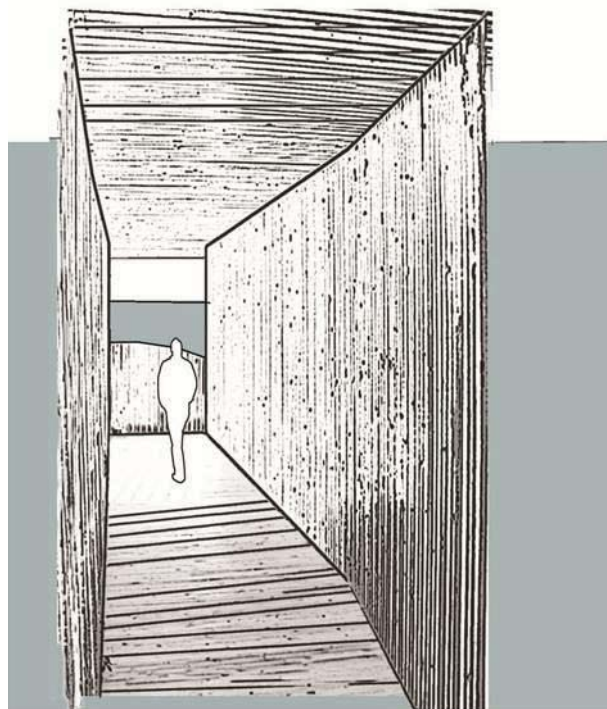
Figure 57 Exit Corridor- Experiential Sketch 1

Figure 58 Exit Corridor- Experiential Sketch 2

4.3.2. Bridge Sections

Below are the proposed bridge sections. Figure 58 illustrates the bending outward of the steel members welcoming a person within its structure. Figure 59-60 show the ascending and descending ramps that provide varying liminal state experiences and the journey of a person as he or she proceeds from the highest point of the bridge to the lowest point. Figure 61 is an overall section of the bridge structure showing the different elevation changes from the entrance, to the platform at the highest point, and the path leading down to the empty space and the lowest point of the bridge. An example of the structural system of the bridge form is shown in Figure 62.

Figure 59 Bridge- Section 1

Bridge section 2 scale 1:200
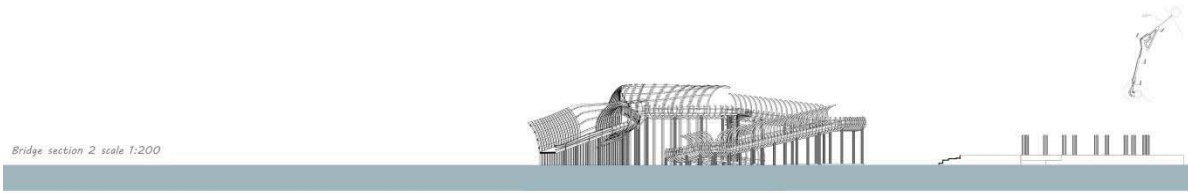
Figure 60 Bridge- Section 2

Bridge section 3 scale 1:200

Figure 61 Bridge Section 3

Bridge section 4 scale 1:200
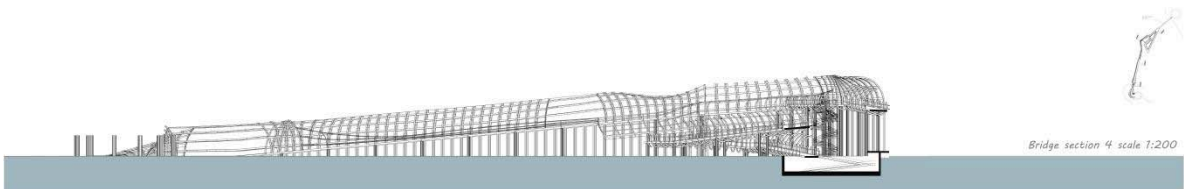
Figure 62 Bridge- Section 4
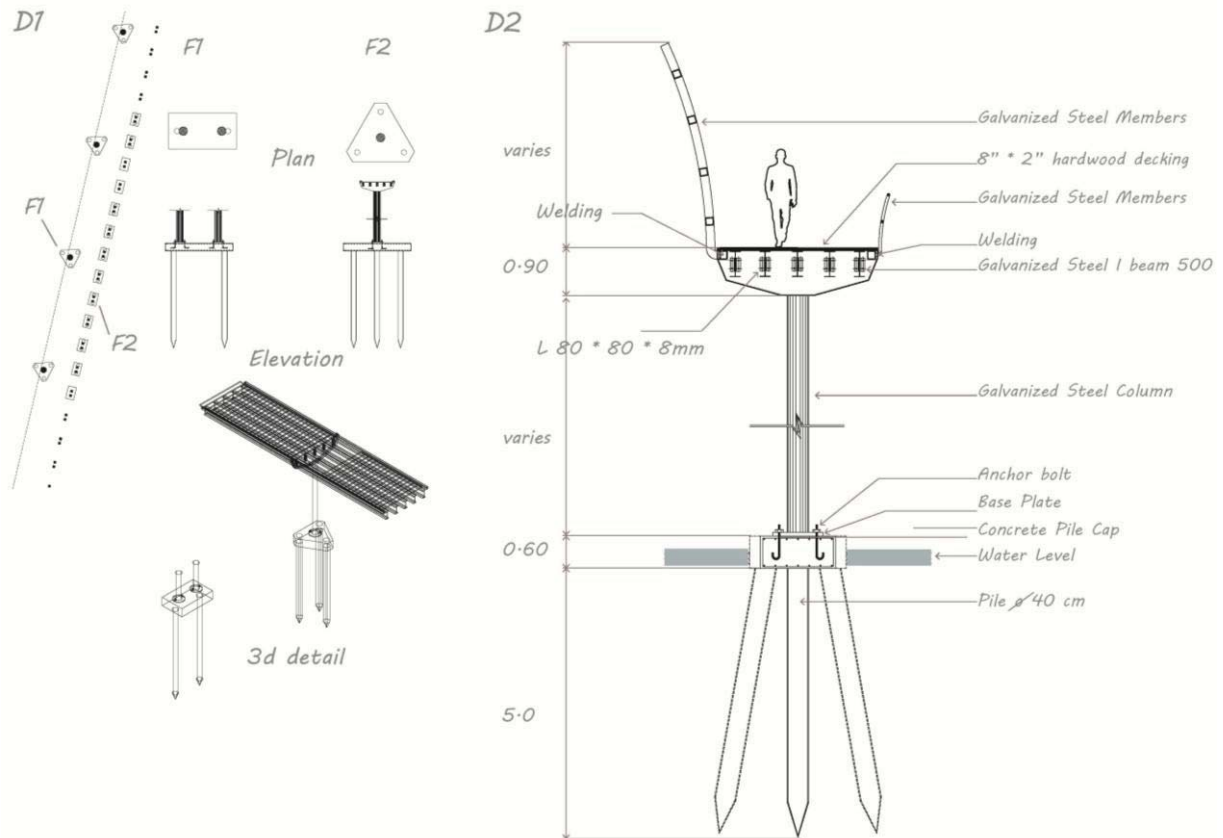
Figure 63 Bridge- structural system detail

4.3.3.   Visual Representation of Bridge

Figure 64 Bridge- Entrance

This entrance point marks the separation state of the individual from the outside world and into their journey through liminality. This starting point is marked by a circular display of columns which are at a similar scale to a person. Upon entering within the context of these columns, a person may feel within the context of their presence. To further welcome him or her in, these columns are met with the bending outward of steel members that gesture for a person to proceed. This procession marks a physical separation from ground and water.

The material expression here is corten steel and galvanized steel which age with time. The material consideration here is influenced by Andy Goldsworthy's embrace of change as a condition that is considerate of a designed object's life cycle and Richard Serra's concept of time; time as an expression of a journey that happens through one's movement in it.

Figure 65 Bridge- on bridge view

As a person proceeds up the highest point of the bridge, the steel members start to bend forward to enclose a person in and include them further in the experience of the bridge. The continuation of the path here is intentionally made not clear by obstructing angles and limiting their view to the journey's end. The person can only see glimpses of what is happening below which suggests a change in direction. At this point, a person sees the park on the right, where they originally came from and the open waters on the left.

Figure 66 Bridge- elevated perspective view at exit

Figure 65 is an elevated perspective showing the overall form of the bridge. The exit corridor of the bridge which ramps up from the lowest point of the bridge to the park grounds is shown. The colonnade display at the exit signals the termination of the liminal experience and the individual's integration back into the park. Depending on the tide condition of the lake, the exit corridor may not be visible (Figure 66).

Figure 67 Bridge- changing tide condition

Figure 68 Bridge- overall view from entrance side

4.4.   Park Design Proposal

Within Bayfront Park are opportunities to create an enhanced park experience, additional program and activities (Figure 69), and architectural moment's representative of liminal experiences.

4.4.1.   Park Plan and Design Approach

Figure 69 Site plan

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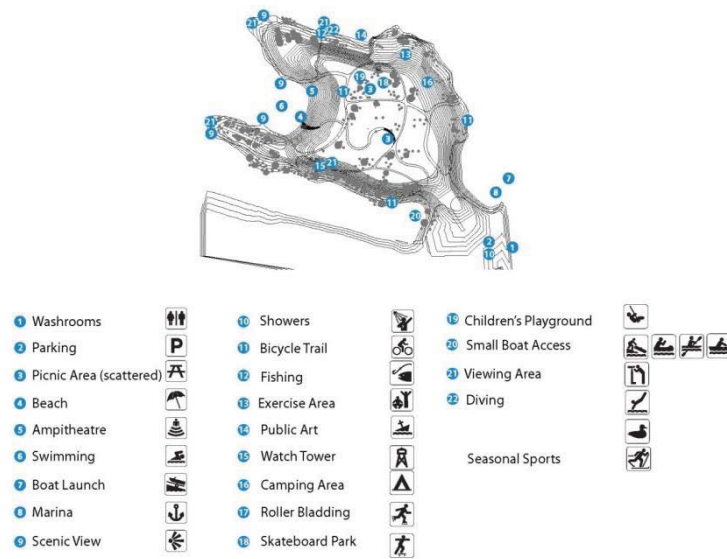
Figure 70 Bayfront Park- proposed park activity

To elevate the park experience, additional walkways are proposed. While the primary walkways are on the periphery of the park, secondary walkways are proposed within the park (Figure 71). Each of which interchangeably utilizes 3 elevations and landscape experiences (Figure 70): 1) being on the ground, 2) being in the ground, and 3) being above ground. This approach mirrors Richard Serra's approach to creating a journey within a specific environment (Section 2.3.4). The idea of seasonal change and its effect on plant life and the overall landscape is an added concept which is embraced within this design approach as well. This concept of change is adopted from Andy Goldsworthy's belief that change is inevitable and ought to be celebrated and recognized as an everlasting cycle of existence (Section 2.3.3). Hence, objects created within nature ought to be recognized as 'things' that will change over the layers of life's cycle and over the course of time.
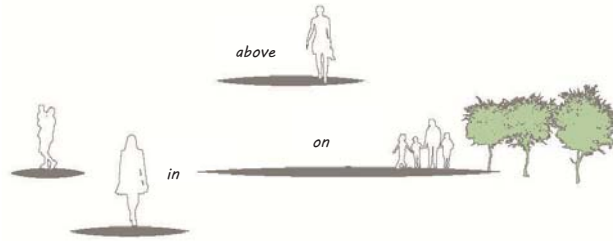
Figure 71 Bayfront Park- landscape approach concept
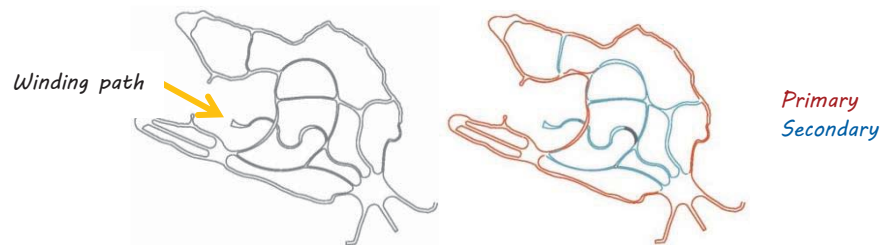
Figure 72 Bayfront Park- Proposed Walkways (left) and proposed walkway hierarchies (right)

The Winding Path utilizes the idea of tidal change wherein depending on the condition of the tide, the water may come into the landscape or recede back. Figure 72 is a section through the landscape illustrating a moment at the end of the winding path in which the tide is high and water is in the path.

Figure 73 Section C

Merleau Ponty's definition that a person is composed of mind and body; the mind a receptor of experiences and body a medium of experience is considered while creating liminal moments within the overall design of the park. The idea of the found object as expressed by Olaffur Eliasson and Alberto Giacomotti is also implemented throughout out the design

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intervention. The found object may entice a person to experience it further or to appreciate it in the context in which it lies.

Other landscape experiential moments are shown in (Figures 73-74). Figure 73 shows a man in the ground where the walls surrounding him provide intimate foliage experience, and Figure 74 shows a layer of experiences where a couple is in the landscape and another couple is cycling above them.
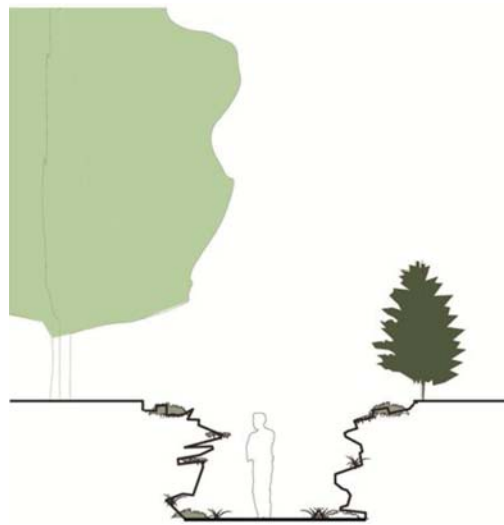
Figure 74 Section B
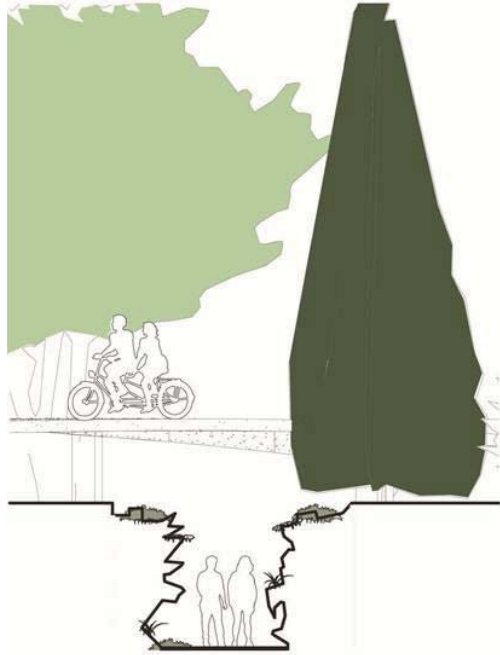
Figure 75 Section D

Figure 76 Bayfront Park- proposed trees
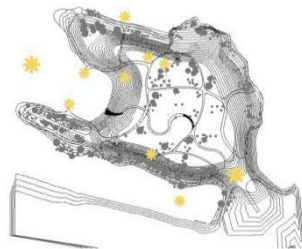
Figure 77 Bayfront Park- proposed nodes

4.4.2. Park Sections

The illustrated site sections below show the various walkway elevations and experiential conditions proposed and previously mentioned. They include the conditions of being in the ground, on the ground or above the ground (Figure 70). Moments of these experiences are shown in (Figure 72-74).
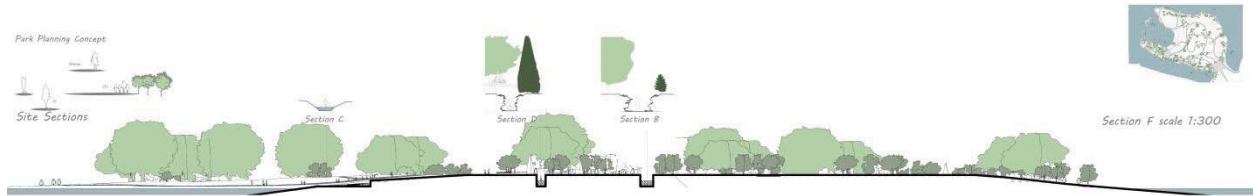
Figure 78 Park- Section F
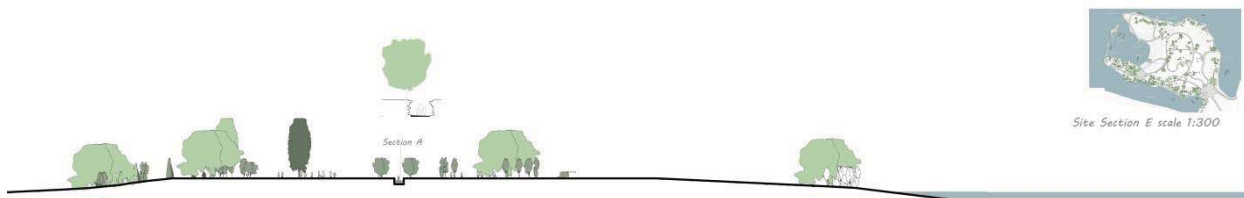
Figure 79 Park- Section E
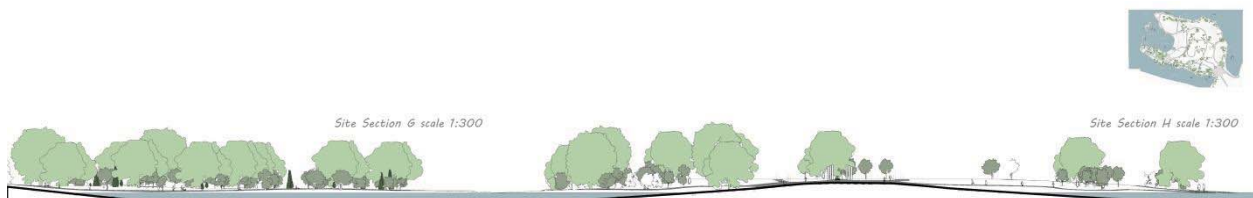
Figure 80 Park- Section G and H

4.4.3.　　　Visual Representation of Park

Figure 81 Park- entrance and exit

Figure **81** Park- entrance　shows the main entrance to the park. Shown here are the possible paths to enter and exit the park. These paths are accented by water fountains and each path offers a unique landscape experience that varies from being in the ground, above the ground or on the ground. The middle path is bordered by three columns on either side. The columns are of the same material as the bridge, thereby utilize the architectural language as the bridge and foreshadow the liminal moments within the park. This path is a winding path that leads to the beach are of the park. This path is unique as it follows the tide conditions; where depending on the tide, the water may come into this path and cover sections of it.

Figure 82 Park- lookout bridge

Figure 81 shows a point along one of the walkways on the eastern edge of the park where a lookout bridge is proposed. This bridge is another liminal moment within the park that uses the same materials and state experiential language as the bridge. The experience of this lookout bridge separates a person from the ground and water and places them in a point above water.

Figure 83 Autumn view of paths at West
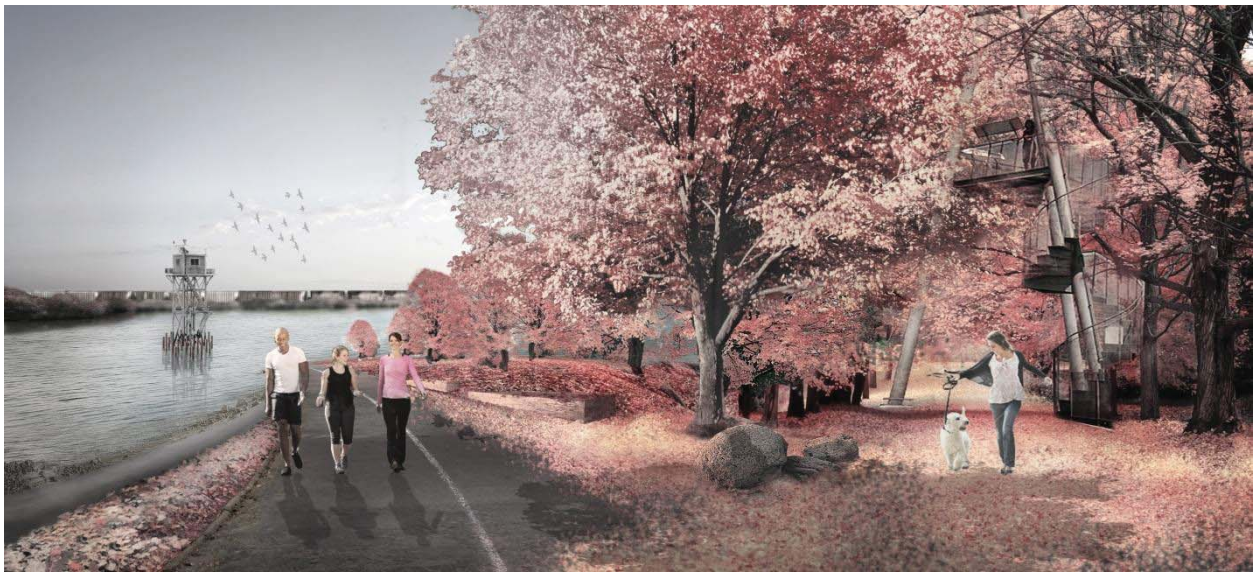
Figure 84 Summer view of paths at West

At the western edge of the park is a wide walkway for jogging and cycling (left), (right) is another liminal moment within the park which is found along one of the paths in a cluster of trees (Figure 82-83). This is a lookout tower that intersects the path which is again, constructed from the same material as the bridge. A person walking this path and having found this object might be enticed to experience it further. If he or she decides to do so, they ascend above the

treetops, and overlook all of the surrounding landscape, and can see the bridge. All vegetation and paths in the park embrace the concept of change.

Figure 85 Children's splash pad

A children's splash pad is the final liminal moment proposed in Bayfront Park. The location of this splash pad is visible from the bridge. So the person on the bridge, having visual access to it, is visually brought back to the context of the park. This site and activity was chosen to bring the individual back from their liminal experience of the bridge to the park. Out of all the possible children activities I wanted to include the water element- to create that sense of familiarity again within the park.

5. Conclusion

Liminality is a state within the ritual process. In ritual liminality is an in-between condition that has obvious starting and ending points of which each must be dramatic enough to mark that a transition has occurred. The 'in-between state' between those points is odd, in that it is the stripping down of previous associations, and it is disorienting because it does not offer a sense of future identity or a known sense of direction. Therefore, liminality must have a terminating point. Liminality has the following experiential states: transition, separation, integration, aggregation, layering, dissolution, dissociation, blurring and abstraction. This state of being could be destructive or constructive; destructive because it can permanently confuse a person, and constructive because it can provide new opportunities, new roles to take on within society, and new self-discoveries.

Philosophy and Psychology give meaning to the liminality by stating that the purpose of liminality and liminal experience is to become aware of one's relationship(s) with everything else. This is done through the recognition that a person is not separate of the world; person-world relationship is the recognition of being within the context of the world. To dwell is to 'be' and dwelling (architecture) is the medium through which this relationship of person and world can be nurtured. The body is a medium of perception of the world. To 'be' and be self-aware is the objective engagement with the world. The body is the mind's access to the world, and this arises from the body's movement in it.

Liminality as defined in art is about recognizing that the stillness of an object may offer the absence of time and allows for one's falling into reverie. This experience can be intensified through the abnormal and unexpected place in which the object is found. The sense of place can be emphasized through the utilization of the materials found in that place. Time and its effect on this material can be observed through the embracement of change. Change is a layer

that adds to the history of place and an agent of creation in the making of the material. A person's feeling of space can be altered through volumetric expressions and gestures. The simple inward and outward tilting of a volume can bring forth a feeling of containment and/or freedom. The interchange between the two alters one's understanding of space and enhances their understanding of the volume and the space which it creates.

Sacred Architecture clearly differentiates between the sacred world and the profane world; exaggerated scale and the combination of abnormal qualities in an element sets the stage for a significant event or presence, and the visual access and prolonged procession into a threshold separates the experience of the individual from the outside and inside world. It sets the stage that what is coming is worthy of prolonging and not easily attained.

The experiential states of liminality exemplify a psychological or emotional state. These states can be visually represented in architectural form and bring on certain psychological and emotional feelings. A small room for one individual is a state of abstraction and a space of awkward architectural composition (sloping floors, angled ceilings and limited access to light) is representative of the state of blurring. The combinations of these liminal architectural representations can augment one's spatial experiences and lead to self-awareness in relation to self, space and the environment.

One of the challenges of this thesis and in the understanding of the concept of liminality is that different states are experienced differently by individuals; therefore, sequential suggestions are dismissed and an individual is left to experience any given state as it becomes apparent to them. State experiences are personalized experiences and liminality is a personal experience.

Bayfront Park is a setting which allows for ritual to happen. It has an 'odd' characteristic because it exists in opposing conditions, and neither belongs to one more than the other, but has an identity of its own as a space in-between two distinct contexts. Almost an island, it is surrounded by water and therefore has an edge condition which brings together the opposing natural elements of land, water, and air. The combination of these elements in such a setting makes Bayfront Park a unique space that is on the threshold of these conditions and classifies it as an in-between space. A park setting, such as that found in Bayfront Park allows for Heidegger's 'person-world' relationship to exist; a space where a person can *be* within the context of the word (nature) wherein he or she can experience their surrounding environment and *be* within the context of it.

The further emphasis of the park's edge condition is connected by a bridge proposal. The design proposal of the bridge is the architectural representation of a liminal experience. A start, end and a connection between the two is a journey of liminal experiences. The expression of liminality on the bridge is a densification of state experiences over a multi-layered structure which separates a person from water and ground and takes them to a state where they are elevated in the air, or lowered to being almost completely submerged in water towards a final journey reconnecting him or her to land. A liminal journey within the context of Bayfront Park may lead to a better sense of one's awareness in relation to themselves, the space they are in and the environment that surrounds them.

The procession of a liminal experience is not one of a found object, but rather a preparation and a foreshadowing of a story to be told. Therefore, liminal design within Bayfront Park extends throughout the park simply because the park is the main access point to the

bridge. Liminal moments along the paths of the park offer different scenic views, experience choices and landscape elevation changes.

Liminality is a journey of different moments which can influence a person to discover something new about themselves and the world around them. Perhaps liminality is not found on a bridge or in a park, may be it can be found in the little things or the little moments that trigger a small or big change that bring a person closer to understanding their being within the context of the world. Liminality exists to explain the "two mistakes which all individuals do: 'we provide no ritual space at all in our lives...or we stay in it too long.' Therefore, 'there is a need to accord space, time and place for liminal feeling.

6. Appendix – Preliminary Concept Development and Schematic Design

Below is a graphical chronological order of the design process.
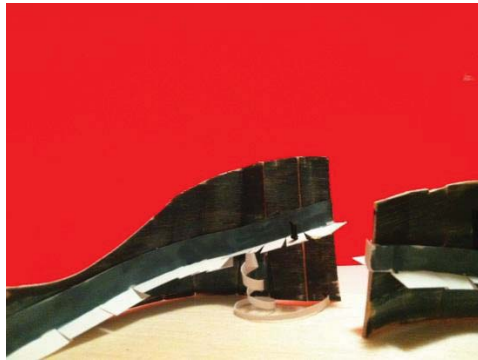
November 2011

January 2012

plan
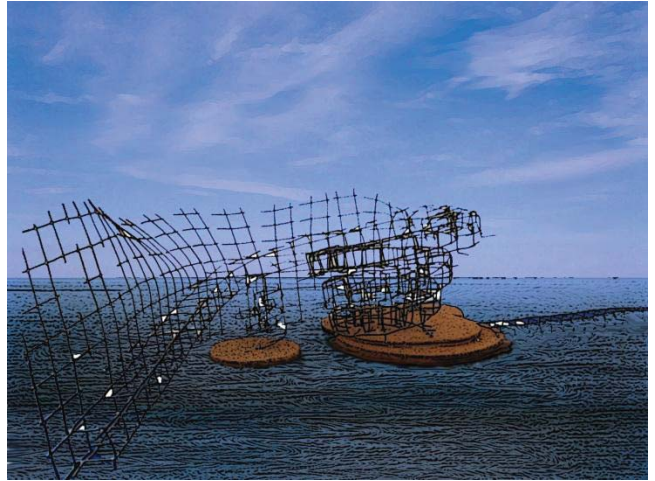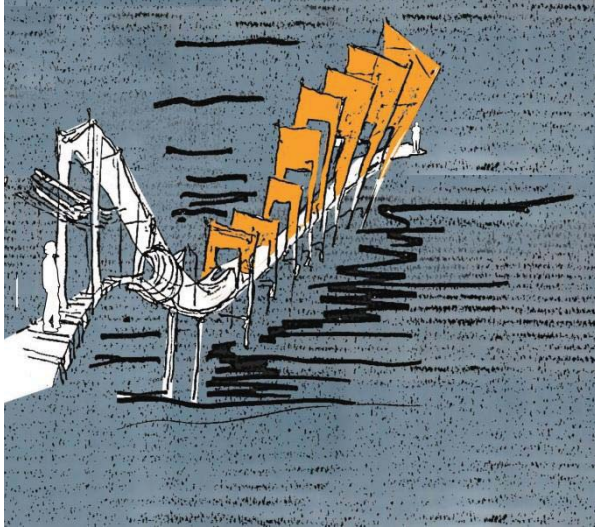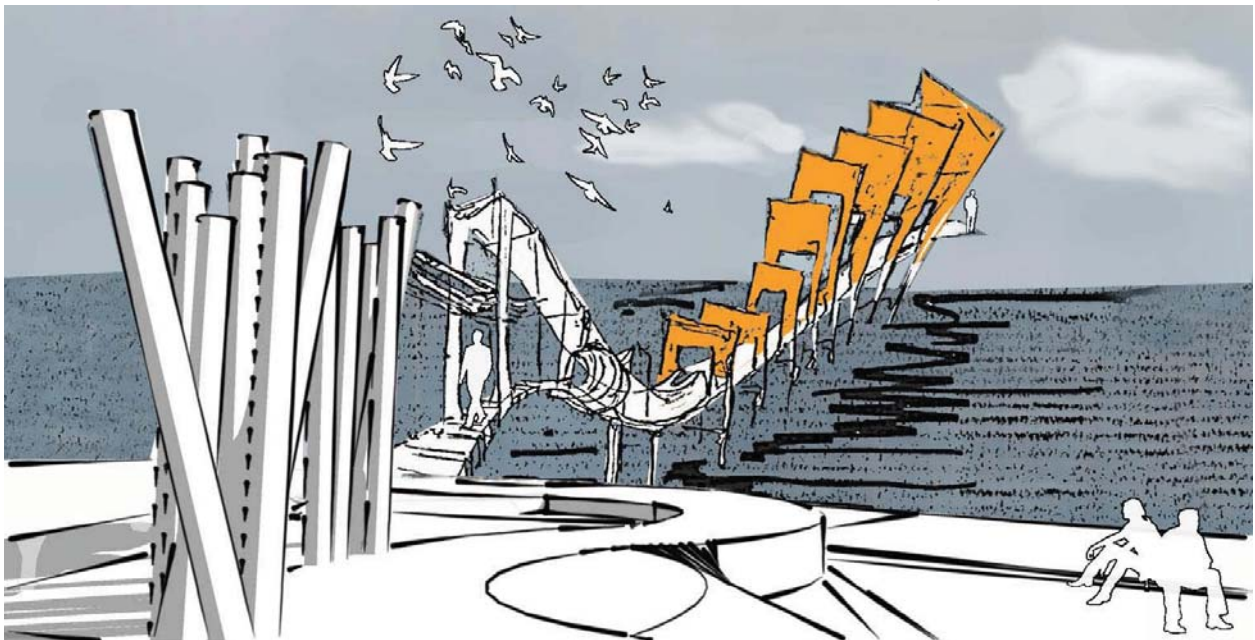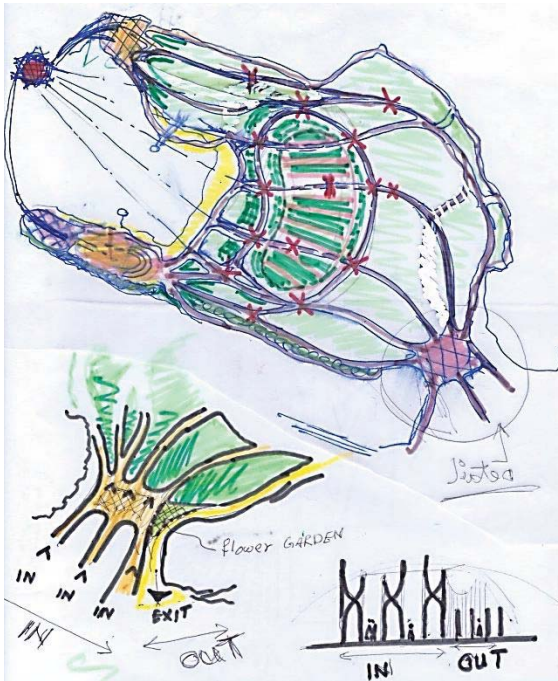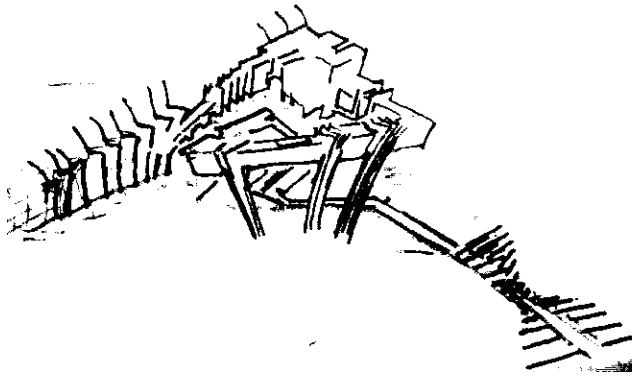
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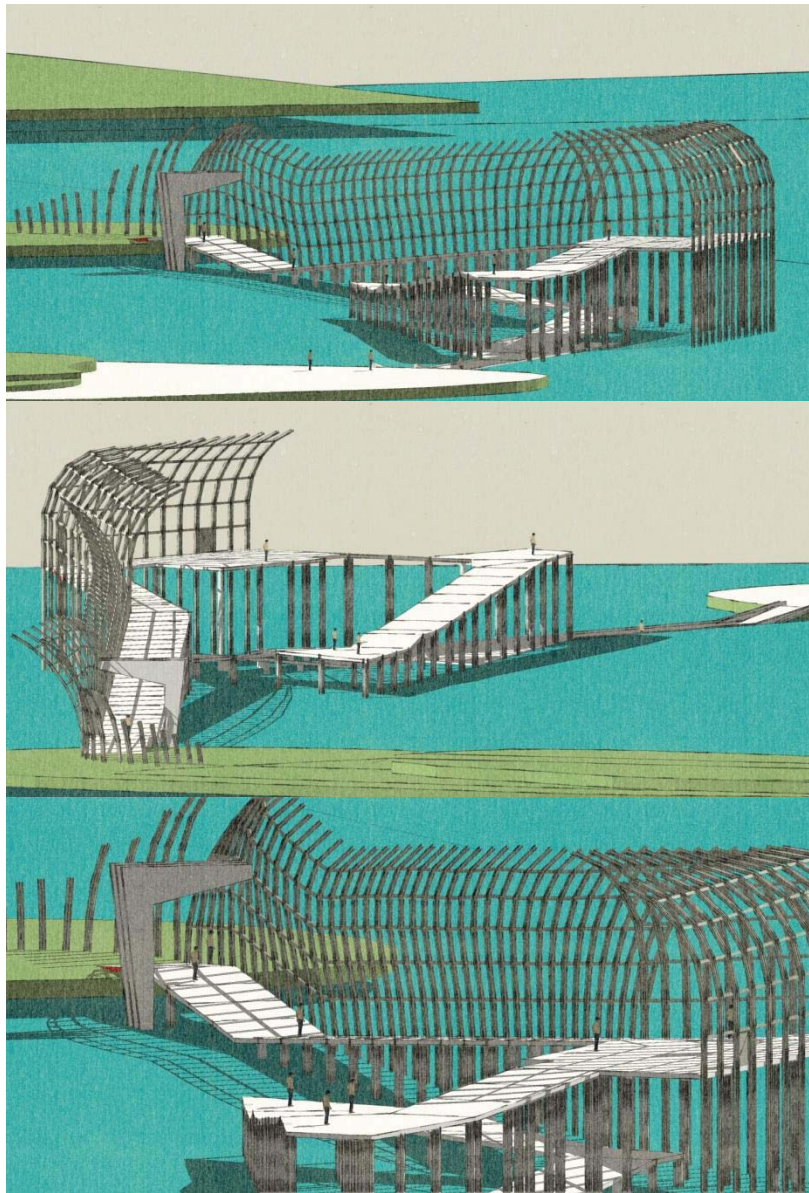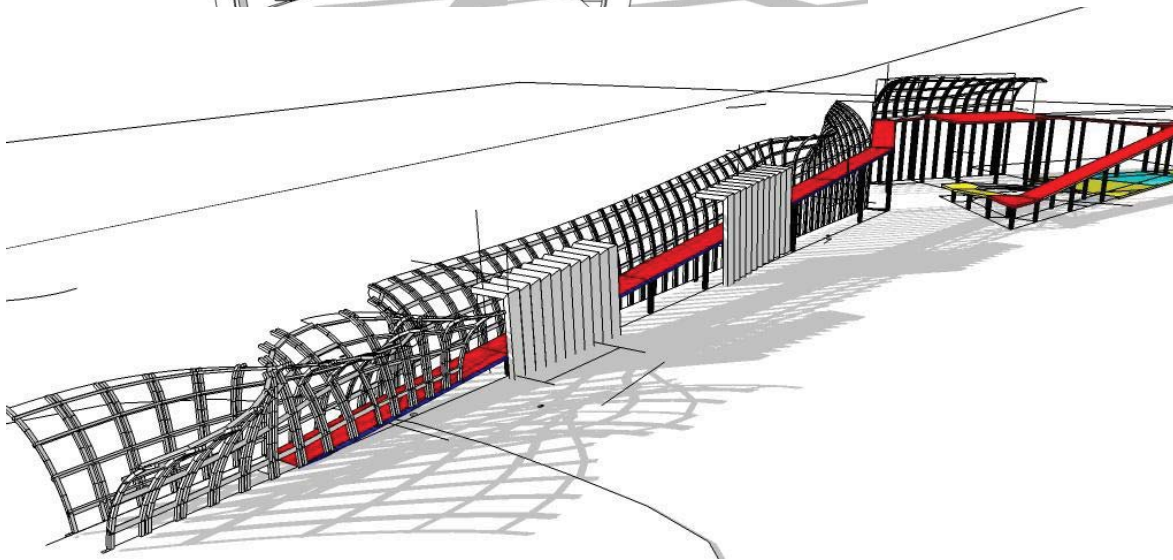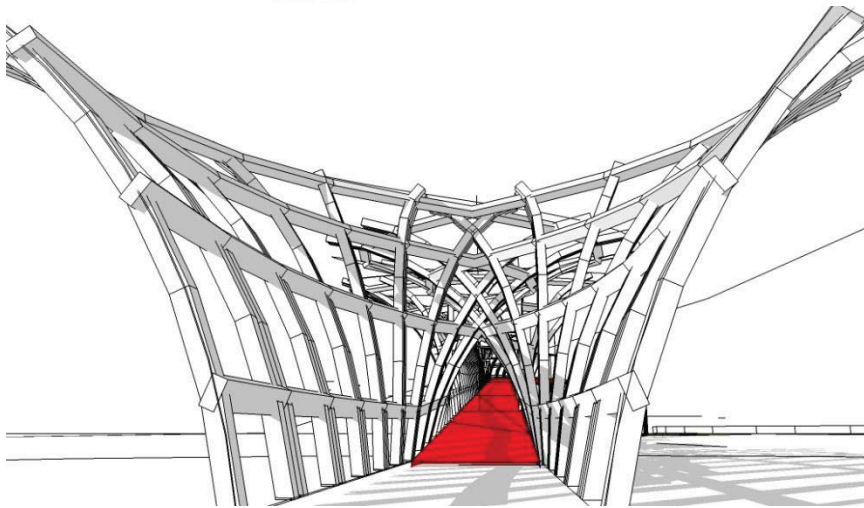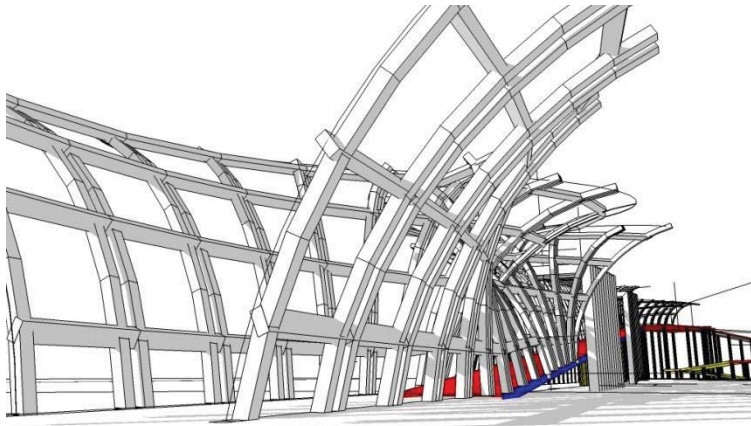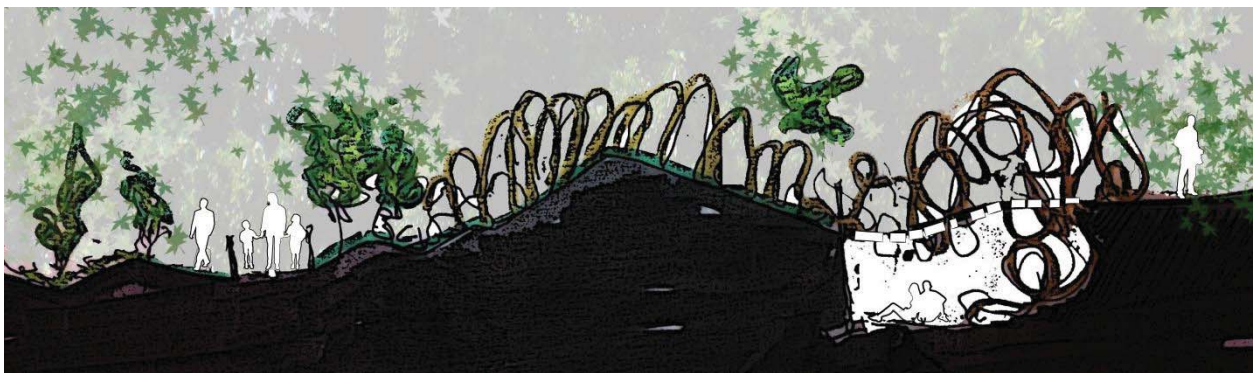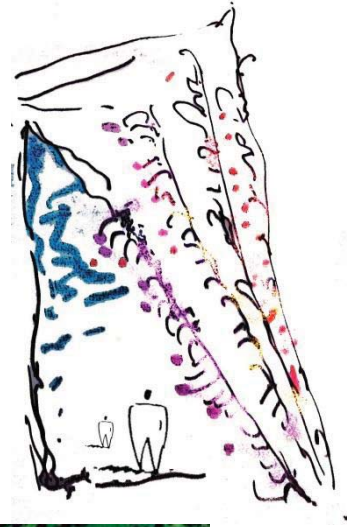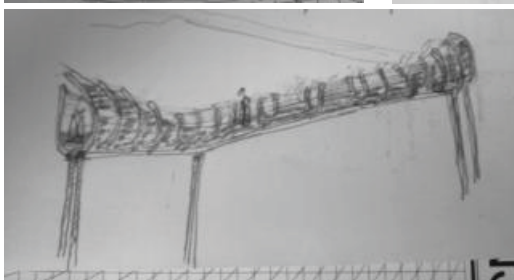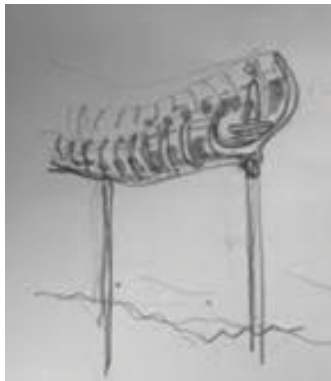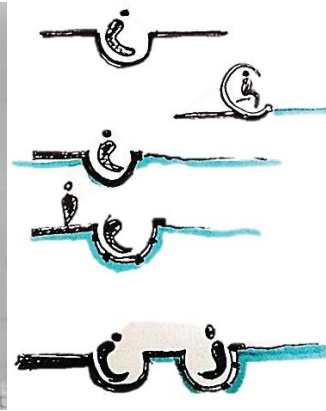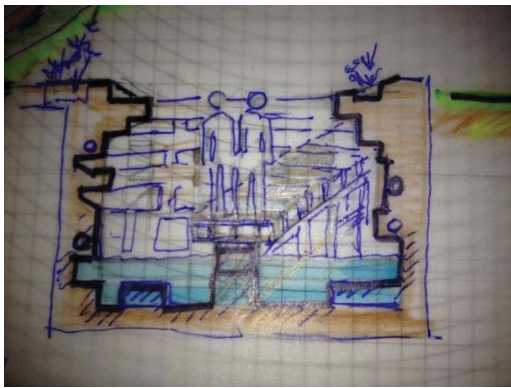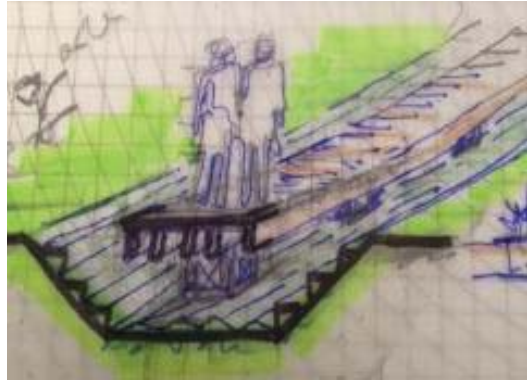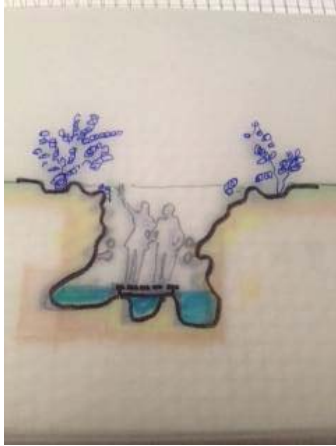
March 2012

March 2012

March - April 2012

boat marina in backgrond

water

parked boat

walkway

bridge lookout
-material is
corten steel

sloped-
land

ramp that follows slope

walkway

boardering plant/ bush

Water plants

minimal seating

sloped down

minimal seats in water
guys's feet in water

Water plants

Trees follow slope

grass

landmark placed in centre of
fountain

Character of bridge should
be included in entrance

Character of bridge should
be included in entrance

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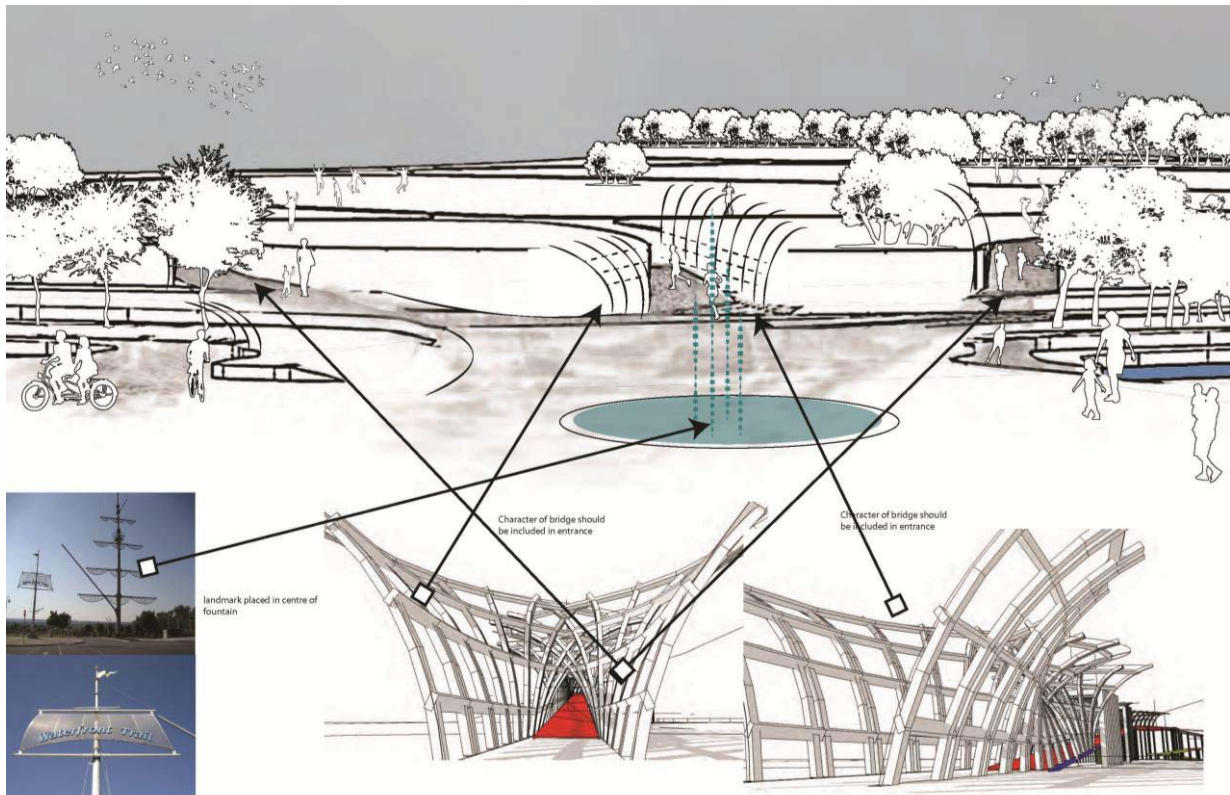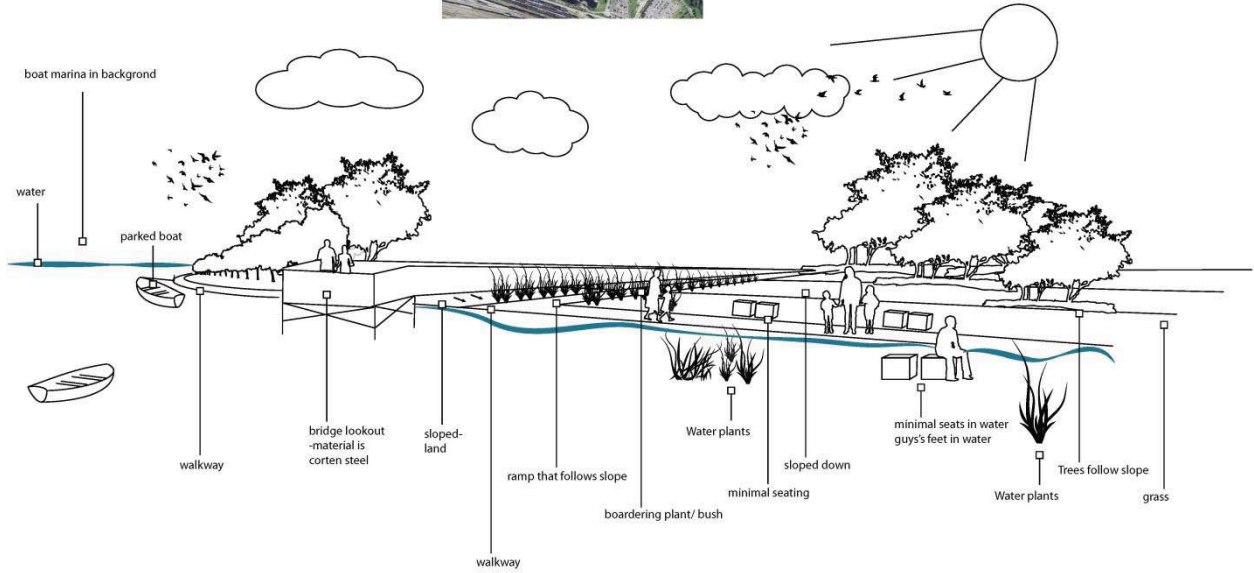   November 24, 2011, from http://aks0101.wordpress.com/tag/phenomenology-and-
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