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-A Phenomenological Reinterpretation-

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Abstract

This thesis explores the emotional connection between Architecture and experience. It is through Edward Relph’s phenomenological reinterpretation of the person-environment relationship that a theoretical joint is articulated. Relph describes various levels of ‘outsideness’ and ‘insideness’ with regard to places. The greatest degree of ‘outsideness’ refers to places, which have only superficial qualities and have no sense of belonging. At the other extreme, the greatest degree of ‘insideness’ characterizes experience of places full of significance but with little self-conscious reflection. It is through this articulation, as well as through contemporary discussion by architects and theorists such as Juhani Pallasmaa, Steven Holl and Peter Zumthor that this thesis will explore the intimacy of an architectural experience. This intimacy, which relies on the experience of the human body and mind as one, constitutes the framework for an emotional experience of Architecture.

The case study investigation, which will comprise the second half of the thesis, is concerned with the potential for an environment to aid the emotional well being of an individual. This investigation includes the design of a Center for Well Being. This facility will provide for the everyday enrichment of the human spirit. Targeted towards both those fighting an illness and those wanting to prevent illness and increase personal and family health, the Center will provide services such as educational health seminars and resources, movement and exercise programs, and workshops that promote a healthy mind-body connection. The aim of this case study will be to investigate a framework for encouraging a more intense and fulfilling emotional experience utilizing architectural poetics.
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Introduction

This thesis explores the emotional connection between Architecture and experience. It is through Edward Relph’s phenomenological reinterpretation of the person-environment relationship that a theoretical joint is articulated. Relph describes various levels of ‘outsideness’ and ‘insideness’ with regard to places. The greatest degree of ‘outsideness’ refers to places, which have only superficial qualities and have no sense of belonging. At the other extreme, the greatest degree of ‘insideness’ characterizes experience of places full of significance but with little self-conscious reflection. It is through this articulation, as well as through contemporary discussion by architects and theorists such as Juhani Pallasmaa, Steven Holl and Peter Zumthor that this thesis will explore the intimacy of an architectural experience. This intimacy, which relies on the experience of the human body and mind as one, constitutes the framework for an emotional experience of Architecture. The development of this thesis begins with a historical narrative of the role of the body within architecture. From an anthropomorphic architecture to investigations of the psychological role of architecture, orientation is focused towards phenomenology and the study of human experience. It is from this platform that a phenomenological architecture is discussed as a specific approach from which to create a connection between Architecture and emotion. A brief perspective on the theoretical interpretations of emotion leads the reader into contemporary architectural discourse,
which focuses on a phenomenology of architecture. Presenting the reader with an analysis and interpretation of the theory and practice of three architects, the thesis develops a strategy to approach an architecture, which provides a framework for an emotional experience. This analysis will provide the working model for a parallel case study investigation.

The case study investigation, which will comprise the second half of the thesis, is concerned with the potential for design to aid the emotional well being of an individual. This investigation will be the case study design of a new Center for Well Being. The purpose of the support center is to provide a facility for the everyday enrichment of the human spirit. Targeted towards both those fighting an illness and those wanting to prevent illness and increase personal and family health, the Center will provide services such as educational health seminars and resources, movement and exercise programs, and workshops that promote a mind-body connection. The aim of this case study will be to investigate a more intense and fulfilling emotional experience utilizing architectural poetics.
Chapter One:  
The Role of the Body in Architecture

1.1 From Antiquity to Le Corbusier

Historically, the experience of architecture has been largely through the visual sense. Based on a fundamental representation of the body throughout history, many architects have neglected the experiential or emotional role of architecture in favor of an architecture that is mediated by the body and vice versa. From the body as cause for shelter, to the body as cause for boundaries, to the body as representation of form, architecture has shifted from the human-centered representation of aesthetics and beauty. Man, as an element of nature and ingredient of form, can be described as the most fundamental measurement of self in our world and consequently it is the vehicle through which society has long represented the built environment. “The body has always maintained an elusive, if not ambiguous, relationship to the built environment, despite a long history of presumed naturalness accorded this relationship throughout Western culture- buildings as the image of man.”

Moving away from the artistic depiction of body and spirit as one, towards relations of symmetry and proportion, the human body as a microcosm of universal harmony can be traced back to Greek antiquity. The human body, which formed the basis
for the right proportions, inspired the proportioning system of the Greek temples, which were considered perfectly harmonized. This harmony between humankind and the universe was greatly influential in following periods. Vitruvius, in his treatise, De Architectura, which is the only complete architectural treatise to survive from classical antiquity, deals with aspects of architecture, city planning and machines. Introduced in Book III, in regard to the building of temples, the Vitruvian concept of man and form is described.

"Similarly, in the members of a temple there ought to be the greatest harmony in the symmetrical relations of the different parts to the general magnitude of the whole. Then again, in the human body the central point is naturally the navel. For if a man can be placed flat on his back, with his hands and feet extended, and a pair of compasses centered at his navel, the fingers and toes of his two hands and feet will touch the circumference of a circle described therefrom. And just as the human body yields a circular outline, so too a square figure may be found from it. For if we measure the distance from the soles of the feet to the top of the head, and then apply that measure to the outstretched arms, the breadth will be found to be the same as the height, as in the case of plane surfaces which are completely square.” -Marcus Vitruvius

Throughout the Renaissance, architects, engineers and scholars alike sought to interpret the Vitruvian Man through pictorial representation as shown.

In continuation with the relation between body and architecture, Vitruvius proved to be quite influential in particular to the artists and architects of the Renaissance, including Leon Battista Alberti (1404-72), Leonardo Da Vinci (1452-1519), and Michelangelo (1475-1564). The proportions of the human body
would serve as the ideal model for a building’s composition and proportion well through the Renaissance with influence still in modern architecture today. The perfection of human proportion is emphasized with Leonardo Da Vinci’s famous drawing of the inscription of a circle and a square over a man’s body, the center positioned at the navel. This famous drawing has remained influential and symbolic even through contemporary times as a symbol of man’s harmony and perfection.

In a letter discussing architectural principles, Michelangelo reinforced the idea of bodily proportions. “He called architects ‘figural artists’ because of the way that the symmetry and apertures of buildings imitate the form and orifices of the human body.” Renaissance architects seem to have truly believed that “man is the measure of all things.” Wittkower emphasizes in his book Architectural Principles that this is not evidence of an anthropocentric worldview. “Since man was made in the image of God, so it was believed the proportions exemplified in the human form would reflect a divine and cosmic order.”

Drawings by Francesco di Giorgio illustrate such proportional concepts directly and vividly.

The influence of the body as a system of proportion has continued well into this past century. In 1942 Le Corbusier developed the Modulor-scale, a proportion scale for buildings that was mainly based on human proportions and the golden section. Le Modular, which was realized as a bas-relief on the front of the residential unit in Marseille, also served as the basis for the building’s entire proportion and scale. According to Le Corbusier, Le Modular represented the essence of harmony.

Hence, the great modernist buildings of the International Style were still indebted to the human
body as far as their composition and proportions are concerned. "Modernist design has housed the intellect and the eye, but it has left the body and the other senses, as well as our memories and dreams, homeless."\(^5\) From historical representations of a human based design to contemporary interpretations, the image of body-centered architecture has remained influential although representational. Contemporary engagement with representation of the human body has assumed many different roles including a psychological role with architecture, as initiated by Gestalt psychology, a role of anthropomorphically represented, as seen in the contemporary works of Santiago Calatrava, and a role of sensuous architecture, which focuses on the experiential qualities for the human body.

1.2 Anthropomorphic, Psychological, Sensuous

Just in this past century, as a result of new theories of sense perception, the doors have been opened towards a design more sensitive to the psychological role of architecture, although this example reinstates the emphasis of visual perception.

![Figure 1. 8: Le Corbusier’s Modular system.](image)

![Figure 1. 9: Gestalt study.](image)

Beginning with the Berlin school of Gestalt psychology, theorists were able to demonstrate, "that in fact irrational forces in the act of perceiving reacted on and
transformed the object being perceived. It was the new theoretical information specific to visual perception that greatly influenced the aesthetics of the modern movements. "Perhaps the quick acceptance of experimental findings favoring a geometrical simplicity was symptomatic of an intellectual prejudice within European academies derived from Platonic thought, for it was Plato himself who had exalted the sense of sight above all other bodily senses and who had sought the purest medium for our knowledge of perfect forms."

Current anthropomorphic representations found within the designs of Santiago Calatrava assume explicit design based on the body. Such representation again places emphasis on the visual perception rather than the human physical experience. "More than the other senses, the eye objectifies and masters. It sets at a distance, and maintains that distance. In our culture, the predominance of the look over smell, taste, tough, hearing, has brought about an impoverishment of bodily relations... The moment the look dominates, the body loses its materiality." 

Figure 1. 10: Santiago Calatrava, sketch.

As the role of the human body within architecture has transformed itself through history, the desire to dwell and connect emotionally within space has remained. It is the pursuit of this thesis to explore how the inclusion
of our senses (as opposed to solely bodily representation) in design can effectively create a more emotionally charged space and consequently an emotional connection within architecture. When and how did the emphasis on the duality of mind and body concede towards a more sensual experience?

This architecture of spectacular sensations is quite different than the representational, human-based architecture of Vitruvius. It is evident that historically there are strong associations between the role of architecture and the human body, but it is also evident that this role has remained for the most part representational. Although there is still strong advocacy towards the dualistic approach, where mind and body are separate, in support of a purely visual architecture, there are many examples responding specific to the full body experience of architecture. When and how then did the role of architecture assume more than just anthropomorphic representation? When did the experience of architecture come to be of importance? The next chapter examines the phenomenological approach to architecture, which focuses on the experiential quality.

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1. Marble, Introduction
2. Vitruvius quote from De Architectura, Book III, Chapter 1, p 3 as found at: http://leonardodavinci.stanford.edu
3. Steadman, pp.17-18
4. Rasmussen, p.114
6. Bloomer, p.31
7. Ibid., p.32
8. Marble, Introduction, quote from Luce Irigaray.
Chapter Two: Phenomenological Interpretation

2.1 Study of Lived Experience

The importance of examining the body and the experience of the body in space has been interpreted through phenomenology. Phenomenology is the most influential and applicable approach to architecture in response to the nourishment of ‘bodily relations.’ Phenomenology is the interpretive study of human experience. This approach examines and clarifies human situations, events, meanings, and experiences. The intention of the phenomenological research method is to, "study the meanings of human experiences in situations, as they spontaneously occur in the course of daily life." The emphasis, according to Rolf van Eckartsberg, "is on the study of lived experience, on how we read, enact, and understand our life-involvements."

The purpose of an existential phenomenological approach, which developed from phenomenology as applied to the human consciousness and incorporated a method of lived experience, or existentialism, is to examine the essential nature of human experience and existence. Of importance is the key phenomenological notion of intentionality- the fact that all human impulses and actions do not exist unto themselves but are directed towards something and have an object.
The starting point within phenomenology then is the “arena of everyday life experience and action.” Edmund Husserl (1859-1938), the originator of philosophical phenomenology, articulated the metaphor of life-world. “The life-world is the locus of interaction between ourselves and our perceptual environments and the world of experienced horizons within which we meaningfully dwell together. It is the world as we find it, prior to any explicit theoretical conceptions.” A phenomenological approach then, “works to unmask the life-world’s concealment, bringing its aspects and qualities to scholarly attention.” Themes of investigation by architects with respect to the life-world include the sense of place, at-homeness, environmental experience and behavior. According to David Seamon, two key phenomenological notions are outside and inside, which are, “significant because they set up an immediate relationship of fusion between person and world.”

The central aim of a phenomenological approach is to explore and to interpret the mutual relationship between the material world and quality of human life through examining behavior, experience, and meaning in a descriptive, interpretive manner as they happen in their everydayness. One example of the relationship between behavior, experience and meaning can be seen through a comparison of the smell of fresh pastries. To an individual, this may cue childhood memories of family rituals, lending coherence to the overall experience. To that individual, the behavior of smell triggered the experiential memories, which placed value or meaning on the situation.

### 2.2 First-Person, Existential, Hermeneutic

“Through a change in perspective- the phenomenological reduction as it is sometimes called-
the phenomenologist works to circumvent the taken-for-grantedness of the natural attitude and bring to the lifeworld a directed, sympathetic attention. The process requires the phenomenologist to take an approach, which is open and unprejudiced—called phenomenological intuiting. Through intuiting, "the researcher’s personal efforts, experiences, and insights are the central means for examining the phenomenon under study and arriving at moments of disclosure whereby the phenomenon reveals something about itself in a new or fuller way." A phenomenologist attempts to meet the phenomenon in an unprejudiced way, so that the topic can present itself and be accurately described and understood.

As defined by phenomenological psychologist Rolf van Eckartsberg, of the Duquesne School of Phenomenological Psychology, there are two general methodologies in approach to phenomenological research, which are existential and hermeneutic. The third methodology as described by David Seamon is called first-person. These three methodologies differ in the proximity of the researcher to the experience of study but maintain the goal of revealing the phenomenon through direct involvement and understanding. While distinct in the proximity, these three approaches are often used in combination as well.

The first-person approach, as designated by Seamon, is the most personal approach. It is where the researcher uses his or her "firsthand experience of the phenomenon as a basis for examining its specific characteristics and qualities." The researcher can approach the phenomenon through his or her own lived experience. This method can offer valuable insight otherwise never attained. The first-person approach can also be used as a starting point for a researcher as a revealer of biases. When interpreting
a phenomenon it is important that these biases and the personal approach be understood and respected.

The existential approach is then the interpretation and study of another individual’s or group’s account of the phenomenon of study. "The basis for generalization in existential-phenomenological research is the specific experiences of specific individuals and groups involved in actual situations and places." The assumption is then that the individual descriptive accounts reveal their own behavior if left “spontaneous” and unbiased. The organization of such inquiry will reveal itself. According to van Eckartsberg, the heart of the approach is, "the analysis of protocol data provided by research (respondents) in response to a question posed by the researcher that pinpoints and guides their recall and reflection." The hermeneutic approach to phenomenology is an interpretation of material in an attempt to uncover meaning. According to Seamon, the point of hermeneutics is that, "the creator of the text is not typically available to comment on its making or significance, thus the hermeneutic researcher must find ways to discover meanings through the text itself." Von Eckartsberg describes the hermeneutical process as, "One embeds oneself in the process of getting involved in the text, one begins to discern configurations of meaning, of parts and wholes and their interrelationships, one receives certain messages and glimpses of an unfolding development that beckons to be articulated and related to the total fabric of meaning. The hermeneutic approach seems to palpate its object and to make room for that object to reveal itself to our gaze and ears, to speak its own story into our understanding." Of importance to the hermeneutical approach is the realization that there are many ways to interpret texts, interpretation is thus always underway.
2.3 The Experience of Architecture

Based then on theoretical assertions of Edmund Husserl, Martin Heidegger argued that, "the alienation of contemporary existence was based on the separation of thought from ‘Being’, a condition epitomized by the privileging of technology and calculative thinking in the modern world.” Heidegger, along with the assertions of Maurice Merleau-Ponty, reinterpreted the separation of mind and body, which had assumed most Western philosophy and psychology, towards Daesin, or being-in-the-world. Consciousness, according to Heidegger, is not separate from the world and human existence. In an architectural sense, it is Heidegger’s notion of dwelling, a notion that is the existential core of being in the world, a notion where architecture, “becomes a setting into work of ‘truth’, and a means of making the ‘world’ visible.” It is from such bases that a phenomenology of architecture has developed.

Architectural theorist Christian Norberg-Schulz is intimately tied to the notion of a phenomenology of architecture. He wrote of phenomenology as a response to the scientific and analytical approach, abstracting the everyday life-world. He argues the importance of a phenomenological approach in order to, “make the environment meaningful through the creation of specific places.” Of particular interest is Norberg-Schulz’s approach towards a phenomenology, which engages the site and tectonics. According to Kate Nesbitt, because of this engagement, phenomenology has “led to a renewed interest in the sensuous qualities of materials, light, and color, and in the symbolic, tactile significance of the joint.” These aspects, she offers, “contribute to the poetic quality that Heidegger says is essential to dwelling.”
Kate Nesbitt summarizes the phenomenological position asserted by Juhani Pallasmaa in *The Geometry of Feeling: A Look at the Phenomenology of Architecture*, by stating, “Meaning in architecture... depends on its ability to symbolize human existence or presence, and as modern architects appear to have overlooked, on the spatial experience of the work.” According to Pallasmaa, “The phenomenology of architecture is thus ‘looking at’ architecture from within the consciousness experiencing it, through architectural feeling in contrast to analysis of the physical proportions and properties of the building or a stylistic frame of reference. The phenomenology of architecture seeks the inner language of building.”\(^{19}\) It is through the awakening of the imagination, as so many phenomenologists assert, that the quality of architecture lies, as opposed to a realistic sense. Emotive power in the words of Pallasmaa, “lie in the phenomenologically authentic feelings true to architecture.”\(^{20}\)

It is through the phenomenology of architecture, then, that we precede. Towards architecture of experience rather than representation, it is a vehicle through which the duality of mind and body concedes and importance is placed on the elements of *being-in-the-world*. It is through the sensuality of design and poetic verses where authentic architecture lies.
2.4 Place and Placelessness

In *Place and Placelessness* (1976), Edward Relph focuses on the diversity and intensity of our experiences of place. "Perhaps the most successful attempt," according to David Seamon in response to *Place and Placelessness*, "by a social scientist to reinterpret the person-environment relationship phenomenologically is Relph’s effort to establish a phenomenology of place."

In defining place, Relph begins with the human experience as the foundation, defining places experientially as, "fusions of human and natural order," and then continues, "(places) are the significant centres of our immediate experiences of the world."

The core of Relph’s definition of place rests in the inside-outsideness continuum. "It is possible to distinguish several levels of experience of the insideness of places, and it is perhaps these that
tell us most about the nature of the phenomenon of place. Relph continues, "At the deepest levels, there is an unselfconscious, perhaps even subconscious, association with place." It is insideness, Relph demonstrates, that transforms space into place and sustains the deepest sense of dwelling.

In the words of Seamon, "Relph argues that the relationship between insideness and its experiential opposite, outsideness, is a fundamental dialectic of human environmental experience and behavior. Through different degrees of insideness and outsideness, different places take on different identities for different people, and human experiences take on different qualities of meaning and feeling."

The following part of this section shall describe in greater depth the inside-outsideness continuum defined by Relph.

"The essence of place lies not so much in these (geographies, landscapes, cities and homes) as in the experience of an 'inside' that is distinct from an 'outside'; more than anything else, this is what sets places apart in space and defines a particular system of physical features, activities, and meanings. To be inside a place is to belong to it and to identify with it, and the more profoundly inside you are the stronger is this identity with the place. Relph describes the inside-outside relationship as a 'basic dualism.' This 'basic dualism' is the difference between "safety and danger, cosmos and chaos, enclosure and exposure, or simply here and there." Because, "we are always at the centre of our perceptual space and hence in a place," Relph considers an egocentric structuring of personal space. "As our intentions vary, so the boundary between inside and outside moves." It is at this point where
similarity is drawn between the dialectic intimacy of outside and inside as defined by Gaston Bachelard. In *The Poetics of Space*, the chapter “The Dialectics of Outside and Inside,” Bachelard takes a metaphysical look at how the geometrical opposition of inside and outside shapes and restricts our experience of place. “Outside and inside form a dialectic of division, the obvious geometry of which blinds us as soon as we bring it into play in metaphorical domains. It has the sharpness of the dialectics of yes and no, which decides everything. Unless one is careful, it is made into a basis of images that govern all thoughts of positive and negative.”

Relph reinforces Bachelard’s concepts of the reversible and delicate relationship between inside and outside. It is then the fading between a defined inside and outside where Relph introduces defined levels of “intensity with which we experience outsideness and insideness.” The levels of intensity are existential outsideness, objective outsideness, incidental outsideness, vicarious insideness, behavioral insideness, empathetic insideness, and existential insideness. The levels vary from complete alienation from all places to a “complete and unselfconscious commitment to a place.” In the words of other phenomenologist, the descriptions vary from homelessness to at-homeness.

“In existential outsideness all places assume the same meaningless identity and are distinguishable only by their superficial qualities.” Existential outsideness involves a self-conscious detachment from the surround. Places become a background, beyond care of periphery, into a state of void. It is this relationship of alienation that characterizes homelessness.

Objective outsideness is a, “deliberately adopted intellectual attitude,” which describes places as,
"spaces where objects and activities are located." This type of involvement, which is similarly assumed in academic geography, self-consciously creates distance from the place in order to perceive systematically. The place becomes objects “having certain attributes, within systems of locations.” The person does not attain any relationship with the place. Instead, they exist in separate domains.

Incidental outsideness, “describes a largely unselfconscious attitude in which places are experienced as little more than the background or setting for activities and are quite incidental to those activities.” As a visitor, it is part of everyone’s experience that the activity “overshadows where we are doing it.” Places exist in the periphery, but attain no conceptual response. It is a part of the activity, but of no attributable forces.

Vicarious insideness remains a secondhand experience. It is the level of insideness without actually being in the place, although it retains a, “deeply felt involvement.” As quoted by Relph, David McCord writes, “Poets, painters, and musicians sometimes choose to live, and strictly operate, within a very special world defined by very special boundaries self-imposed. They do not set out to discover these worlds: they appear to be born within them… When we read, inspect, or listen to their work we enter into their domain…” We make internal this secondhand experience. The level of involvement is made personal without direct experience.

Behavioral insideness involves the realization of being in a place and absorbing its characteristics. “…It is the patterns, structures and content of this inside that tell us we are here rather than somewhere else.” Through observation, the place is seen as, “a set of objects, views, and activities.” It is through a direct association
with this place that the items are given significance and experiences are articulated.

One more level beyond is empathetic insideness. The transition from behavioral insideness to empathetic insideness, “demands a willingness to be open to significances of a place, to feel it, to know and respect its symbols.” The step between behavioral and empathetic insideness, as Relph asserts is the difference between looking and seeing. The former involves “appreciating the essential elements of its identity.” It is a “fading from the concern with the qualities of appearance to emotional and empathetic involvement in a place.” Empathetic insideness allows for an identity with the place, involving one’s own experiences and associations as well as the associations held already by such a place.

Beyond empathetic insideness is existential insideness. “The most fundamental form of insideness is that in which a place is experienced without deliberate and selfconscious reflection yet is full with significance.” Existential insideness involves a deep form of identity with the place, most common and most easily identified with home. It is the place of sincere bond, where the place is a part of the person, the person a part of that place.

Assuming an effort of perception, one can reach a certain level of connection with the environment. By extending through a level of incidental outsideness into behavioral insideness and perhaps reaching the level of empathetic insideness, concern fades from the qualities of a space to an emotional and empathetic involvement. Through what intentions then, can we transform an architectural experience into an emotional experience of architecture? The next section of the thesis aims to gain insight into the theoretical world of emotion in order to proceed towards the
contemporary phenomenological investigations of architecture. The objective is to provide insight into the design of space that reaches beyond the level of incidental outsideness into empathetic insideness.

1 Eckartsberg, p. 3
2 Ibid.
3 Seamon (2000), 3.1
4 Eckartsberg, p. 4
5 Ibid.
7 Ibid.
8 Seamon (2000), 3.2.1 (reference from Spiegelberg, 1982, pp.118-123)
9 Ibid., 3.2.1
10 Ibid., 4.1
11 Ibid., 4.2
12 Ibid., 4.2 (quoted from van Eckartsberg, 1998, p.21)
13 Ibid., 4.3
14 Ibid., 4.2 (quoted from van Eckartsberg, 1998, p.50)
15 Leach, p.98
16 Ibid.
17 Nesbitt, p.412
18 Ibid., p.413
19 Pallasmaa (1986), p.448
20 Ibid., p.449
21 Seamon (1982), p.132
22 Seamon (1982), p.132, excerpt from Relph, p.141
23 Relph, p.142
24 Ibid.
25 Seamon (1982), p.133
26 Relph, p.49
27 Ibid.
28 Ibid., p.50
29 Bachelard, p.211
30 Relph, p.50
31 Ibid.
32 Relph, Reference and quotations regarding levels of outsideness-insideness can be found on pp.51-55
Chapter Three:
Emotions

3.1 Complex, Episodic, Dynamic, Structured

Trying to define emotion is not an easy task. In fact, psychologists, philosophers, and researchers have all attempted to create and agree upon an exact definition of emotion. The definition of emotion refers to a feeling state involving thoughts, physiological changes, and an outward expression or behavior. The process and relationship between these elements is of debate among theorists. "The only common ground among a myriad of writers is the conclusion that emotion is not easy to define."\(^1\)

By the end of the 19\(^{th}\) century, emotion was identified as differing from cognition (reasoning) and volition (willing). Presently, according to Douglas Candland, we retain this analysis in our conception of emotion, "Emotion is commonly thought to be the obverse of reason, a separate faculty, usually one to be guarded lest it interfere with the rational aspects of the mind and thereby subvert motivation or values."\(^2\)

Contemporary definitions of emotion include that given by Kleinginna and Kleinginna (1981) in an effort to provide a comprehensive, inclusive definition of emotion:
Emotion is a complex set of interactions among subjective and objective factors, mediated by neural/hormonal systems, which can:

- Give rise to affective experiences such as feelings of arousal, pleasure/displeasure
- Generate cognitive processes such as emotionally relevant perceptual effects, appraisals, labeling processes
- Activate widespread physiological adjustments to the arousing conditions
- Lead to behavior that is often, but not always, expressive, goal directed and adaptive

Although there is no single definition of emotion, as described by Peter Goldie, an emotion is typically complex, episodic, dynamic, and structured. "An emotion is complex in that it will typically involve many different elements: it involves episodes of emotional experience, including perceptions, thoughts, and feelings of various kinds, and bodily changes of various kinds; and it involves dispositions, including dispositions to experience further emotional episodes, to have further thoughts and feelings, and to behave in certain ways. Emotions are episodic and dynamic, in that, over time, the elements come and go, and wax and wane, depending on all sorts of factors, including the way in which the episodes and dispositions interweave and interact with each other and with other aspects of the person's life. And an emotion is structured in that it constitutes part of a narrative-roughly, an unfolding sequence of actions and events, thoughts and feelings- in which the emotion itself is embedded." To summarize Goldie's explanation, emotions are complex in the number of elements, which must be choreographed, episodic and dynamic because emotions come and go with varying degrees of temporality, and also typically structured as part of a narrative, part of a sequence of dependent events.
Another approach to understanding the definition of emotion is to discriminate between the similar concepts of motivation, affect and mood. To explain the difference between emotion and motivation, it is suggested that emotions are a series of reactions to a situation, an external situation, while motivation is an internal, action-oriented function. The difference between emotion and affect is less clear, and as explained by Joseph Fell, if the intensity is mild, it is considered to be an affect, if the stimulus is intense, then it is an emotion. Fell describes the difference between mood and emotion as the former having a longer span and a vague source of cause, while emotion has a short-term effect and a more identifiable cause.

Because the meanings of the term emotion continue to evolve, Candland suggests that, “it is of little concern how we define emotions,” rather he suggests, “what is important... is to determine the logical structures given emotion in theory.” In relation to an emotional response and for the purposes of this thesis, it will be assumed that the definition of emotion is flexible.

3.2 Action and Experience Theories

The study of emotion can be traced from early developments inspired by Aristotle to a wealth of approaches in the last century, including biological, behavioral, and cognitive approaches. Common themes between these varying historical and contemporary theories include the, "belief that emotion is a system which affects and is affected by other systems.” As well, common conceptualizations include elements of intensity, arousal and cognition. Diagrammed below are five theoretical explanations of why we experience emotion.
James-Lange Theory:

EVENT → AROUSAL → INTERPRETATION → EMOTION

Cannon-Bard Theory:

EVENT → EMOTION

EVENT → AROUSAL

Schaster-Singer Theory:

EVENT → AROUSAL → REASONING → EMOTION

Lazarus Theory:

EVENT → THOUGHT → EMOTION

EVENT → AROUSAL

Facial Feedback Theory:

EVENT → FACIAL CHANGES → EMOTION

Similarities between the sequences are (1) that the emotion begins with perception or an event and (2) that emotion resides in the cognitive state. Differences exemplify two views, the centralist and the peripheralist view. The centralist approach recognizes cognition as a filter of perception, selecting the sequential behavior. The peripheralist view relies on peripheral receptors of behavior that lead to cognition. The following two diagrams represent such sequences:

Centralist view:

PERCEPTION → COGNITION → AROUSAL STATE

Peripheralist view:

PERCEPTION → AROUSAL STATE → COGNITION
As seen in the diagrams above, consciousness serves as a boundary between stimulation from the external worlds and the internal body world. Emotions are a part of consciousness and reflect the complex interaction of mind and body. Psychologists have always disagreed about how the mind and body interact—so a unified theory of emotions remains unstated. Instead, the theories of mind, body and emotion can be differentiated as action and experience theories. Action theories focus on the adaptive and purposive mind. These include centralism, behaviorism, and cognitivism. With a focus on the mind, the feelings are the shadows of cognition. Experience theories focus on bodily reactions to social meanings. These include peripheralism, psychodynamics, and phenomenology/existentialism. With a focus on the body, the cognitions serve as a context for emotions.\textsuperscript{8}

Now, with a focus towards emotion within the design field, questions arise such as:

\textit{Do the ideas direct bodily activity and do cognitions govern feelings?}

\textit{Does the body awaken the mind to memories and symbolically meaningful experiences?}

In this thesis, it is through phenomenology that we explore the emotional experience of architecture. Therefore the focus is on the bodily experience. The emotional state is the interaction of mind and body as a result of arousal. As Heidegger based consciousness on actual human experience rather than pure cerebral consciousness, the emotions are then directly reflective of human experience and therefore mind body interaction.
Chapter Four:
Architecture and Experience

Perspectives

The perspective of emotional theories and history has led us to the question, how does the body awaken the mind to memories and symbolically meaningful experiences? What are these implications in architecture? This section will focus on the perspectives of three architects, Juhani Pallasmaa, Steven Holl and Peter Zumthor. These theorists and architects approach architecture from the consciousness of feeling it, or through the experiential qualities, which help define phenomenology. The focus is on the human body, not as a source for representation, but rather, as an experience of the human body in a spatial environment. It is through this analysis that the thesis will gain insight for application to the design case study investigation of a Center for Well-Being.
4.1 Peter Zumthor

Swiss architect, Peter Zumthor approaches architecture from a unique source that is solely his, a unique source that is constantly morphing, constantly fluctuating- this unique source is his own experience. Although it is an obvious statement, the realization is overlooked. It is through his own experiences that he is able to think forward, towards experiences in spaces, yet concrete. We all have acquired such experiences. “…I frequently find myself sinking into old, half-forgotten memories, and then I try to recollect what the remembered architectural situation was really like, what it had meant to me at the time, and I try to think how it could help me now to revive that vibrant atmosphere pervaded by the simple presence of things, in which everything had its own specific place and form.”

Zumthor focuses on the ‘primary experiences’ of architecture. The body and mind are in a constant dialogue with the surrounding materials, a dialogue that communicates memories, passing time, and ambitions. Zumthor is concerned with not the form, not the techniques, not the specific materials, but rather with the perception of the form, the perception of the details, and the perception of the materials. The “poetic quality” comes from the ability of the architect to create a “meaningful situation for (the materials)… since materials in themselves are not poetic.”
Evidence of Zumthor’s approach can be seen in the Thermal Baths in Vals, Switzerland. The bath, in the words of Zumthor, “relies on the silent, primary experiences of bathing, cleansing oneself, relaxing in the water; on the body’s contact with water at different temperatures and in different kinds of spaces; on touching stone.”\(^3\) The project focuses on the subject’s perspective as they transition through the space; the touch of the stone, the coolness of the cavernous earth, the sequence of spaces, the chance meander, the light caught in the instance. The ‘stillness’ allows the perspective moments of realization. Essential to the architecture of Peter Zumthor is the inclusion of a silence, “which allows people to inhabit space in an undisturbed way.”\(^4\) Relationships are formed between the user and the architecture, the site and the material, the material and the connections. The relationships are based on the implication as recalled by Heidegger that “the process of thinking is never really abstracted but is connected to things.”\(^5\)

The essence of the project at Vals resides in its materials. The local stone was replaced within the earth in cavernous configurations. The companion material, water, runs delicately through the spaces reinforcing the stone’s firm, static role in the space.
The materials serve to “mediate” between purpose and site, while establishing subtle temporal qualities. The space waits for the “actuality of its everyday performance.”

### 4.2 Juhani Pallasmaa

“...The task of art and architecture in general is to reconstruct the experience of an undifferentiated interior world, in which we are not mere spectators, but to which we inseparably belong.” –Juhani Pallasmaa

Finnish architect and theorist, Juhani Pallasmaa, establishes a phenomenological position in his writing towards an architecture of human existence and an architecture of spatial experience. Pallasmaa makes a point of the visual history and capabilities within architecture, arguing towards the significance of a haptic, sensuous architecture. Within a sensuous architecture, experience is magnified. Pallasmaa argues, “as a consequence of the power of the eye over the other sensory realms, architecture has turned into an art form of instant visual image... our buildings have lost their opacity and depth, sensory invitation and discovery, mystery and shadow.”

Pallasmaa describes many attributes to an architecture of existential and experiential qualities: multi-sensory experience, material poetics, and fragility. These qualities create an experience not based on aesthetic and proportion but on the human perception.
Multi-sensory architecture developed in addition to the visual dominance throughout architectural history. Drawing much theoretical discussion from Merleau-Ponty, Pallasmaa explores the extension of the senses into the architectural experience in order to enhance the experience. “Tactile sensibility replaces distancing visual imagery by enhanced materiality, nearness and intimacy.” An aesthetic based on visual proportions and beauty creates an experiential void. Haptic architecture on the other hand creates an intimacy with the observer by stimulating the senses through sight, touch, taste, smell and sound. This stimulation allows the observers to situate themselves in the center, to make the experience first-hand, to
appreciate and comprehend “gradually as images of the body and the skin.”

Another modifier of experience in architecture is the narrative of the material. Pallasmaa opposes modernist traditions of flatness, immaterial abstractness, timelessness and universality in favor of an architecture of weather, decay, vulnerability, and unconscious images. Pallasmaa references Gaston Bachelard in a distinction between formal and material imagination, the latter creating more profound experiences than the images of form. "Matter evokes unconscious images and emotions... Vision places us in the present tense, whereas haptic experience evokes the experience of a temporal continuum." It is the reality of the experience in which individuals attach themselves. With perfection and detachment of materials from this reality, individuals cease to be vulnerable within the experience of the space. The human needs to experience and read the time of the architecture according to Pallasmaa.

Lastly, Pallasmaa discusses the experiential quality of a ‘fragile’ architecture. This is an architecture that allows the interaction of a user with the space. "The architecture of weak image is contextual and responsive... it is concerned with real sensory interaction instead of idealized and conceptual manifestations." This architecture reacts against the aggressive design in support of an accepting and tangible experience. The experience transitions from spectacle to engagement. It is within this weak architecture that Pallasmaa describes where an architecture can find an emotional and expressive range.
4.3 Steven Holl

"The challenge for architecture is to stimulate both inner and outer perception; to heighten phenomenal experience while simultaneously expressing meaning; and to develop this duality in response to the particularities of site and circumstance."  
Architecture, according to Steven Holl, can be understood as a series of partial experiences. In many of his essays, including the essay on Phenomenal Zones, Holl explores these partial experiences, which correspond to the perceptual phenomena of the senses. Dimensions of his exploration of perception include the ‘unmeshed experience,’ color, light, sound, time, detail and proportion.

Concerning the unmeshed experience, Holl describes it as the merging of object and field. "Beyond the physicality of architectural objects and the necessities of programmatic content, unmeshed experience is not merely a place of events, things, and activities, but a more tangible condition that emerges from the continuous unfolding of overlapping spaces, materials, and detail."  
Argued to be a critical element in architecture, the elements of space, light, color,
geometry, detail, and material constitute this “experiential continuum.” It is within this merged field that contains the geometries, activities and sensations of architecture.

Of importance to Holl’s approach is the sensuous experience of architecture. “The essences of material, smell, texture, temperature, and touch vitalize everyday existence. Phenomenology is a discipline that puts essences into experience. The complete perception of architecture depends on the material and detail of the haptic realm, as the taste of a meal depends on the flavors of its ingredients.”\textsuperscript{14} Similar to Pallasmaa, Holl is concerned with the haptic experience. "As a catalyst for change, architecture’s ability to shape our daily experiences in material and detail is subtle yet powerful. When sensory experience is intensified, psychological dimensions are engaged."\textsuperscript{15} Strength of an architectural project lies in the ability to explore the experience and perception of the material and detail.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure4.10.png}
\caption{Addition to the Cranbrook Institute of Science}
\end{figure}

\begin{thebibliography}{99}
\bibitem{1} Zumthor (1998), p.10
\bibitem{2} Ibid., p.11
\bibitem{3} Zumthor (1996), p.10
\bibitem{4} Ibid., p.59
\bibitem{5} Ibid., p.57
\bibitem{6} Ibid., p.6
\bibitem{7} Pallasmaa (1996), p.16
\bibitem{8} Pallasmaa (2000)
\bibitem{9} Ibid.
\bibitem{10} Ibid.
\bibitem{11} Ibid.
\bibitem{12} Holl (1994), p.42
\bibitem{13} Holl (2000) p.56
\bibitem{14} Ibid., p.68
\bibitem{15} Ibid., p.71
\end{thebibliography}
Chapter Five:  
The Emotional Connection

5.1 Articulating the Joint

“The purpose of architecture is to move us. Architectural emotion exists when the work rings within us in tune with a universe whose laws we obey, recognize and respect.” –Le Corbusier

The intimacy of an architectural experience relies on the ability of the architecture to address the mind and body as one. As concern fades from the qualities of a space to an emotional and empathetic involvement, the individual has the capability to achieve a more fulfilling experience. As proposed by this thesis, a phenomenological approach addresses how architecture can awaken the mind to meaningful experiences. What then is the relationship between the theories of emotion, the study of experience and design? Through the theory and practice of the previously identified architects, certain assertions may be hypothesized with respect to the body, emotion, and architecture. These concepts can be understood through first, the perception of the individual participant as it elicits personal sensations and evokes meaningful experiences. Second, the perception of the individual as it provides ideas which direct bodily activity and therefore feelings. Third, the approach to a design based on lived experience as interpreted though behavior, experience and meaning. It is the
synthesis of these assertions providing, that this thesis aims to demonstrate the framework for an emotional experience of architecture. The following section will explore these assertions in the context of the body, emotion and architecture.

5.2 Assertions

The first concept is focused on the perception of the individual participant as it elicits personal sensations and evokes meaningful experiences. According to theories of emotion, *experience theories* focus on the bodily reactions to social meanings. Recalling the following diagram, the peripheral receptors of behavior lead to cognition.

- perception ——>
- arousal state ——>
- cognition

According to Cupchik, this description of the mind-body-emotion theory focuses on the body, where the cognitions serve as a context for emotions. **In this sense, it is the body that awakens the mind to memories and symbolically meaningful experiences.**

By focusing on the experience of the body in space, architecture can awaken the body through sensual qualities, an articulation of the space sensitive to the experience of the individual. This concept emphasizes the sensual qualities of a space, where the individual is aroused and becomes involved in the poetics of the architecture. The potential to engage the individual’s internal world surfaces through design that is focused on an engagement with the body. Holl states, "Architecture, more fully than any other art forms, engages the immediacy of our sensory perceptions. The passage of time; light, shadow and transparency; color phenomena, texture, material and detail all participate in the complete experience of architecture..."
only architecture can simultaneously awaken all the senses- all the complexities of perception."\(^2\)

The second concept is the perception of the individual as the experience provides ideas which direct bodily activity and therefore feelings. It is similar to the first concept in that both rely on the perception of the participant, but differs in the treatment of consciousness as a boundary between stimulation from the external worlds and the internal body world.

According to theories of emotion, action theories focus on the adaptive and purposive mind. Recalling the following diagram, cognition serves as a filter of perception, selecting the sequential behavior.

perception ➔ cognition ➔ arousal state

This focus on the mind leaves feelings as the shadows of cognition. It is the ideas, which direct bodily activity and the cognitions, which govern the feelings.

Architecturally, it is the choreography and layers of dialogue within a structure, specifically the ‘impression’ of the environment that directs the internal body world. It is the difference between an aggressive architecture and a ‘fragile’ architecture; it is the difference between a path and a field; it the difference between a solid surface and a transparent surface; it is the difference between narration and image. This concept relies on the impression of the building as a whole; the architectural poetic and meaning. This concept refers to the perception of the architectural dialogue; the acknowledgement of architectural experiences that allows the user to interact with the surround; the quality that leads the user to a level of vulnerability, capable of response, feeling, and reaction. It is within this process of reasoning and
vulnerability that the line between quality of space and empathetic involvement can be crossed.

Pallasmaa describes this quality as ‘fragile’ architecture and Zumthor describes it as ‘stillness’ in his architecture. One example of this concept is the way Pallasmaa interprets a weakening of the architectural image through the processes of ‘weathering’ and ‘ruination.’ As a result of such a technique, “The language of matter takes over from the visual and formal effect, and the structure attains a heightened intimacy.” Through attaining a heightened intimacy, human vulnerability is present and therefore the ability for an emotional experience. It is through cognitive resolution that the individual is capable of emotional involvement.

The third concept is the approach to a design based on lived experience as interpreted though behavior, experience and meaning. The interpretations of emotional relationships within a designer’s own experience and the study of other’s emotional experiences, which can also be described as a phenomenological reduction, is necessary in the understanding of architectural experience. It is the realization of personal experience as a designer and then the implementation and translation of such mental images that aids the framework of an emotional experience of architecture. This concept, which explores the emotional aspects of the joint between experience and Architecture is the personal vault of the architect. It is the designer who has the capability to explore their personal images, their unique motivations, and the capability to recapture the essence of a distant moment. As explored by Zumthor, Pallasmaa and Holl, the experience of the designer is invaluable when pursuing the line between quality of space and empathetic involvement. It is within each of their writings that one finds indulgence.
into the author’s architectural poetics. Description and essence find companionship with future endeavors.

The three phenomenological methodologies to research can be applied to this concept. The phenomenon of an emotional experience of architecture can be examined through the first-person, existential and hermeneutic approaches. Mostly, the authors described have documented their personal, intuitive, first-hand experiences as the source for insight. Although, as the reader interprets the author’s insights, the research becomes part of an existential approach. Further, hermeneutic interpretation would be drawing conclusions from texts, discerning and discovering meanings. Through a phenomenological approach, meaning and sources for design are uncovered through an understanding of personal intuition, experience of others, and the patterns that such reveal.

In regard to teaching architecture, Peter Zumthor states, “The roots of architectural understanding lie in our architectural experience: our room, our house, our street, our village, our town, our landscape- we experience them all early on, unconsciously, and we subsequently compare them with the countryside, towns and houses that we experience later on.” It is these roots that we have to become consciously aware of as designers. We question how and why these experiences made an impression on us. What these characteristics were like, how they felt, how they sounded. “In order to design, to invent architecture, we must learn to handle (these characteristics) with awareness. This is research; this is the work of remembering.” It is the ‘concrete,’ sensuous quality of our inner image that enables the designer to fulfill the quality of space towards architecture of mind-body involvement.
5.3 The Body, Emotion and Architecture

This last section will focus on the experience of architecture. Arousal, which suggests an interaction of the mind and body and therefore an emotional experience, can result in an architecture that has the ability to ‘move us.’ Although it is clear that all individuals are not likely to experience the same reaction to an environment, there are certain spaces that can connect emotionally with many users. With a focus on the body-mind experience, this last section looks at examples of architecture, which have the ability to create an emotional response. It provides precedents with respect to exemplars of experience rather than representation, emotion rather than techniques, feelings rather than plans. These examples explore the formerly determined concepts. They help establish a framework of design that has the capability to support an emotional experience.

The Jewish Museum, by Daniel Libeskind

![Image: The Jewish Museum, Berlin.](image)

Daniel Libeskind’s extension to the Berlin Museum, in the form of the new Jewish Museum in Berlin both spiritually and physically renders an experience of the persecution and emigration, which are central parts to Jewish history. It is through a full body experience of
memory recall that the designer attempts and succeeds to make an impression. A physical and phenomenological experience, Vidler describes the architecture:

“...When confronted by the withdrawn exteriors and disturbing interiors of the Jewish Museum... we find ourselves in a phenomenological world in which both Heidegger and Sartre would find themselves, if not exactly ‘at home’ (for that was not their preferred place), certainly in bodily and mental crisis, with any trite classical homologies between the body and the building upset by unstable axes, walls and skins torn, ripped and dangerously slashed, rooms empty of content and with uncertain or no exits or entrances. What Heidegger liked to call ‘falling into’ the uncanny, and what for Sartre was the dangerous instrumentality of objects in the world as they threatened the body and its extensions, is for Libeskind the stuff of architectural experience.”

The museum serves not just as a traditional space preserving artifacts within cases, but rather engages the user in an active memory of consciousness. It is through such an experience that the user is left vulnerable to the intimacy of the architecture. The first concept, which emphasizes the body, can be explored through the use of light, material, spatial contraction and expansion, the sharp, inclined forms, and sounds in the Jewish Museum. These elements engage the participant directly in order to evoke personal feelings derived from experience and memory.

Specifically, the use of spatial expansion and contraction elicits emotional emptiness and intimacy respectively. There is an intentional creation of “voids,” or “negative spaces,” which are arranged in a perfect line through out the entire building.
Symbolically, the voids represent the "gap that evolved in German and European culture and history by the destruction of Jewish lives." Through the absence of material, insecurities are aroused. This absence is contrasted to the experience of the angular architecture, which contracts to provide intimate moments.

The second concept, which emphasizes the mind through which emotion is processed, can be explored through the qualities of symbolism and representation within the Jewish Museum. The heterogeneous order, the roses, the fragments, the voids are all elements which stimulate memorial and reflection. It is through a cognitive process that the participant is able to understand and personalize these design implications. The rose arbor for example, has many experiential intentions. "The thorny rose, a symbol of life, can both injure and reconcile. Roses were the only plants permitted in the ancient city of Jerusalem."

Although not visually evident in the museum, according to Bernhard Schneider, Libeskind alluded to a fragmented Star of David in the design of the floor plan. Beyond this representational role of the designer’s intentions, the museum design "blends and distills a number of ideas from earlier, non-architectural projects." One translation of personal theoretical work into the design is manifested in Libeskind’s definition of the line. "In architecture as in life, lines define the relationship between material and immaterial reality. Any two lines on the paper of an architectural plan will shape and delimit the empty space between them, and at the same time configure the solid, impenetrable masses of the projected structure." As interpreted, some insight can be seen into the translation of the designer’s personal experience as a source for emotional intent.
The Blur Building, by Diller + Scofidio

The visual icon is quite unusual. From a distance, the wisp of fog seems to just hover above Lake Neuchetel, like a low cloud caught by the damp surface. The mystery of the Blur radiates while aesthetically it dissolves. The approach is cautious and procedural. Sensations are casually affected. The dampness in the air intensifies and vision becomes hazy. Wetness on your skin is dripping off your fingers. Dark figures lazily move through the fog, impressions close in on your space. You swim through the density, a heavy, rough surface guiding your movements, up and down. Hissing and drops echo around. Conversation comes and goes with the wafts of air. Intimacy closes in.

![The Blur Building](image)

Figure 5.9: The Blur Building

The seduction of this project is based on a sensory experience. Not only are the senses amused, but also the journey is full of exotic rejuvenation, self-awareness, disorientation, re-orientation and sensational intimacy. The immediacy of the architecture commands interaction, leaving the user vulnerable to new perceptions and emotional involvement.

Conceptually, the focus of the project is to engage the individual in a sensory experience. It is an immersion into stimulating experiential qualities of sight, sound, and sensations of the haptic realm. This design
technique addresses the first concept of this thesis. It is the perception of bodily experience and sensation that composes a reaction of feeling. This is emphasized by the full sensory immersion and limitations of sight. The body is made more aware of their senses through such a limitation. “Sensory deprivation stimulates a sensory heightening: the density of air inhaled with every breath, the lowered temperature, the delicate and pervasive sound of water spray, and the scent of atomized lake water all engage the senses.” Ricardo Scofidio goes on to state, “the sensation of emerging through the mist is similar to piercing a cloud layer to the open blue sky when in flight.” This is one translation of perception leading to sensations that awaken the mind.

The choreography of the installation creates a social environment. While sensational qualities are exerted, the cognitive process of perceiving the Blur leads to anticipation, attraction, and avoidance. The second concept of this thesis may be explored through the movement of figures through the fog. It is through the learning process inside of the Blur, where participants explore their own situation from emotional levels of loneliness, intimacy, and inclusion. This emotional relationship is derived from a cognitive process as opposed to the direct body relationship of the former concept.
Another form of emotion as a result of cognition as opposed to bodily experience is translated from the language of the architecture. The mist is ephemeral, a blur floating over the lake. The structure represents vagueness, an obscenity, an unknown, as it contrasts the colorful, plastic, sensual forms on the land. The Blur leads to recognition of its temporal qualities.

The birth of the exposition came from a series of personal associations. As seen in the matrix image, through capturing lived qualities, an intention begins to form. Through then such associations, the design team sought to capture the essence. This concept draws a parallel to design based on experience, or a phenomenological approach. Words that are introduced in this matrix and identifiable in the finished product include round, amoeba-like, soft, organic, amorphous, moments, feeling, intuition, Romeo and Juliet, Marilyn Monroe, game, letting go, hedonism, alcohol, water, whispering, aura, heartbeat, swimming, crawling, and free fall.

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**Figure 5.12: Matrix of Associations**
(actual matrix included all four of the destination arteplages)
The Chapel of Notre-Dame-du-Haut at Ronchamp, by Le Corbusier

The heaviness, the plasticity, the movement. A choreographed gem atop the hill invites the user inside for the spiritual ceremony. An icon of fantastic architecture, the Chapel at Ronchamp inspires, mystifies, and eludes. Through spiritual recognition and the art of procession, the Chapel at Ronchamp captures an intimacy with the visitor that awakes the imagination. The body becomes part of the experience through quality of space; the details, the textures, the light. Awakened into a spiritual atmosphere of delight, the experience creates a connection between physical and inner worlds. Emotion is struck in the intimacy of Ronchamp.

The body perceives the color, weight, sequence, light and textures of the Chapel at Ronchamp. Senses are again stimulated as in the other projects. In an intimate encounter through the engagement of body in experience, the individual situates their feelings in response to personal experience and memories. The soft grass under foot contrasted to the prickly concrete surface creates one of the many moments for the visitor.
The mind stimulates feelings from the spiritual notion incurred by the religious context. The colors evoke images from the stain glass of a cathedral, yet the monochromatic concrete lends to simplicity, allowing the specific moment in the sun to create a vision unique to that moment. Eyes are drawn upwards, towards the floating roof plane, a realization of the spiritual heavens. This is an example of the second concept, a recognition that governs the feelings. In a spiritual context, it is typical to process the meaning before feeling. Because there is a ritual, a procession, a preconceived meaning, the building’s participants derive emotional connection from cognitive interpretation.

The third concept of this thesis can be explored in the design of the Chapel at Ronchamp. In the creation of architecture for an emotional experience, it is necessary to understand as a designer, personal intuition and experiences. In the design of the chapel, Le Corbusier explored his own personal experiences and translated these into qualities found at Ronchamp. Examples of such inspiration include the shape of the towers and the lighting system. On a sketch, Le Corbusier notes, “Light! in 1911(?) I had noticed something like that dug out in a Roman grotto in Tivoli.” He had drawn from his memory, the experience from the Villa Adriana in Tivoli, the quality and technique that had so touched the architect during that travel, and translated that quality towards his own design.

Another example, pointed out by Daniele Pauly’s research, is the inspiration for the chapel roof. Personal to Le Corbusier, he drew the form of the chapel roof from the inspiration he found in a crab’s shell. Termed by Le Corbusier, “à réaction poétique,” the crab shell was a source for creativity and personal
inspiration in his artwork. The shell not only inspired the aesthetic of the roof, but also subsequently inspired the construction of the layered membranes in the roof.

Figure 5.18: The Chapel at Ronchamp

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1 Le Corbusier quote found in Norberg-Schulz (1979)
2 Holl (1994), p.41
3 Zumthor (1998), p.57
4 Ibid., p.58
5 Vidler (2000), p.238
6 Schneider, p.53
7 Ibid., p.40
8 Ibid., p.38
9 Ibid., p.36
10 Le Corbusier quote found in Pauly (1997)
Chapter Six:
Case Study

6.1 Introduction to the Center for Well-Being

To continue the exploration of the emotional connection between experience and Architecture, this thesis will pursue a parallel design case study. The purpose of this case study will be to investigate a framework for an intense and fulfilling emotional experience utilizing architectural poetics. Based on evidence provided in this thesis, the case study will seek to translate the ideas of an emotional experience of architecture through the design of a Center for Well-Being. The intent of this center is to promote the well being of the whole person by empowering people with the knowledge, skills and spirit to take responsibility for personal, family and community health. Almost 10,000 square feet, the program will be adapted from precedent wellness centers, retreats and community centers. The program will include components for information and exploration of knowledge, relaxation and stress management, psychological support, and finally space for inspiration, imagination and optimism. Targeted towards both those fighting an illness and those wanting to prevent illness and increase personal and family health, the Center will provide services such as educational health seminars and resources, movement and exercise programs, and workshops that promote a mind-body connection. As well, there will be an exploration of public-private, an exploration of group activity and personal reflection.
6.2 Thesis and Design Intentions

The thesis intention of the case study derives from the question, how does architecture awaken the body and mind to memories and symbolically meaningful experiences? Specifically, this case study aims to interpret the articulation of the connection between emotion and architecture. As provided in this thesis, the process of design will focus on a phenomenological approach to the relationship between the body, emotion and architecture. Based on the articulation of the designer’s own personal experiences as well as concepts of perception, arousal and cognition of the individual participant, architecture has the ability to respond to emotional well-being. The Architecture shall be derived from an articulation of experiences rather than an articulation of form and concept.

The chosen program of this case study, a center for well being, will provide the opportunity to explore architecture as part of an emotional experience. In particular, the proposed occupant would be vulnerable to an emotional experience. This willing participation is necessary to reach an empathetic involvement with place.

The Center for Well-Being is to provide a retreat like setting for individuals to enrich their lives through seminars and workshops for the betterment of their health as well as their family’s health. The intention of the design is to allow the individual to enter into an emotional and vulnerable state so that they may grow through self-awareness and holistic healing. The facility should provide an environment for the revitalization of the human body and mind. The following intentions shall be addressed in the design of the Center for Well-Being:
1. To elicit self-awareness through an investigation of sensory design. Specifically, to address and utilize materiality and light in an attempt to deepen the visitor’s experience.

2. To create architecture of ‘fragile’ quality so that the experience is essential as opposed to an aggressive architecture.

3. As a designer, to translate personal experience and perception into a design that reveals my personal perspectives and leads to an enriched architecture.

The Center for Well-Being is focused towards the moments where an individual experiences a connection and fulfillment between their mind and physical state. The purpose of the center then is to provide such environments, environments that promote physical awareness and contemplation leading to hopefully an awakening of inner strengths, inner contentment, and inner health. Architectural attributes will promote an experience that addresses and engages the body and mind. The design will engage the senses, promoting participation throughout the site as senses are aroused through smells, sights, sounds, and touch. Attributes such as light, color, and texture respond to the first thesis concept, which is to awaken the body towards meaningful experiences.

A synthesis of sensual and contemplative design will pursue an architecture that is fragile, receptive and non-aggressive. Participation will also be evoked through architectural dialogue and meaning, which addresses the second concept. The architecture will melt into the site, allowing the individual to focus on personal experience rather than built form. The design will promote an inward focus, towards the emotionally intimate space where an individual can indulge spiritually.
Lastly, these heightened senses will be explored through an approach, which incorporates the designer’s personal experience, intuition, and reflection on other’s experiences. This personal approach will reveal a more intimate and reflective design.

The intention of the described approach is to design a spatial environment that is temporal and static, calming and awakening, familiar and unexpected. The environment will elicit emotional responses that are undetermined, yet triggered through the intentional body and mind engagement.

The following narrative explores the experiential qualities that this design will aim to capture.

*I notice the Center as I approach. Impacted by conditions. It stands in nature, monolithic, as if to say, "this is a moment in time." It has a hard surface. A shield is up. To enter is to become passive, vulnerable to its conditions. The approach and identity are scattered with distractions, complementary to the chaotic sphere from which I am departing. My thoughts are entertained; there are options and enticements. Might I take a path elsewhere? I see activity inside."

*Upon entry, the forms begin to break down in scale. The aggressive monolith begins to accommodate me. It is not an open space, but rather the perspective is distorted. Other forms block my view. There are echoes. The lights reflect and there is much movement. It is like a murky pool. I must swim through the forms to catch air."

*The distortion fades. The sounds soften. The materials disintegrate. My perspective opens up. I see my shadow. I am guided now through a space, which begins to conform to my scale. The surfaces want to be touched. The soft glow eases my rush and
time begins to slow down. Silence creeps in. I feel alone. I notice my body in space.

I approach an opening. Looking through, I see the world, but do not hear it. I am completely removed. I enter further into the building. I am floating. Nothing can distract me. I have complete control of my limbs. They relax, joint and muscle at a time. I find a level of inner strength and must take this back with me. I know what I can do with it.

Leaving, the beauty and the dizziness of the space affect me. At once it was chaotic, my soothed mind and body now see it as simply dancing, an exciting choreography that seems to barely quench the thirst. I take with me this renewed sense.
6.3 Client and Occupant Description

The Center for Well-Being will be a facility dedicated to the emotional well-being of individuals. Through various backgrounds, individuals will visit The Center in search of information, relaxation, and a reconnection between body and mind. With intent to promote the well-being of the whole person by empowering people with the knowledge, skills and spirit to take responsibility for personal, family and community health, the center will serve the community through the sponsorship of dedicated, local health professionals as well as local holistic support organizations.

The primary users will be both individuals with an illness and individuals simply pursuing a healthier lifestyle. The intention is that individuals utilize the facility to learn new skills for the betterment of their health and self-rejuvenation. The goal is to have visitors take away with them a renewed sense of being as well as knowledge to better their own lives and those of their friends and family. Commuting to the Center for Well-Being from the surrounding Cincinnati suburbs, the typical visitor will arrive via personal automobile. Daytime visitors include senior citizens, professionals breaking from their workday, adults with non-traditional work hours and young adults from local schools. Evening hours accommodate the majority of the visitors. The Center is also open on Saturday, which welcomes a mix of visitors, including families, partners, professionals, senior citizens, and young adults.

There are several different motivations for visiting the Center for Well-Being. First, the Center holds regular workshop sessions, run by local health enthusiasts, which consist of movement and exercise programs. There are a variety of types of movement programs, including sessions of basic stretching techniques,
movement techniques for certain disabilities, different types of yoga, trends in aerobic exercise, breathing classes, stretching and exercise for pregnancy, and movements to reduce stress. The workshops are held on a rotational basis and constantly changing instructors, methods and techniques. The aim of the workshops is education, so that the visitor may practice the techniques after they leave the Center. The purpose is to promote ‘news’ for the body and mind.

The second motivation for these visitors to utilize the Center is the Educational Resource Center (ERC), which consists of conference rooms, meeting rooms, a reference and reading room. The ERC is an area where professionals have the opportunity to hold small group information sessions as well as providing space for discussion and support groups. Sample sessions may include ‘Coping with Terminal Illness,’ ‘Caring for Newborns,’ ‘Creating a Healthy Diet,’ ‘Breast Cancer Self-Examinations,’ and ‘What is Diabetes?’ Aside from discussion groups, the reference area provides an extensive source for information regarding health and well-being. Typical visitors have a desire to learn about certain conditions that may be affecting their lives, whether through a family member, friend, affecting them personally, or of mere curiosity.

The third motivation for visiting the Center is for self-rejuvenation. The Center provides opportunities for self-preservation, relaxation, meditation and inspiration through the retreat-like setting, unique meditation niches, promotion of the mind-body connection, and a blend of public and private spaces. Besides from providing group workshops activities and a resource center, the Center is able to provide a setting away from the hectic suburban and urban lifestyles of the modern individual; a setting in which
the individual can find calamity, resolve, inspiration, motivation and their interior energy.

Aside from the visitors to the Center, the occupants would include the staff and the visiting professionals. The staff of the Center for Well-Being would conduct services to accommodate various workshops, schedule events and activities, maintain the facility, and sustain visitor and community relations. Provided for the staff, the Center would include an administrative area. While the staff will conduct daily business through the center, the visiting professionals will run the workshops, seminars, discussions, literature and guidance. The visiting professionals are community and local health figures who wish to participate in the betterment of the community. These professionals have direct involvement with the visitors, providing new opportunities and enrichment. Through coordination of space, materials and equipment with the staff of the Center, the visiting professionals do not have permanent space within the Center, although it does provide a flexible room their breaks and belongings.
6.4 Program Precedents

Almost 10,000 square feet, the program will be adapted from precedent wellness centers, retreats and community centers. The program will include components for information and exploration of knowledge, relaxation and stress management, psychological support, and finally space for inspiration, imagination and optimism. Targeted towards both those fighting an illness and those wanting to prevent illness and increase personal and family health, the Center will provide services such as educational health seminars and resources, movement and exercise programs, and workshops that promote a mind-body connection. As well, there will be an exploration of public-private, an exploration of group activity and personal reflection. This section will look at precedent projects, which approach a similar program.

Located in Center City, Minnesota, the Hazelden Meditation Center was designed by Meyer, Scherer and Rockcastle, Ltd. The project was designed for the Hazelden Foundation, which is a non-profit center for the treatment of addictions. The building's program consisted of a variety of spaces where individuals and groups of up to twelve people can meditate. The generative concept was a slice through the center of a square form, symbolic of the ‘wound of addiction.’ The subsequent gash through the building permitted natural light to diffuse into the space as well as programmatic features of a sculpture garden, composed of stone monoliths. Of sustainable note, the design incorporates diverse non-toxic materials—including New York bluestone, Douglas fir, bamboo flooring, and fabric ceilings—that reinforce the Center's commitment to cleanliness and environmental responsibility.¹
Located in Jemez Springs, NM, The Center of Gravity Foundation Hall was designed by Predock_Frane Architects. The hall serves as the primary teaching and meditation hall for the existing Zen Buddhist Compound. The concept for the design of the facility is derived from a juxtaposition of heaviness and lightness, translated by the contrast of rammed earth and the polycarbonate on timberstrand. The project balances the east and west compositions with a release and cradle opposition read on both the exterior and interior. The project, which allows light to glow through the western facing polycarbonate facade, maintains a presence in the dark while forming character at sunset. An important aspect of the project is the sensitivity of form to site, as well as environmental impact. Both are subtle and responsive to the contextual implications through passive techniques and form.
# 6.5 Program Summary and Space Criteria

## Activity Spaces
- Workshop Studios (3 @ 400 ea): 1200 sf
- Equipment Storage: 200 sf
- Waiting Areas (3 @ 100 ea): 300 sf
- Individual Meditation Niches (10 @ 50 ea): 500 sf
- Changing Rooms (2 @ 250 ea): 500 sf
- Towel Storage: 35 sf
- Laundry: 150 sf

## Educational Resource Center
- Meeting Rooms (4 @ 150 ea): 600 sf
- Conference Room: 250 sf
- Reading Room: 500 sf
- Reference Room: 500 sf

## Common Areas
- Reception/ Lobby: 450 sf
- Public Restrooms (2 @ 300 ea): 600 sf
- Lounge/ Café: 500 sf
- Kitchen: 300 sf

## Administrative Support
- Director’s Office: 200 sf
- Staff Offices (2 @ 150 ea): 300 sf
- Workstations (2 @ 80 ea): 160 sf
- Staff/ Visiting Professional Lounge: 300 sf
- Office storage and machines: 200 sf

Net Area Total: 7745 sf
Grossing Increment @ 30% of Gross Area: 3300 sf

## Gross Area
- Total: 11045 sf

## Outdoor Spaces
- Parking (20 spaces): varies
- Vehicle Drop Off Zone: varies
- Meditation Gardens: varies
Activity Spaces
1 Workshop Studios
2 Equipment Storage
3 Waiting Areas
4 Individual Meditation Niches
5 Changing Rooms
6 Towel Storage
7 Laundry

Educational Resource Center
8 Meeting Rooms
9 Conference Room
10 Reading Room
11 Reference Room

Common Areas
12 Reception/ Lobby
13 Public Restrooms
14 Lounge/ Café
15 Kitchen

Administrative Support
16 Director's Office
17 Staff Offices
18 Workstations
19 Staff/ Visiting Professional Lounge
20 Office storage and machines

Outdoor Spaces
21 Vehicle Drop Off Zone
22 Meditation Gardens

KEY
- Program Spaces, proximity represented by relative distances
- Circulation system
- Direct connection
- General view, preferably to exterior
- Daylight required
- Daylight desired
Activity Spaces

Workshop Studios

Floor Area:
- (3 @ 400 ea) 1200 sf

Activities:
- Various organized classes and workshops such as yoga, meditation, movement and exercise programs.

Occupants:
- Visitors, Visiting Professionals, Staff

Space Adjacency:
- All studios adjacent with ability to create large, single space.
- Adjacent to equipment storage.
- Connected to primary circulation.

Safety and Security:
- N/A

Design Qualities:
- Bright and airy space.
- Uplifting atmosphere with minimal distraction.

Behavioral Qualities:
- Space should be flexible and open for various activities.

Acoustics:
- Should be acoustically separated from other spaces to provide quiet environment.
  - STC Rating 45-55
  - Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting to complement natural light.
- Light level 50 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 68-72 (degrees F)
- Humidity 60 or less (%)
- Air exchanges per hour- 3 (per AIA guidelines)
- Operable windows.
- Ceiling fans for additional air circulation.

Furniture and Equipment:
- Mirrored wall surface.
- Various seating.
• Water fountain.
• Audio equipment.

Special Considerations:
• Flexible, aerobic floor system to provide soft and hard surfaces.

![Figure 6.7](image1)

![Figure 6.8](image2)
Activity Spaces

Equipment Storage

Floor Area:
- 200 sf

Activities:
- Storage of equipment for workshop studio spaces.

Occupants:
- Staff

Space Adjacency:
- Adjacent to workshop studios.

Safety and Security:
- Doors must be lockable.

Design Qualities:
- Flexible space

Behavioral Qualities:
- N/A

Acoustics:
- STC Rating 40-45
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting.
- Light level 50 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 68-72 (degrees F)
- Humidity 60 or less (%)

Furniture and Equipment:
- Shelving system with wall hooks

Special Considerations:
- N/A
Activity Spaces

Waiting Areas

Floor Area:
- (3 @ 100 ea) 300 sf

Activities:
- Waiting space for entry to workshop studios.
- Small group discussion.

Occupants:
- Visitors, Visiting Professionals, Staff

Space Adjacency:
- Adjacent to workshop studios.
- Connected to primary circulation.
- Multiple waiting areas may be combined into one space.

Safety and Security:
- Adequate signage

Design Qualities:
- Support individual and group dynamics.

Behavioral Qualities:
- Space should be flexible yet help control circulation.

Acoustics:
- Should be acoustically separated from workshop studio spaces.
- STC Rating 50-55
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting to complement natural light but not required.
- Light level 40-60 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 72-78 (degrees F)
- Humidity 60 or less (%)

Furniture and Equipment:
- Various seating.

Special Considerations:
- N/A
Activity Spaces

Individual Meditation Niches

Floor Area:
- (10 @ 50 ea) 500 sf

Activities:
- Individual spaces for contemplation, meditation, and reading.

Occupants:
- Visitors

Space Adjacency:
- Connected to primary circulation.

Safety and Security:
- N/A

Design Qualities:
- Intimate space.
- Connection to exterior (view).

Behavioral Qualities:
- Secluded, minimal distraction.

Acoustics:
- Should be acoustically separated from other spaces to provide quiet environment.
- STC Rating 50-55
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting to complement natural light.
- Light level 40-60 (footcandles)

Heating/Cooling/Ventilation:
- Operable windows desired.
- Temperature 72-78 (degrees F)
- Humidity 60 or less (%)

Furniture and Equipment:
- One form of seating.

Special Considerations:
- N/A
Activity Spaces

Changing Rooms

Floor Area:
- (2 @ 250 ea) 500 sf

Activities:
- General preparation for activities.
- Storage of personal belongings.

Occupants:
- Visitors

Space Adjacency:
- Near workshop studios.
- Connected to primary circulation.

Safety and Security:
- N/A

Design Qualities:
- Sense of privacy.

Behavioral Qualities:
- Adequate circulation.

Acoustics:
- Sound transmission minimized.
- STC Rating 45-50
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting (and diffused natural light).
- Light level 50 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 72-78 (degrees F)
- Humidity 60 or less (%)
- Air exchanges per hour- 3 (per AIA guidelines)

Furniture and Equipment:
- Personal lockers.
- Various seating.
- Counter with sink and storage below.

Special Considerations:
- N/A
Activity Spaces

Towel Storage

Floor Area:
- 200 sf

Activities:
- Towel storage for visitors to use during various workshops.

Occupants:
- Staff

Space Adjacency:
- Adjacent to changing rooms.

Safety and Security:
- Doors must be lockable.

Design Qualities:
- N/A

Behavioral Qualities:
- N/A

Acoustics:
- STC Rating 40-45
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting.
- Light level 50 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 68-72 (degrees F)
- Humidity 60 or less (%)

Furniture and Equipment:
- Shelving system

Special Considerations:
- N/A
Activity Spaces

Laundry

Floor Area:
- 200 sf

Activities:
- Laundry room for towel service.

Occupants:
- Staff

Space Adjacency:
- Near towel storage and changing rooms.

Safety and Security:
- Doors must be lockable.

Design Qualities:
- N/A

Behavioral Qualities:
- N/A

Acoustics:
- Minimize sound transmission.
- STC Rating 40-45
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting.
- Light level 50 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 68-72 (degrees F)
- Humidity 60 or less (%)

Furniture and Equipment:
- Shelving system.
- Commercial washer and dryer.
- Basket for soiled towels.
- Cart for clean towels.

Special Considerations:
- N/A
Educational Resource Center

Meeting Rooms

Floor Area:
- (4 @ 150 ea) 600 sf

Activities:
- Small discussion group (2-6 person)

Occupants:
- Visitors, Visiting Professionals, Staff

Space Adjacency:
- Near reference and reading rooms.
- Near primary circulation.

Safety and Security:
- N/A

Design Qualities:
- Unique millwork and seating.
- View to exterior.

Behavioral Qualities:
- Minimal distraction.
- Promote round table discussion.

Acoustics:
- Acoustic separation from other spaces to provide quiet environment.
- STC Rating 50-55
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting to complement natural light.
- Task lighting over work surface.
- Light level 50 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 68-72 (degrees F)
- Humidity 60 or less (%)

Furniture and Equipment:
- Table and seating for 6 persons
- A/V equipment support.
- Storage unit.

Special Considerations:
- N/A
Educational Resource Center

Conference Room

Floor Area:
- 250 sf

Activities:
- Large discussion group (2-16 person)

Occupants:
- Visitors, Visiting Professionals, Staff

Space Adjacency:
- Near reference and reading rooms.
- Connected to primary circulation.

Safety and Security:
- N/A

Design Qualities:
- Unique millwork and seating.
- View to exterior.

Behavioral Qualities:
- Minimal distraction.
- Promote round table discussion.

Acoustics:
- Acoustic separation from other spaces to provide quiet environment.
- STC Rating 50-55
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting to complement natural light.
- Task lighting over work surface.
- Light level 50 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 68-72 (degrees F)
- Humidity 60 or less (%)

Furniture and Equipment:
- Table and seating for 16 persons
- A/V equipment support.
- Storage unit.

Special Considerations:
- Adequate circulation around table.
Educational Resource Center

Reading Room

Floor Area:
- 500 sf

Activities:
- Space for quite reading and conducting research.

Occupants:
- Visitors, Visiting Professionals, Staff

Space Adjacency:
- Near conference and meeting rooms.
- Adjacent to reference room.
- Connected to primary circulation.

Safety and Security:
- Staff desk to control circulation of materials.

Design Qualities:
- Unique millwork
- Bright, well-lit and airy space.
- Provide quiet, intimate, private atmosphere.

Behavioral Qualities:
- Space should be flexible.

Acoustics:
- Acoustic separation from other spaces to provide quiet environment.
- STC Rating 50-55
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting to complement natural light.
- Task lighting on work surfaces.
- Light level 40-60 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 72-78 (degrees F)
- Humidity 60 or less (%)

Furniture and Equipment:
- Various seating.
- Writing surfaces and workstations.

Special Considerations:
- N/A
Educational Resource Center

Reference Room

Floor Area:
- 500 sf

Activities:
- Storage of reference material.

Occupants:
- Visitors, Visiting Professionals, Staff

Space Adjacency:
- Adjacent to reading room.
- Near conference and meeting rooms.
- Near primary circulation.

Safety and Security:
- N/A

Design Qualities:
- Well-lit space.

Behavioral Qualities:
- Flexibility and adequate circulation space.

Acoustics:
- STC Rating 50-55
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting to complement natural light.
- Light level 50 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 68-72 (degrees F)
- Humidity 60 or less (%)

Furniture and Equipment:
- Various seating.
- Shelving.

Special Considerations:
- N/A
Common Areas
Reception/Lobby

Floor Area:
- 450 sf

Activities:
- Greeting and reception.
- Waiting and gathering.
- Registration for visitors.

Occupants:
- Visitors, Visiting Professionals, Staff

Space Adjacency:
- Connected to main entry.
- Connected to primary circulation.

Safety and Security:
- Secure entry.

Design Qualities:
- Space should be flexible and open.
- Bright and airy space.
- Create impression for center.

Behavioral Qualities:
- Adequate circulation.

Acoustics:
- STC Rating 50-55
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting to complement natural light.
- Light level 40-60 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 72-78 (degrees F)
- Humidity 60 or less (%)

Furniture and Equipment:
- Various seating.
- Reception desk with storage.

Special Considerations:
- Materials at entry should be durable and respond to weather conditions.
Common Areas

Public Restrooms

Floor Area:
- (2 @ 300 ea) 600 sf

Activities:
- Small discussion group

Occupants:
- Visitors, Visiting Professionals, Staff

Space Adjacency:
- Connected to primary circulation.

Safety and Security:
- N/A

Design Qualities:
- Sense of privacy.

Behavioral Qualities:
- Adequate circulation.

Acoustics:
- STC Rating 45-50
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting to complement natural light.
- Light level 40-60 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 72-78 (degrees F)
- Humidity 60 or less (%)
- Air exchanges per hour- 3 (per AIA guidelines)

Furniture and Equipment:
- Lavatories
- Countertop
- Adjacent seating
- Toilet Stalls/ Urinals

Special Considerations:
- N/A
Common Areas
Lounge and Cafe

Floor Area:
- 500 sf

Activities:
- Dining, socialization and relaxation.

Occupants:
- Visitors, Visiting Professionals, Staff

Space Adjacency:
- Connected to primary circulation.
- Adjacent to kitchen.

Safety and Security:
- N/A

Design Qualities:
- Space should be flexible and open.
- Bright and airy space.
- Views to exterior.

Behavioral Qualities:
- Adequate circulation between seating.

Acoustics:
- Reduce sound transmission to other spaces.
- STC Rating 50-55
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting to complement natural light.
- Light level 40-60 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 72-78 (degrees F)
- Humidity 60 or less (%)
- Air exchanges per hour- 3 (per AIA guidelines)

Furniture and Equipment:
- Various seating and tables.
- Bar with adequate counter space, storage, p.o.s.
- Recycling/ trash receptacle area.

Special Considerations:
- N/A
Common Areas

Kitchen

Floor Area:
- 300 sf

Activities:
- Food storage and preparation for café.

Occupants:
- Staff

Space Adjacency:
- Connected to Café.
- Connected to primary circulation.

Safety and Security:
- Lockable door.

Design Qualities:
- Exposed to café area.
- Promote sanitary atmosphere.

Behavioral Qualities:
- Adequate circulation between equipment.

Acoustics:
- STC Rating 50-55
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting to complement natural light.
- Light level 40-60 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 72-78 (degrees F)
- Humidity 60 or less (%)
- Air exchanges per hour- 3 (per AIA guidelines)

Furniture and Equipment:
- Industrial size refrigerator- 42”x36”x68”
- 2 stoves- 40”x36”x36”
- Industrial dishwasher- 36”x36”x36”
- Sinks and (1) preparation sink
- Ice machine- 36”x18”x32”
- Prep surfaces
- Storage

Special Considerations:
- Materials chosen for easy maintenance and durability.
Administrative Support

Director's Office

Floor Area:
- 200 sf

Activities:
- General administrative tasks
- Private meetings.

Occupants:
- Director of facility and occasional guest.

Space Adjacency:
- Near primary circulation.
- Near other administrative support areas.

Safety and Security:
- Lockable door.

Design Qualities:
- Unique millwork and seating
- View to exterior and visual connection into center.

Behavioral Qualities:
- Minimal distraction.

Acoustics:
- Acoustic separation from other spaces.
- STC Rating 50-50
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting to complement natural light.
- Task lighting over work surfaces.
- Light level 40-60 (footcandles)

Heating/Cooling/Ventilation:
- Operable windows.
- Temperature 68-72 (degrees F)
- Humidity 60 or less (%)

Furniture and Equipment:
- Desk and chair
- Storage/filing cabinet
- Guest chairs

Special Considerations:
- N/A
Administrative Support

Staff Offices

Floor Area:
• (2 @ 150 ea) 300 sf

Activities:
• General administrative tasks.

Occupants:
• Staff

Space Adjacency:
• Near primary circulation.
• Near other administrative support areas.

Safety and Security:
• Lockable doors.

Design Qualities:
• Unique millwork and seating
• View to exterior.

Behavioral Qualities:
• Minimal distraction.

Acoustics:
• Acoustic separation from other spaces.
• STC Rating 50-50
• Measured Reverberation Time 0.8-1.4 (s)

Illumination:
• Electric lighting to complement natural light.
• Task lighting over work surfaces.
• Light level 40-60 (footcandles)

Heating/Cooling/Ventilation:
• Operable windows.
• Temperature 68-72 (degrees F)
• Humidity 60 or less (%)

Furniture and Equipment:
• Desk and chair
• Storage/filing cabinet
• Guest chairs

Special Considerations:
• N/A
Administrative Support

Workstations

Floor Area:
- (2 @ 80 ea) 160 sf

Activities:
- General administrative tasks.

Occupants:
- Staff

Space Adjacency:
- Near primary circulation.
- Near other administrative support areas.

Safety and Security:
- N/A

Design Qualities:
- Unique millwork and seating
- View to exterior.

Behavioral Qualities:
- Minimal distraction.
- Workstations may be joined, flexibility desired.

Acoustics:
- STC Rating 50-50
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting to complement natural light.
- Task lighting over work surfaces.
- Light level 40-60 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 68-72 (degrees F)
- Humidity 60 or less (%)

Furniture and Equipment:
- Desk and chair
- Storage/filing cabinet

Special Considerations:
- N/A
Administrative Support

Staff and Visiting Professional Lounge

Floor Area:
- 300 sf

Activities:
- General break area.

Occupants:
- Visiting Professionals, Staff

Space Adjacency:
- Adjacent to administrative areas.

Safety and Security:
- N/A

Design Qualities:
- Space should be flexible and open.
- Bright and airy space.

Behavioral Qualities:
- Adequate circulation.

Acoustics:
- STC Rating 50-55
- Measured Reverberation Time 0.8-1.4 (s)

Illumination:
- Electric lighting to complement natural light.
- Task lighting over work surfaces.
- Light level 40-60 (footcandles)

Heating/Cooling/Ventilation:
- Temperature 72-78 (degrees F)
- Humidity 60 or less (%)
- Air exchanges per hour- 3 (per AIA guidelines)

Furniture and Equipment:
- Table and chairs (8 persons) with additional seating.
- Sink with counter.
- Refrigerator
- Dishwasher
- Cabinet storage
- Bulletin Board
- Recycling/ trash receptacle

Special Considerations:
- N/A
Administrative Support
Office Storage and Machines

Floor Area:
• 200 sf

Activities:
• Storing equipment for administrative tasks.

Occupants:
• Staff

Space Adjacency:
• Adjacent to administrative area.

Safety and Security:
• Doors must be lockable.

Design Qualities:
• Flexible space

Behavioral Qualities:
• Adequate circulation around machine and storage.

Acoustics:
• STC Rating 40-45
• Measured Reverberation Time 0.8-1.4 (s)

Illumination:
• Electric lighting.
• Task lighting.
• Light level 50 (footcandles)

Heating/Cooling/Ventilation:
• Temperature 68-72 (degrees F)
• Humidity 60 or less (%)

Furniture and Equipment:
• Shelving system.
• Copier and fax machines.
• Recycling/trash receptacle.

Special Considerations:
• N/A
6.6 Site Description and Analysis

The location for the Center for Well-Being is to be French Park, which is located at the intersection of Section Road and Ridge Road in Amberley Village. This beautiful, 275-acre land sits at the top of the hill, creating an expansive panoramic view of the distant hills of Cincinnati. While the park provides a wealth of natural beauty, it is also private and allows for a buffer from the hectic suburban and city life of Cincinnati, which is perfect for a retreat like setting.

Herbert Greer French originally owned the park, which became property of the City of Cincinnati in 1943. Before then, the park was the site of Edmund Buxton’s home, which curiously enough, was built out of materials, which were all drawn or produced on the site, including the brick used. Before Buxton, John Cleves Symmes, whom bought the land from the U.S. Congress, owned the land. At that time, the land laid along an Indian trail from the Ohio River to a stockade in the hills.3

Much of French Park is heavily wooded, which attracts a variety of woodland neo-tropical migrants. A large
portion of the park also consists of native prairie species as well as grassy areas, which attract grassland-nesting birds. A detailed physical analysis of the site reveals varied topography with water drainage running from the northeast to the southwest corner of the site.

French Park is located at 39°11'54” north latitude and 84°25’23” west longitude. According to Norbert Lechner, this site would be considered in the Climate Region 3, which consists of cold winters and hot summers. The winters are emphasized by the cold winds from the northwest and western direction and a somewhat mild snowfall of 12-60 inches. The

Figure 6.12: French Park site
Summers are characterized by high temperatures accompanied by high humidity and southerly winds. The climatic design priorities of a site in such a climate are:

1. Keep heat in and cold temperatures out in the winter.
2. Protect from the cold winter winds.
3. Let the winter sun in.
4. Keep hot temperatures out during the summer.
5. Protect from the summer sun.
6. Use natural ventilation for summer cooling.

Figure 6.13: French Park site
The part of the site chosen for the Center for Well-Being is located in the cleared, grassy area near the top of the hill. This section was chosen because of the opportunity the view provides, the distance from the water drainage area, the ability to preserve as many existing trees as possible and the opportunity to reuse the existing paved roadway. Above is a diagram of the portion of the site where the Center for Well-Being shall be located. Site opportunities in this area also include utilizing the southern facing slope, incorporating the mature, mostly deciduous forest, and the aesthetic opportunities provided by the prairie grasses, flowers and wildlife.

The site chosen poses many challenges, mainly designing for sloped site. Other site challenges posed by this thesis include utilizing landscape as part of the overall experience and utilizing local materials and passive techniques in an effort to be sensitive to the site.

1 MS&R website- http://www.msrlimited.com
2 Predock_Frane Architects website- http://www.predockfrane.com
3 Cincinnati Parks website- http://www.cincinnati-oh.gov
4 Ibid.
5 Lechner, p.86
Bibliography


