

# **ABSTRACT**

This thesis explores the potentials of multisensorial design through mixture of engagement and attunement by deconstructing Western Colonial design dominance of vision over the other senses and inverting the top-down conventional hierarchy of architectural design. Cultural codes are not tangible or quantifiable even in records or habits; it is a continuous evolution that needs to be implemented in design to allow self-awareness, thorough understanding of the evolution of space and flexibility for the growth of culture.

Our role as creators is to provide authentic responses to people's needs and make them feel the sense of place.

The shift to a more experiential and multisensory encounter in architecture calls for a new design consciousness and methodology. A design that is more inclusive, incremental and promotes continuous exposure to atmosphere.

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# THESIS STATEMENT

Reimagining the *Private Islands* in Hogan's Alley: Deconstructing Western Colonial design dominance of vision and suppression of other senses through multisensorial principles, mixture of engagement and attunement

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# PART I

# THE HOUSE AS A VESSEL FOR CULTURAL HISTORY AND THE SENSES

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In opposition to the commonly accepted dominance of vision in architecture, I wish to argue that multisensorial principles, attunement and mixture of engagements are elemental in order to achieve authentic design responses and a sense of place in the art of building.

The shift of attention from form to experience and from visual impression to multi-sensory and fused encounter also calls for a new design consciousness and methodology. It is evident that, as architects and designers, we need to grasp the essence of the entire human sensory reality and to sensitize ourselves to our neglected and nearly lost senses.1

An interest in the phenomena of atmospheres, ambiences, feelings, moods and attunements, as well as in the understanding of the real multi-sensory and simultaneous nature of perception is emerging.

The aim of this project is to reconnect these disjointed pieces of cultural history by inverting the top-down conventional hierarhy of architectural design and initiating design within the small scale from fundamental architectural elements.

#### THE HEGEMONY OF THE EYE

Since the late eighteenth century, the discipline of architecture has been predominantly taught, theorized, practiced and critiqued as the aestheticized art form of the eye, emphasizing form, geometry and focused Gestalt<sup>2</sup>. This bias, in fact, has its origin with the ancient Greeks. The traditional way of understanding and collecting sensorial information came through the five senses: sight, hearing, touch, taste, smell. These principles all came from Aristotle and like Plato they did not grant them any equality. Of all the senses, Plato accord primacy to sight as the foundation of philosophy. And Aristotle continued this line of thought, regarding sight as the most highly developed senses<sup>3</sup>. Thus sight was granted some degree of validity, primarily on the grounds that it was "enlightening." It is probably for this reason, as well as its obvious utility, that sight became the

dominant sensory modality in Western culture4.

The hegemony of the visual realm really begins in the fifteenth century, when several inventions ensured its dominance. The first is the invention of geometric perspective which sought to render visible, three-dimensional world systematically comprehensible, even measurable, on a two-dimensional plane<sup>5</sup>. The second invention was the development of systematic drawings such as the plan, elevation, and section to render designed space intelligible. What had been the province of the master builder applying a store of knowledge in situ instead became the work of the designer communicating information to construction workers6.

- Ibid. 4
- 5 Ibid.
- Ibid.

CHAPTER 1

Pallasmaa, Juhani and Matteo Zambelli. Inseminations: Seeds for Architectural Thought. Hoboken, NJ: Wiley, 2020, 228.

Pallasmaa, Juhani and Matteo Zambelli. Inseminations: Seeds for Architectural Thought. Hoboken, NJ: Wiley, 2020, 228.

Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 11.

It can be argued that typology itself is simply a manifestation of the centuries-old "hegemony of the eye" that characterizes European cultural history. The effects and influence of architectural typology has become so pervasive that, in one form or another, it continues to shape the buildings we live despite its apparent inadequacies<sup>7</sup>. Joyce Monica Malnar and Frank Vodvarka's view of architectural typology is a construct that in light of particular cultural circumstances generates a concretized architectural model<sup>8</sup>. They believe that such a construct in contrast with its current assumptions and focus on form, is fully sensory.

Additionally, we can also argue that this manifestation of the visual realm through design types leads to an acculturated sensory response that is not confined for different cultures. Walter J. Ong points out that cultures vary greatly in their exploitation of the various senses and in the way in which they relate their conceptual apparatus to the various senses. Therefore, as designers, creating authentic responses that values multisensorial principles through design for different cultures is fundamental.

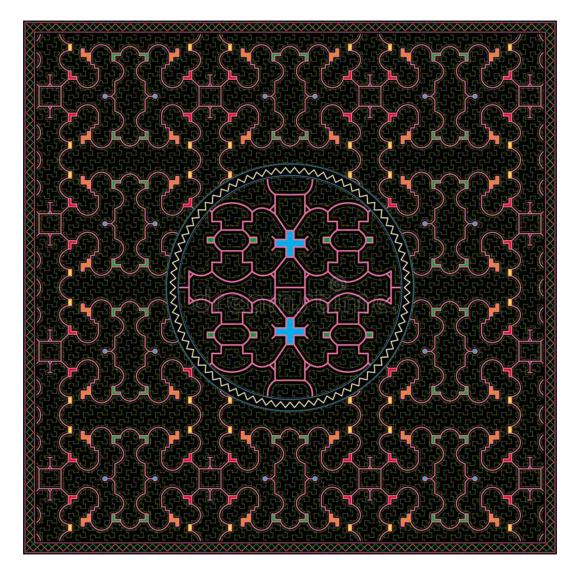


Fig.1 - Geometric dream design of the Shipibo-Conibo

<sup>7</sup> Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 12.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid., 55.

#### ARCHITECTURAL TYPOLOGY

"The type developed according to both needs and aspirations to beauty; a particular type was associated with a form and a way of life, although its specific shape varied widely from society to society. The concept of type thus became the basis of Architecture" 10. The type is the abstract framework of spatial ordering, while the model is the refined spatial form that derives from it<sup>11</sup>.

| Aldo Rossi |

Types are usually so long established that their origins have become obscure. One of Carl Jung's contributions to an understanding of typology was to forward concepts such as collective unconscious, archetype, and symbol. Jung contrasted the notions of personal unconscious, earlier postulated by Sigmund Freud, with the collective unconscious, a deeper layer that does not derive from personal experience and is therefore universal: "In contrast to personal psyche, it has contents and modes of behaviour that are more or less the same everywhere and in all individuals. It is, in other words, identical in all men and thus constitutes a common psychic substrate of a supra personal nature which is present in every one of us"12.

Jung theorized that the collective unconscious connected human beings to their primordial past through its contents, which he designated archetypes<sup>13</sup>. Thus, the term "archetype" designates only those psychic contents which have not yet been submitted to conscious elaboration and are therefore an immediate datum of psychic experience....The archetype is essentially an unconscious content that is altered by becoming conscious and by being perceived, and it takes its color from the individual consciousness in which it happens to appear"<sup>14</sup>.

The archetype, upon entering the conscious mind, assumes an evocative and multifaceted symbolic form. Thus the archetype may be seen as the generator of the type, which in turn produces a situational model.<sup>15</sup> Thus, the symbolic form which can be associated to the needs and aspirations to beauty comes from the collective unconscious that we all share as individuals.

"Archetypes are typical forms of behavior which, once they become conscious, naturally present themselves as ideas and images, like everything that becomes a content of consciousness" 16.

| Carl Jung |



Fig.2 – Bernd Becher, Hilla Becher. Framework Houses, 1959-73.

<sup>10</sup> Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 12.

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

<sup>13</sup> Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 12.

<sup>14</sup> Ibid., 13.

<sup>15</sup> Ibid., 13.

<sup>16</sup> Ibid.

On another note, Jolande Jacobi defines archetype as structural condition of the psyche which can bring forth certain 'patterns'. She further elaborates that these images are not inherited representations, but inherited possibilities of representation<sup>17</sup>. Therefore, It would follow that a major task of the designer is to give perceptible form to the common, elemental patterns that lie within our unconscious, so that the resultant image appears authentic.<sup>18</sup> Bettina L. Knapp refer to this phenomenon:

-The creative artist, architect or writer ushers into existence mirror images of what lies inchoate within his depths. These he develops, molds, extracts from that limitless oceanic sphere existing dynamically and vitally within him which is referred to as the collective unconscious. As the inner eye sweeps into the hidden layers and secret folds of this world inaccessible to consciousness, it seizes universal motifs and cultural manifestations of all sorts, which have been the common heritage of all beings since time immemorial. It is the artist or architect who provides shape, line, and mass to these amorphous images that have been dredged up from subliminal spheres... Whatever the path, the nothingness that existed in the void took on form and became something, definable and electrifying.—

How, then, does archetype become type, a symbolic and evocative image with tangible characteristics? Jacobi explains that it is necessary to "distinguish the archetype of the collective unconscious, which work upon the ego from the depths of the psyche and influence it in the direction of specific human behaviour... from the archetypes of the collective consciousness as representatives of the typical norms, customs, and views prevailing in a particular environment"19. She notes that when the archetype enters consciousness, the raw material of imagery and meaning are added, and thus the symbol is born. It is precisely this symbolic entity born of primordial urge end endowed with cultural values that we refer to as type.

While avoiding any mention of "collective unconscious," Malcom Quantrill is referring to something very like "universal motifs and cultural manifestations" when he notes that architectural form "is capable of connecting us to the deep well of human consciousness, keeping open the channels of historical continuity by the myths, ideas, rituals, and events which it represents"<sup>20</sup>. Type really derives much of its authenticity from its capacity to spiritually, symbolically, and sensually embody these aspects (whether called archetype or human consciousness), and its usefulness for the degree to which it

inspires coherent models<sup>21</sup>. And what may be most important are the ways in which these primordial drives evokes human response, such that the type carries authority. That is, what perceptible form does the type assume in order to be recognized, and in what manner does such recognition necessarily involve our senses?<sup>22</sup>

<sup>17</sup> Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 14.

<sup>18</sup> Ibid.

<sup>19</sup> Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 14.

<sup>20</sup> Ibid.

<sup>21</sup> Ibid.

<sup>22</sup> Ibid.

Malnar and Vodvarka expressed that one's house best captures all the properties of type which is capable of keeping open the channels of historical continuity. Such a concept helps explain the affection for our domiciles, and the emphasis accorded aspects of the house like entries and hearths, which are often considered sacred.<sup>23</sup>

In Carl's Jung autobiography, he had the occasion to explain a dream in which he found himself exploring the interior of a two-story house. The fully sensory character of Jung's perception of his house derives from how these spaces are being from a certain period, what sort of consciously evolved typology informed his perception and those type appear to him? He began his journey on the upper floor and descended through the ground floor to the cellar, finally ending in a cave below the cellar. Each layer reached farther back in time:

— "It was plain to me that the house represented a kind of image of the psyche that is to say, of my then state of consciousness, with hitherto unconscious additions... The deeper I went, the more alien and the darker the scene became. In the cave, I discovered remains of a primitive culture, that is the world of the primitive man within myself."<sup>24</sup>—

He realized that his dream pointed to a cultural history consisting of successive layers of consciousness, thus suggesting an impersonal nature underlying the psyche. These layers he later recognized as forms of instinct, or archetypes.<sup>25</sup>

At each stage of his dream journey, Jung's relies on previous knowledge of architectural types, with their objective attributes, and a range of distinct spatial sensations. In his dream he notes that the upper floor appeared as "a kind of salon with time old pieces in rococo style" or he comments on how it was then that he discovered a "heavy door", behind which lay a stairway leading to an ancient cellar. At each stage of his dream, he refers to previous knowledge of architectural types, with their objectified attributes, and a range of distinct spatial sensations. Therefore, he relied on a "sense of place" in his house paradigm or spatio-sensory construct.<sup>26</sup>

Malnar and Vodvarka suggests that the critical questions for spatial design may thus be: first, how can one elicit those unconscious patterns of the human psyche that proceed from archetypal and personal experience; second, how can they be translated into images (types) that authentically reflect their source; and third, how can these types be transposed into working models whose spatio-sensory attributes accord with our archetypal experience?

The authors then mentions that spatio-sensory constructs (sense of place) are those types that reflect the collective unconscious in a peculiar format that is perceptible in both cognitive and sensory terms.<sup>27</sup> Therefore, we may conclude that in order to have an authentic human response to spatial design, authentic typology, which depends both in the perception of the type and in verification of its authenticity, needs to be perceived through the senses.

— The house shelters the daydreamer and provides a site for memory. If it is a complex house, with an attic and cellar, as well as niches and corridors, memories will be more clearly delineated than in a featureless space.<sup>28</sup> —

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<sup>23</sup> Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 15.

<sup>24</sup> Ibid.

<sup>25</sup> Ibid.

<sup>26</sup> Ibid.

<sup>27</sup> Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 18.

<sup>28</sup> Ibid., 16.

# PART 2

# SENSE OF PLACE

#### SENSORY MEMORY

Malnar and Vodvarka suggests that humans commonly experience three kinds of sensory response: first, an immediate physical response to stimulus, second, a response conditioned by prior knowledge of its source: and third, a response to stimulus as it has become identified in one's memory with a particular time and place. They refer to the formation of such mnemonic sensation as sensory imprinting.<sup>29</sup> Indeed, imprinting can be so powerful that detailed awareness of place can occur in the presence of the stimulus alone.<sup>30</sup> Such sensation can invoke still other sensations, the sum of which the mind uses to reconstruct the dimensions of particular places.

Frances Downing refers to this kind of mnemonic, sensory phenomenon as, rather than simple repository of experience, dynamic, often seeming to form and reform experience without our conscious permission<sup>31</sup>. Moreover she mentions that what shapes the content of

this dynamic and large involuntary recall are the senses.

She further points out that a person's memory of a pavilion in Grandmother's garden can evoke sensory experiences like the quality of the shade and door of the roses, but also emotional dimensions such as belonging and safety and cultural identity. This phenomena is present and continues to retain meaningful detail and complexity. Its mnemonic quality resides in architectural configurations - old or new - that evoke a sense of cultural continuity which often is not considered in the greater spectrum of various cultural identity. Again, the mental images are an active, vital repository of information gathered through sensual experience such as sight, sound, smell, touch, and taste.

Downing contends:"However powerful a mental image may seem in memory, it does not include all the environmental information contained in any particular place or event experience. Instead, the mental images presents a version of experience that is most important to the individual or situation at a particular moment in time"<sup>32</sup>. Therefore it suggests that sensory memory is selective as well as nuanced.

This lead to question how as designers can we recall these sensory memories within each individuals of the communities that have not experienced cultural continuity from voluntary and involuntary displacement? I believe that by adopting incremental design methodology, one could allow memory to forge gradually as collective sensorial memory. To understand and learn about the spaces they live in or encounter, collective sensorial experience and better design can occur.

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<sup>29</sup> Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 21.

<sup>30</sup> Ibid.

<sup>31</sup> Ibid.

<sup>32</sup> Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 22.

#### SPATIO-SENSORY EXPERIENCE

In the preface of the October 1991 issue of The Architectural Review, the editor states: "We appreciate a place not just by its impact on our visual cortex but by the way in which it sounds, it feels and smells. Some of the sensual experiences elide, for instance our full understanding of wood is often achieved by a perception of its smell, its texture (which can be appreciated by both looking and feeling) and by the way in which it modulates the acoustics of the space"33. He thus postulates sensory experience as the key to understanding the essential nature of an architectural construct, in much the way that writers understand the sites he describe.

This position suggests a phenomenological view, in which direct, preconceptual experience rather than objectified quantification represents the real shape of the world<sup>34</sup>. As formulated by Edmund Husserl, phenomenology is largely concerned with the world as immediately experienced through

senses. David Abram points out that unlike the mathematics-based science, phenomenology seeks not to explain the world objectively but to describe the manner in which the world makes itself evident to awareness through direct, sensorial experience.

He then concludes that the world, far from being a fixed and definable "datum," is rather a matrix of sensations and perceptions a collective field of experience.<sup>35</sup> The author concludes that phenomenal reality is therefore the result of sensory emotional experience, suggesting an ongoing dialogue between human beings and the entities that surround us.

Furthermore, Abram sees that vitality within artifacts as primarily residing in the material used:

—"All these still carry, like our bodies, the textures and rhythms of a pattern that we ourselves did not devise, and their quiet dynamism responds directly to our senses." —

The content thus assigned to materials doubtless accounts for much of phenomenology's appeal to designers. The materials within artifacts continuously transforms within spatio-sensory constructs and as designers we need to be mindful of what they can become.



Fig.3 — Flag, 2012. Theaster Gates Decommissioned fire hose.

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<sup>33</sup> Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 23.

<sup>34</sup> Ibid., 24.

<sup>35</sup> Ibid., 24.

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#### **CHAPTER 5**

#### SPATIO AND SENSORY PROPERTIES

It has been argued that the aesthetic response is primarily a function of cognition, that art and architecture are best "understood" intellectually. This has been especially true for architecture, as the physical/structural properties of buildings have usually been granted greater weight than their sensory properties. In this construct, what is aesthetically important is pure spatial form<sup>36</sup>.

In an analysis based in philosophy, Nick Zangwill theorizes that aesthetic properties depend in part on sensory properties, such as colours and sounds. He points out that architectural "functionalism," which holds that the aesthetic properties of a building depend on how well it "expresses" its function, is often fallaciously invoked.<sup>37</sup>

He maintains that what generates aesthetic excellence is the expression or articulation of those functions, particularly the spatial and sensory properties. Thus the vital role of sensory properties in architectural design.<sup>38</sup> He concludes:

— "That aspect of the modernist tradition, which in ideology or practice concentrates exclusively on pure spatial structure or the appearance of spatial structure, rests on an error about the metaphysics of architecture... It is sensory properties in a certain three-dimensional spatial context which have aesthetic significance in architecture". 39

<sup>36</sup> Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 26.

<sup>37</sup> Ibid.

<sup>38</sup> Ibid.

<sup>39</sup> Ibid.

#### **HUMAN SENSORY RESPONSE**

# The worth of sensory data in the perception of built space

In the Architecture of Humanism, historian Geoffrey Scott comments that because weight, pressure, and resistance are part of our habitual body experience, we unconsciously identify with these characteristics in the forms we see. Scott states: "In any building three things may be distinguished: the bigness which it actually has (mechanical measurement), the bigness which it appears to have (visual measurement), and the feeling of bigness which it gives (bodily measurement).<sup>40</sup>

In fact, the psychologist J.J. Gibson has taken theses five senses and reformulated them into active, highly inclusive systems.<sup>41</sup> This likely reflects his view that our senses, taken as a whole, are really an integrated information-seeking mechanism that functions without any mediating cognition.<sup>42</sup>

In places of the senses of sight, sound, smell, taste, and touch, Gibson stipulates the visual system, the auditory system, the taste-smell system, the basic-orienting system, and the haptic system. It is in fact the last of these systems that most closely approximates Scott's "bodily measurement." Indeed, one could argue that the last two systems together are responsible for our understanding of three-dimensionality, the sine qua non (a thing that is absolutely necessary) of architectural experience (Fig.4).<sup>43</sup>

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Name	Mode of Attention	Receptive Units	Anatomy of the Organ	Activity of the Organ	Stimuli Available	External Information Obtained
The Basic Orienting System	General orientation	Mechano- receptors	Vestibular organs	Body equilibrium	Forces of gravity and acceleration	Direction of gravity, being pushed
The Auditory System	Listening	Mechano- receptors	Cochlear organs with middle ear and auricle	Orienting to sounds	Vibration in the air	Nature and location of vibratory events
The Haptic System	Touching	receptors	Skin (including attach- ments and openings) Joints (including ligaments) Muscles (including tendons)	Exploration of many kinds	Deformations of tissues Configuration of joints Stretching of muscle fibers	Contact with the earth Mechanical encounters Object shapes Material states Solidity or viscosity
The Taste-Smell System	Smelling	Chemo- receptors	Nasal cavity (nose)	Sniffing	Composition of the medium	Nature of volatile sources
	Tasting	Chemo- and mechano- receptors	Oral cavity (mouth)	Savoring	Composition of ingested objects	Nutritive and biochemica values
The Visual System	Looking	Photo- receptors	Ocular mechanism (eyes, with intrinsic and extrinsic eye muscles, as related to the vestib- ular organs, the head and the whole body)	Accommoda- tion, Pupillary adjustment, Fixation, convergence Exploration	The variables of structure in ambient light	Everything that can be specified by the variable of optical structure (information about objects, animals, motions events, and places)

Figure 42. The perceptual systems. (From Gibson 1966b.)

Fig.4 — The perceptual systems, 1966. From James J. Gibson, The Senses Considered as Perceptual Systems (Boston: Houghton Mifflin Company, 1966).

Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 41.

<sup>41</sup> Ibid., 42

<sup>42</sup> Ibid.

<sup>43</sup> Ibid.

HUMAN SENSORY RESPONSE PART 2 - SENSE OF PLACE

The clear implication is that not only is sensory response critical to any cultural outcome (like design), but the specific societal context (the sensory ratio of that culture) will need to be addressed if it is to resonate with its users.44 In the conclusion to Varieties of Sensory Experience, Howes and Classen offer five valuable considerations for the anthropologist: first, other cultures do not necessarily divide the sensorium as we do; second, the first step is to discover what sorts of relations between the senses a culture considers proper; third, senses that are important for practical purposes may not be important culturally or symbolically; fourth, sensory orders are not static but develop and change over time, just as cultures do; and fifth, there may be different sensory orders for different groups within a society. That every culture develops its own sensory formula must surely provide a warning for the architects as well.

# Perceptual Systems ————— = Contextual Percept Cultural Modifiers

Table 1 — Conceptual percept diagram. Created by Joy Monice Malnar and Frank Vodvorka

The discussion of how we perceive our spatial environment has so far centered on visual phenomena, but as the principle of dynamic self-distribution maintains, perception taken as a whole is what is crucial to spatial experience. Of course, perception/response factors, insofar as they have meaning for design, exist to serve some expressive (and predictive) end. Rudolf Arnheim points out that "it is necessary to distinguish between the balancing of forces in the perceptual field itself and the 'outside' control exerted by the artist's motives, plans, and preferences. He can be said to impose his structural theme upon the perceptual organization." Thus psychological theory can provide organized principles of perception (as well as other information) that can be used to reconcile complex design relationships (fig. 3.5).45

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Sensory System	Stairs		
Visual Systems	Color, material pattern, size of staircase, location of staircase in space, and whether in an enclosed or open space		
Auditory system	Treads made of materials that emit tone when stepped on or tapped with a cane		
	Space echoes or absorbs the sound of footsteps		
	Mechanical sound introduced into enclosed stairwell		
Taste-smell system	Venting to include whiff of fragrance to indicate stair room of beginning and end of stair run		
Basic orienting system	Continuous run or changes in direction		
	Rectangular or spiral		
Haptic system Touch	Treads — material texture gradient, and change in degree of hardiness; selection of material for its thermal conductivity to facilitate temperature transfer when walking barefoot		
	Railings — material texture gradient (rough vs. smooth), change in degree of hardness (rubber vs. steel), thermal conductivity (copper vs. wood), drag (leather vs. marble)		
	Vibration transfer between treads and railing or mechanical system and railings		
Kinaesthesia	Change in thread-to-riser to decrease or increase exertion and speed of person (take into consideration stairs typically thought of as going below ground level or up into attic or loft space		
	Landings located to provide moments of rest		
Temperature and Humidity	Heating and air-conditioning vents located at ankle, hand, or head height to indicate first and last stair treads		
	Air vents located at top or bottom of stair to coincide with direction of main movement on stair		
	Distinct air velocity, temperature, and/or humidity change at top and bottom of stair		

Table 2. Sensorially designed stairs. Created by Joy Monice Malnar and Frank Vodvorka

<sup>44</sup> Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 55.

<sup>45</sup> Ibid., 56.

# PART 3

# THE SENSES

#### SENSE OF INCLUSION

Perception taken as a whole is what
is crucial to spatial experience

In the previous chapter, Malnar & Vodvarka mentions that not only sensory response is critical to any cultural outcome such as design, but the specific societal context (the sensory ratio of that culture) will need to be addressed if it is to resonate with its users<sup>46</sup>. He further elaborates based on Classen and Howes values that every culture develops its own sensory formula.

The discussion of how we perceive our spatial environment has so far centered on visual phenomena, but as the principle of dynamic self-distribution maintains, perception taken as a whole is what is crucial to spatial experience. Gibson's fundamental sensations provide the raw materials for a response influenced by context.

In places of the senses of sight, sound, smell, taste, and touch, Gibson stipulates the visual system, the auditory system, the taste-smell system, the basic-orienting system, and the haptic system. Gibson regards the visual and auditory system as active stimulus-seeking entities, enjoying large degree of autonomy. Although they function in a more complex manner, they require little explanation. Taste and smell are combined as they usually function in concert. The last two systems, basic-orienting system and haptic-system, are crucial not only in the experience of architecture but for any spatial experience.

The basic-orienting system is based on the relationship between the horizontal ground plane and our vertical posture.<sup>47</sup> Gibson theorizes that the resulting orientation leads us to seek a symmetrical balance, and that our senses are always directed to that end. The haptic system refers to our sense of touch extended to include temperature, pain, pressure, and kinaesthesia (body sensation and muscle movement). It is thus a system in which humans beings are literally in contact with their environment<sup>48</sup>.

These two senses in concert would go far toward explaining our sense of place, and our tactile awareness of walls and doors, compression and expansion, ascent and descent; that is, the very qualities of mechanical measurement, visual measurement and bodily measurement.

It is fundamental for designers or artists to add layers of context to their design such as psychological theory which can provide organized principles of perception (as well as other information) that can be used to reconcile complex design relationships<sup>49</sup>. Including these contextual layers in design requires dynamic interaction between the designers and users.

27

<sup>46</sup> Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 55.

<sup>47</sup> Malnar, Joy Monice and Frank Vodvarka. Sensory Design. Minneapolis: University of Minnesota Press, 2004, 42.

<sup>48</sup> Ibid.

<sup>49</sup> Ibid., 46.

#### PERIPHERAL VISION

 Our image of our world of perceptual fragments is held together by constant active scanning by the senses, movement and creative fusion and interpretation of these inherently dissociated percepts through memory.

The role of peripheral and unconscious perception explains why a photographic image is usually an unreliable witness of true architectural quality; what is outside of the focused frame, and even behind the observer, has as much significance as what is consciously viewed<sup>50</sup>. Peripheral vision integrates us with space and its events, while focused vision pushes us out of the space and makes us mere observers. Unconscious peripheral perception transforms retinal images into spatial and bodily experience.

Therefore because of their poverty of the field of peripheral vision, the architectural and urban settings of our time tend to leave us as outsiders, in comparison with the overwhelming emotional engagement of historical and natural settings. A forest context, a Japanese garden, richly molded architectural space, as well as ornamented or decorated interiors provide ample stimuli for peripheral vision and these settings centre us in the very space.

The historic development of the representational techniques depicting space and form is closely tied to the development of architecture itself. The perspectival understanding of space gave rise to an architecture of vision, whereas the guest to liberate the eye from its perspectival fixation enables the conception of multi-perspectival, simultaneous and atmospheric space. Perspectival space leaves us as outside observers, whereas multi-perspectival and atmospheric space and peripheral vision enclose and enfold us in their embrace. This is the perceptual and psychological essence of Impressionist, Cubist and Abstract Expressionist space; we are pulled into the space and made to experience it as a fully embodied sensation and a thick atmosphere.<sup>51</sup>

29

Pallasmaa, Juhani and Matteo Zambelli. Inseminations: Seeds for Architectural Thought. Hoboken, NJ: Wiley, 2020, 168.

Pallasmaa, Juhani and Matteo Zambelli. Inseminations: Seeds for Architectural Thought. Hoboken, NJ: Wiley, 2020, 168.

32

#### **CHAPTER 9**

## **UNFOCUSED VISION**

 The object of a creative act is not only identified and observed by the eye and touch, it is introjected, identified with one's own body and existential condition.

The perspectival understanding of space has further emphasized the architecture of vision. The quest to liberate the eye from its perspectival fixation has enabled the conception of multi-perspectival, simultaneous and haptic space. By its very definition, perspectival space turns us into outside observers, whereas the simultaneous and haptic space enclose and enfold us in their embrace and turn us into insiders and participants.

The works of Frank Lloyd Wright, Alvar Aalto, Louis Kahn, Carlo Scarpa and, more recently, of Peter Zumthor can be given as examples of a multi-sensory architecture that reinforces our sense of the real.

In heightened emotional states, such as listening to music or caressing our loved ones, we tend to eliminate the objectifying and distancing sense of vision by closing our eyes.<sup>52</sup> The spatial, formal and colour integration of a painting is often appreciated by dimming the sharpness of vision. Even creative activity and thinking calls for an unfocused and undifferentiated subconscious mode of vision, which is fused and thinking calls for an unfocused and undifferentiated subconscious mode of vision, which is fused with integrating tactile experience. The object of a creative act is not only identified and observed by the eye and touch, it is introjected, identified with one's own body and existential condition<sup>53</sup>.

Pallasmaa, Juhani and Matteo Zambelli. Inseminations: Seeds for Architectural Thought. Hoboken, NJ: Wiley, 2020, 238.

<sup>53</sup> Ibid.

#### **ATMOSPHERE**

Each space and place is always an invitation to and suggestion of distinct acts: spaces are verbs.

An atmospheric perception also involves judgements beyond the five Aristotelian senses, such as sensations of orientation, gravity, balance, stability, motion, duration, continuity, scale and illumination. Indeed, the immediate judgement of the character of space calls for our entire embodied and existential sense, and it is perceived in a diffuse and peripheral manner rather than through precise and conscious observation. This complex assessment also includes the dimension of time as experiencing implies duration and it fuses perception, memory and imagination. Moreover, each space and place is always an invitation to and suggestion of distinct acts: spaces are verbs<sup>54</sup>.

In addition to environmental atmospheres, there are cultural, social, workplace, family, interpersonal, etc. atmospheres. The atmosphere of a social situation can be supportive or discouraging, liberating or stifling, inspiring or dull. We can even speak of specific atmospheres in the scale of cultural, regional or national entities. Genius loci, the Spirit of Place, is a similarly ephemeral, unfocused and non-material experiential character that is closely related with atmosphere; we can, indeed, speak of the atmosphere of a place, which gives it its unique perceptual character and identity.

 - 'We perceive atmospheres through our emotional sensibility — a form of perception that works incredibly quickly, and which we humans evidently need to help us survive' —

| Zumthor |

It is evident that we are genetically and culturally conditioned to seek or avoid certain types of situations or atmospheres. Although atmospheres and mood seem to be overarching qualities of our environments and spaces, these qualities have not been much observed, analyzed or theorized in architecture or planning.<sup>55</sup>

Modernity has been obsessed with clarity of form and focused vision, which both promote exteriority and control; the separation of the subject and the object. Peripheral vision has hardly been studied at all, although it seems to be the medium of our spatial cognition. Due to its fascination with focused form, modernity has undervalued the other sense and failed to acknowledge atmospheres, feelings and moods as real and significant architectural qualities.

I suggest that we may well become more interested in atmospheres than individually expressive forms. Understanding atmospheres will most likely teach us about the secret power of architecture and how it can influence entire societies, but, at the same time, enable us to define our own individual existential foothold<sup>56</sup>. Our capacity to grasp qualitative atmospheric entities of complex environmental situations, without a detailed recording and evaluation of their parts and ingredients, could well be named our sixth sense, and it is likely to be our most important sense in terms of our existence, survival and emotional lives.

33

Pallasmaa, Juhani and Matteo Zambelli. Inseminations: Seeds for Architectural Thought. Hoboken, NJ: Wiley, 2020, 212.

Pallasmaa, Juhani and Matteo Zambelli. Inseminations: Seeds for Architectural Thought. Hoboken, NJ: Wiley, 2020, 212.

<sup>56</sup> Ibid., 168.

# PART 4

# PHENOMENA



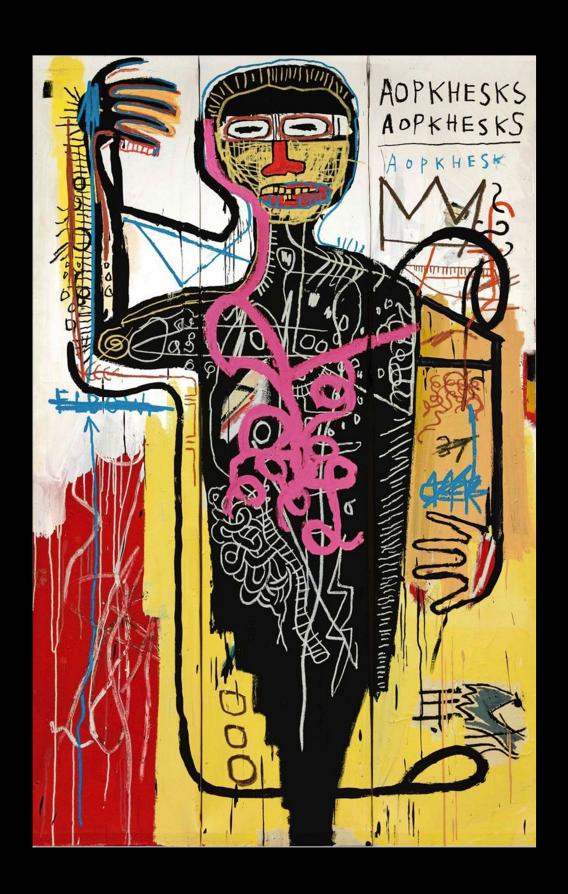


'Your car leaves the highway, the rumble of the dirt road is felt, and the indication that you have arrived at the resort is marked by a simple yet exquisite metal 'ranch gate' and a curving entry road that brings you up against the tall, mysterious sphinx-like rock formation that signals your arrival somewhere special. The sheer verticality of this rock formation mysteriously guards and screens the view beyond. Passing by a horse stable on your right, the guests arrive around the bend of this entry rock and suddenly a distant view of wider landscape reveals itself. The road then straightens out and heads toward a beautiful rock formation. An island in the midst of the "rock garden". A continuous fire emanates, sparkling reflections from up on the rock, luring the tired traveller to explore further'.











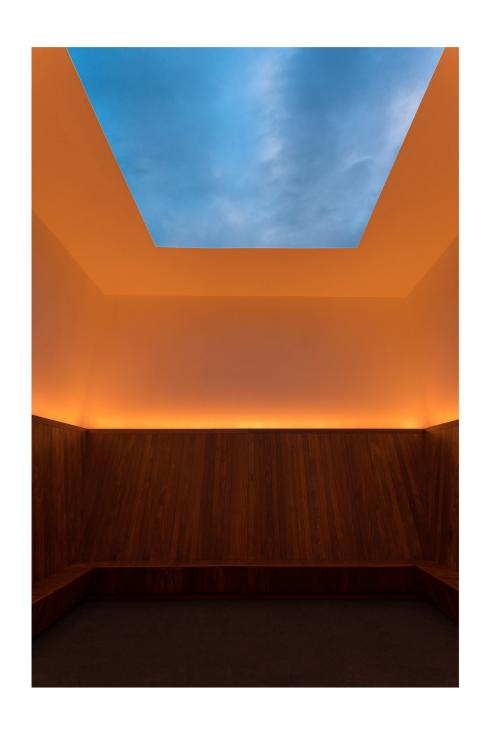






Fig. 5 — The interior of the Bioscleave House (Lifespan Extending Villa) in East Hampton, N.Y., built in 2008 by the artists Arakawa and Madeline Gins. The Bumby floors of compacted earth and the intensely colored walls were meant to be difficult to live with, thus prolonging life. — Matt Harrington

Fig. 9 — Jean-Michel Basquiat (New York, 1960-

Basquiat liked to bring the spectator into a state

of semi-knowledge, where he is able to read the superficial message of the painting effortlessly

through the familiar use of images, colours, and

cance invested in the work, as the deeper levels

words, yet remains unaware of the true signifi-

1988) Versus Medici, 1982.

of meaning are obscured.



Fig. 7 — Rick Joy, Wendell Burnette and Marwan Al-Sayed sequential narrative of Amangiri Resort and Spa located in the desert of Utah.

47



Fig. 6 — The Hundertwasserhaus is an appartment house in Vienna, Austria, built after the idea and concept of Austrian artist Friedensreich Hundertwasser with architect Joseph Krawina as a co-author.



Fig. 8 — Batammaliba house in Togo, Africa.



Fig. 10 — Photo of St. Ignatus Chapel's door handle in Seattle. Author.



Fig. 12 — The forest enfolds us in its multisensory embrace. The multiplicity of peripheral stimuli effectively pulls us into the reality of its space.

48



Fig. 11 — Zumthor's Bruder Klaus chapel in Mechernich, Germany, was formed by setting a wigwam of rough hewn trunks within a concrete block. The wood was then burned out.

Architectural Review



Fig. 13 — Installation view of James Turrell, Meeting, 1980-86/2016, at Moma PS1. The Museum of Modern art, New York.



Fig. 14 — Jackson Pollock, One: Number 31, 1950 (detail), 1950, Museum of Modern Art, New York.

The scale and painterly technique of American Expressionist painters provide peripheral stimuli and invite us into the space

# PART 5

# CREATING A SENSE OF PLACE

# CONTEXT



Fig. 15 — Aerial view of Hogan's Alley, 2022. Google Earth.

51

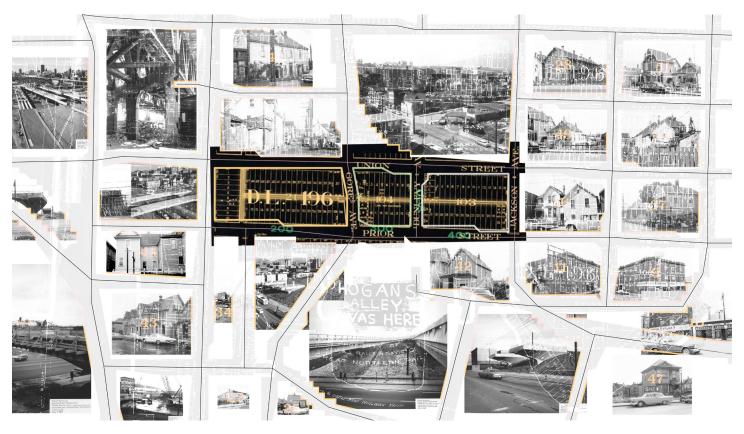


Fig. 16 — Hogan's Alley site composition drawing.

Hogan's Alley is an historic neighbourhood in the city of Vancouver. It was home to multiple immigrants communities but most largely African-Canadian population. Hogan's Alley was the unofficial name for a T-shaped intersection, including Park Lane, and the nearby residences and businesses at the southwestern edge of Strathcona.<sup>57</sup>

At its epicentre are two city lots where was the centre of Afro-canadian culture. The alley ran between Union and Prior Streets from approximately Main Street to Jackson Avenue.

Wayde, Compton. "Hogan's Alley." The Canadian Encyclopedia. Historica Canada. Article published February 13, 2014; Last Edited February 14, 2019, https://www.thecanadianencyclopedia.ca/en/article/hogans-alley.

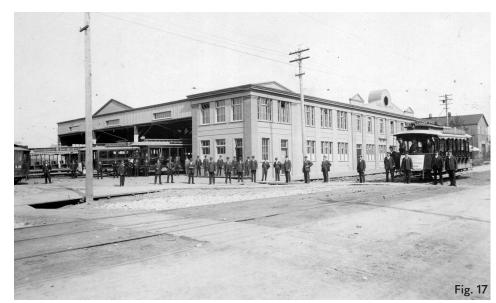










Fig. 17-22 — City of Vancouver Archives

53

During its time, Hogan's Alley was the site of overlapping and shifting ethnic populations, being the original home to Vancouver's Italian community as well as the southern edge of Chinatown.<sup>58</sup> The Black community had established itself in the area by 1923, when the African Methodist Episcopal Fountain Chapel was founded.<sup>59</sup> Black settlement there was due to the neighbourhood's proximity to the

Great Northern Railway station nearby, where many of the men in the community worked as porters. Housing discrimination in other parts of Vancouver also concentrated the city's Black population in this area. 60 Black cultural institutions it was known for included Vie's Chicken and Steak house as well as the African Methodist Episcopal Fountain Chapel and the residential guarters of the Brotherhood of







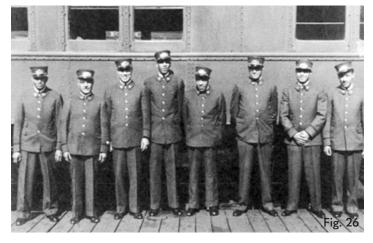






Fig. 23-28 — Hogan's Alley Archives

Sleeping Car Porters. 61 Sleeping car porters played an essential role during the heyday of rail travel in Canada. Black men from across Canada, the United States, the Caribbean, and as far away as Wales and the Dutch East Indies were hired as sleeping car porters for Canadian railway companies. 62 Its most

famous resident is Nora Hendrix, the paternal grandmother of the musician Jimi Hendrix. She was involved in the community from the 1920s through to its demise, remaining nearby until the 1980s.<sup>63</sup> "The Crump Twins", Ronnie and Robert Crump, were two of the most recognizable entertainers in Vancouver from

Wayde, Compton. "Hogan's Alley."

<sup>59</sup> Ibid.

<sup>60</sup> Ibid.

<sup>61</sup> Wayde, Compton. "Hogan's Alley."

Travis, Tomchuk. n.d. "Black Sleeping Car porters: the struggle for Black labour rights on Canada's railways." Canadian Museum for Human Rights. Accessed March 16, 2022. https://humanrights.ca/story/sleeping-car-porters.

<sup>63</sup> Wayde, Compton. "Hogan's Alley."













Fig. 29-34 — City of Vancouver Archives

the late 1940's to the early 1960's. They notably performed on the same stage alongside Sammy Davis Jr. and Louis Armstrong.<sup>64</sup>

The concept of urban renewal in the US combined "slum clearance" with schemes in which interurban freeways were built and streetcar infrastructure dismantled. Typically, residents were relocated to experimental

housing projects in such schemes. Cities enacting this model most often chose a Black neighbourhood or a Chinatown as areas for renewal; in Vancouver, it was both. <sup>65</sup> The justification for the building of a freeway exactly at the site of Hogan's Alley and half of Chinatown was tied to the creation of two tower blocks in Strathcona: MacLean Park and the Raymur Social Housing Project. Both

55



Fig. 35 - Aerial view of Hogan's Alley, 2022. Google Earth.

56

were to absorb the residents displaced by the freeway. The freeway project is an example of totally Top-Down masterplan and was also simultaneously racist and classist. This is a Vancouver instance of larger troubling history of using freeways to be an agent of kind of displacement

Most of the Black population of Hogan's Alley left the area in the lead-up to the plan and effectively integrated into the general population before the city began expropriations of area lots in the 1960s. During that decade, the area that was Hogan's Alley

66 Wayde, Compton. "Hogan's Alley."67 Ibid.

became the southern portion of Chinatown — though a few Black families remained, and the church continued service into the 1980s. 66 After the building of the Georgia and Dunsmuir Viaducts wiped out the western part of what was Hogan's Alley in 1967, community opposition stopped the remaining stages of the plan. Chinatown was saved, but few markers of the Black community that had once been there remained. 67

The two city blocks that constitute the Subarea 6D are today the on and off ramps for the Dunsmuir and Georgia Viaducts. This location

BC Entertainment Hall of Fame. n.d. "The Crump Twins." BC Entertainment Hall of Fame. April 8, 2022. https://bcentertainmenthalloffame.com/crump-twins/.

<sup>65</sup> Wayde, Compton. "Hogan's Alley."













Fig. 36-41 — Hogan's Alley site images

is traversed by thousands of commuters each day who have no knowledge of what once stood there.<sup>68</sup> East of the site is Strathcona, a residential neighbourhood of historic homes that is well established and thriving. The western blocks of Strathcona overlapped with the Black community concentrated around Hogan's Alley.<sup>69</sup> The African Methodist

Episcopal Fountain Chapel was a Black Canadian congregation and the structure still stands at the corner of Jackson and Prior, two blocks east of the project site. The character of today's Strathcona between Union and Prior and extending east to Hawks Avenue is a good indication of the character that Hogan's Alley might have today if it had not been

Hogan's Alley Working Group Workshop Report, NEFC Sub-Area 6D East Block, July 2017, City of Vancouver, 15.

57

69 Ibid.



Fig. 42 — Aerial view of Hogan's Alley, 2022. Google Earth.

#### destroyed.<sup>70</sup>

Today, what stands on the block is the Nora Hendrix Place, a low income housing program. Union Street has become a major east-west bicycle thoroughfare, connecting downtown Vancouver to residential neighbourhoods to the east.<sup>71</sup> Prior Street is a significant arterial street leading to the on and off ramps of the viaduct.<sup>72</sup> The blocks of Sub-area 6D is today little more than an underpass for the viaducts. The exception is a thriving skate park built under the western portion of the viaduct

#### abutments.73

The Hogan's Alley block represents an important opportunity to reconcile a painful moment in Vancouver's history that resulted in the displacement of Vancouver's Black community during the construction of the viaducts.

As part of the North East False Creek plan, the Dunsmuir and Georgia Viaducts will be demolished and the two blocks to either side of Main Street will be redeveloped.

70 Hogan's Alley Working Group Workshop Report, NEFC Sub-Area 6D East Block, July 2017, City of Vancouver, 15.

58

71 Ibid.

72 Ibid.

73 Ibid.





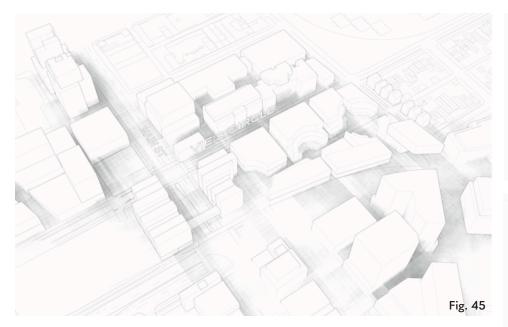
Fig. 43-44 - Hogan's Alley Working Group Workshop Report

The eastern block that was Hogan's Alley redeveloped as mixed-use with transitional scales from mid-rise along Main Street to low-rise along Gore Ave. The north side of Union Street has a mostly consistent street wall of mid-rise structures that support a mix of residential and retail/commercial uses. This is likely to remain in the foreseeable future. South of Prior, a significant medical complex is planned around the new St. Paul's Hospital. Gore Street will connect through to the Citygate neighbourhood and the historic Vancouver Pacific Central Station depot.<sup>74</sup>

These two blocks will connect across Quebec Street, to the west, to a series of parks and

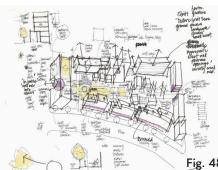
recreational areas oriented around the False Creek waterfront and intended to connect the city to the waterfront. Successfully executed, the Subarea 6D will function as a critical point of convergence for several urban precincts and itself will become a culturally rich destination within Vancouver.<sup>75</sup> There is currently work being done to pay tribute and memorialize the community that was once there, and revitalize the area for the community moving forward. The makeup of this development is the subject of a workshop that lasted three days and was lead by the City of Vancouver Project Team and Perkins + Will design team. Participants from the Hogan's Alley Working Group represented the community by bringing

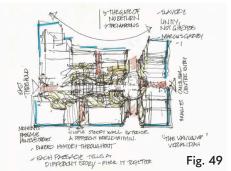
59











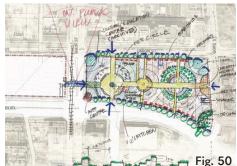


Fig. 45-50 — Hogan's Alley Working Group Workshop Report

forward the rich history of Hogan's Alley. The workshop intended to inform the broader Northeast False Creek Area Plan with a more culturally sensitive understanding of the social and physical community that was Hogan's Alley, the events that led to its destruction, and the devastating impact the loss of this community had on Vancouver's Black community and the City of Vancouver. Most importantly, this workshop was intended to outline the beginning of a constructive path forward that

honours the past while charting an inclusive social, economic, and physical redevelopment plan for the future of what was known as Hogan's Alley.

 Despite the efforts of community revitalization and community involvement we are still faced with a kind of top-down master plan type project.

Hogan's Alley Working Group Workshop Report, NEFC Sub-Area 6D East Block, July 2017, City of Vancouver, 18.

<sup>75</sup> Ibid.

# **PROGRAM**



Fig. 51 — Aerial view of Hogan's Alley, 2022. Google Earth.

61

Some components about the workshop were good such as the community engagement which was great and well intentioned. However, its still reverting to the normative architectural tendency which is to start from the big,

overall dominating master plan and at the later date get down to the details. The design approach that I am utilizing is for the creation of a cultural centre and what I am trying to implement is a different model.

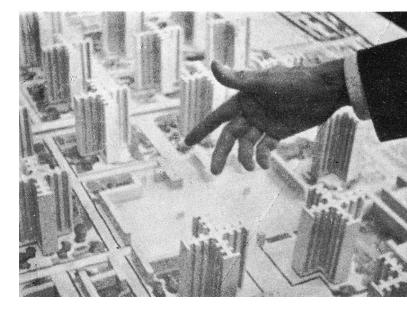


Fig. 52 — Le Corbusier Plan Voisin for Paris (1922-25)



Fig. 53 — Aerial View to the Northeast False Creek Site

62

In light of this context, this prompted me to explore an alternative design option which would be more inclusive.

What I am trying to show is a different model.

PROGRAM PART 5 - CREATING A SENSE OF PLACE

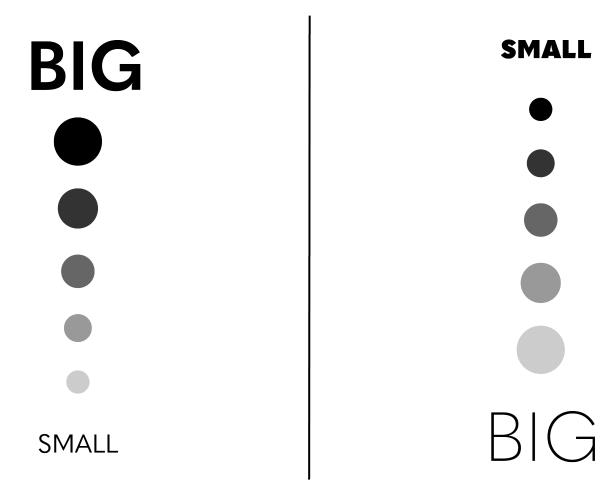


Fig. 54 — Program Diagram

63

The standard normative Big
 (masterplan) to Small human scale
 and in contrast Small human scale
 (multisensorial) to Big —

Initiating design within the small-scale from fundamental Architectural Elements

— In opposition to the commonly accepted Top-Down approach and dominance of vision over the other senses in architecture, I wish to argue that multisensorial principles, attunement and mixture of engagements are elemental in order to achieve authentic design responses and a sense of place in the art of building. —

#### **METHODOLOGY**

## **Five Elements**

Door Handle Screen Stove Winter Garden Floor

65

What I proposed is to design five architectural elements in relation to important themes from the workshop and investigate the multisensory phenomena in each one. Because I am starting from the small human scale, multi sensorial, I am designing and beginning with these five human scale small elements.

By designing on the small scale to focus on the elements necessitate thinking in multisensorial terms which opens new ethics and design that is more inclusive. It enables you to study intimate dynamics which articulate between its protagonists and its environment. It also help better understand what is important for the community by appreciating and experiencing all these little moments. What defines these elements echo the community aspirations as well as the history and their functional purposes.

# "Go Back and Get It"

One overall theme that relates to afro-canadian influences is the symbol of "Sankofa". Go Back and Get it. Reach back to move forward. Connect with your heritage. "Sankofa means that taking pride in one's heritage is the right attitude to face the future. Originally from the akan Twi and Fante Languages of Ghana, the word and its essence have been adopted by many African and black people around the globe as a symbol of cultural and political affirmation.

The symbol made its way into the designs found on wrought iron fences created by enslaved people from West Africa who worked as blacksmiths in New Orleans and other cities throughout the United States.



# "Learning from the Past to Build the Future"

66



Fig. 55 — The versatile calabash in its natural environment

One other influence is the calabash which is a powerful symbol of womanhood and is an indispensable part of the African cultural heritage. This fruit, essentially dried-out and sturdy yet lightweight shell known as Lagenaria siceraria, a type of gourd, was one of the first crops that man harvested and the Fulani women of northern Nigeria are often spotted carrying these beautifully decorated

calabashes. it has long served a multitude of purposes. In African society, it is used for storing or serving food and is a marker of wealth and power when used to proffer water, milk or kola nuts to guests.



Fig. 56 — Fulani woman in Niger, Henry Brandt, 1956

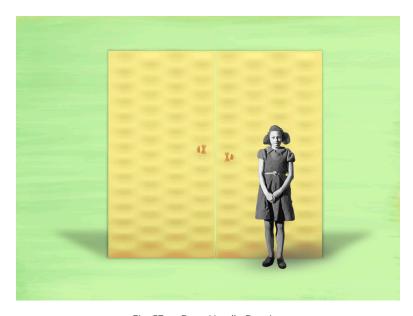


Fig. 57 — Door Handle Drawing

## The Door Handle

— The composition of the door and its handle is an immersive experience. The soft wooden texture of the handle transforms through use and time. The metal edges of the handle provides a slight soft cold contrast to touch. —

#### Animation viewable at the following link:

https://vimeo.com/706284551



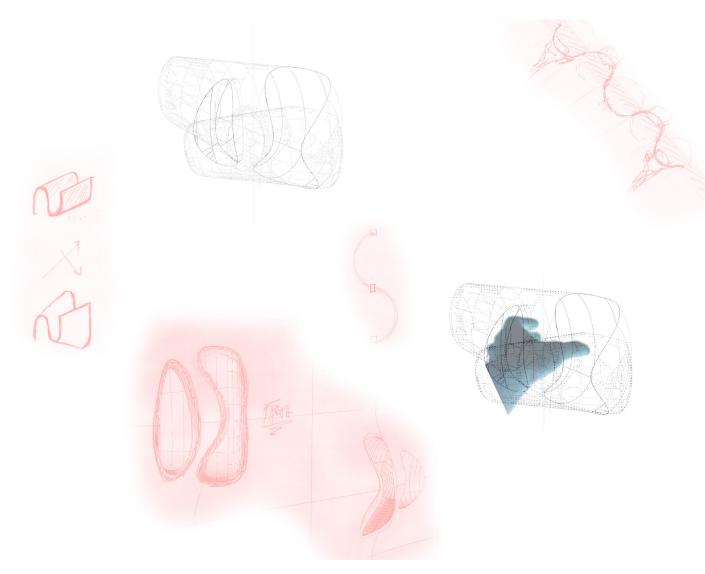


Fig. 58 — Door Handle Composition Drawing



Fig. 59 — Screen Drawing

# The Screen

The hard surface of the metal provides a cold sensation to the human touch.
 As you walk by the screen, you can feel the warmth, its ornament and the breeze that rustles through the leaves.

Animation viewable at the following link:

https://vimeo.com/706285184



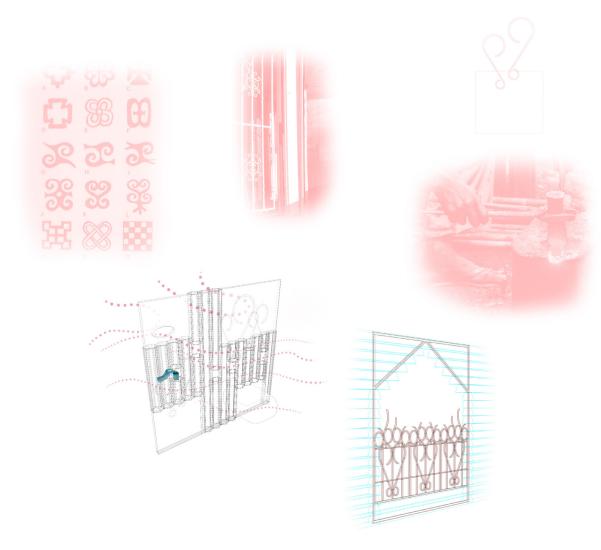


Fig. 60 - Screen Composition Drawing

METHODOLOGY



Fig. 61 — Stove Drawing

# The Stove

 The sound of the wood burning kindlings and the smell of food and spices in the communal kitchen creates an ambient atmosphere. The earth-like tones give you the sense of being grounded with nature.

Animation viewable at the following link:

https://vimeo.com/706285845



71



Fig. 62 — Stove Composition Drawing

METHODOLOGY PART 5 - CREATING A SENSE OF PLACE

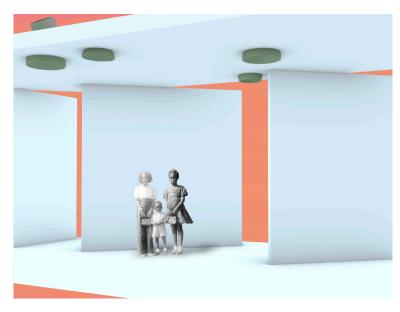


Fig. 63 — Winter Garden Drawing

## The Winter Garden

— The light wells in the winter garden creates a dynamic space, the openness of the space allows social connections and glimpses of life within. —

## Animation viewable at the following link:

https://vimeo.com/706286366



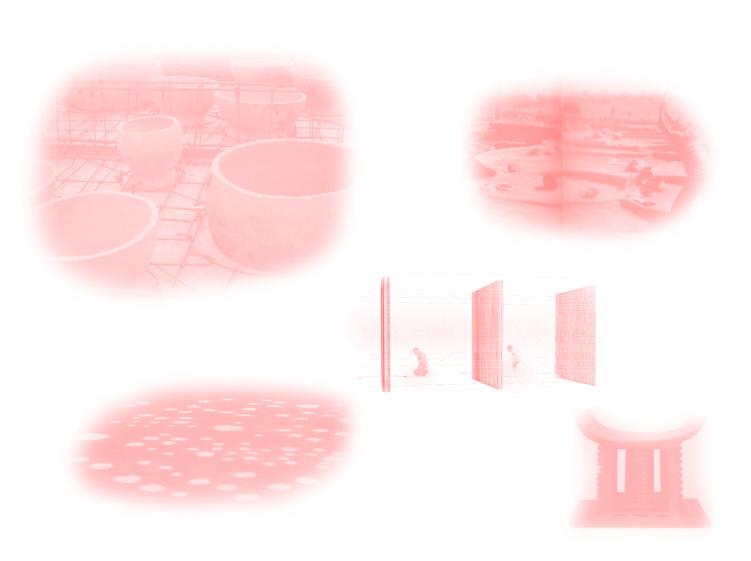


Fig. 64 — Winter Garden Composition Drawing

METHODOLOGY PART 5 - CREATING A SENSE OF PLACE



Fig. 65 — Floor Drawing

## The Floor

— The soft carved texture of the wooden panels and its natural patterns are pleasing to the bare feet and the eyes. As you walk along the floor, light, texture and air sip through its porous openings. —

## Animation viewable at the following link:

https://vimeo.com/706287030





Fig. 66 — Floor Composition Drawing

## CONCLUSION

The aim of this project is to provide an authentic design response by engaging with the community through multisensorial design, mixture of engagement and attunement. By inverting the Top-Down approach and initiating design from fundamental architectural elements within the small human scale foregrounds the users and designers to multisensory experiences, historical values, and functional purposes. The elements shown through these animations and drawings also evoke a sense of place by connecting with the community aspirations and different cultural codes through design. Overall, these elements combined are not prescriptive, but are meant to connect and forge multisensorial experiences and give an idea of the living spaces or what constitutes a cultural centre. I believe that by adopting a design methodology that exposes users to multisensorial experiences, new cultural historical identities can develop and design becomes more inclusive.

As Stephanie Allen, board member of Hogan's Alley, mentions:

In my professional experience, when designers suggest to the public, planners, and civic officials that architecture can deliver on ideals that are difficult to define and measure such as inclusion, empowerment, or the honouring of a disadvantaged group, that assurance obscures and diminishes the other critical systematic factors that are necessary components to achieving said ideals. A physical structure on its own is not inclusive or empowering, but rather it is the use, long-term operational program, and degree of power-sharing granted to marginalized communities that determines how inclusive, empowered, or honoured they might be.

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