ARCO214: Context Essay
Hapticity and Alvar Aalto’s Architecture
Tony Aldrich
The value of our embodied aesthetic experience of architecture has been noted by various writers (Abram 1996, Le Cuyer 2001, St John Wilson 1989, Von-Miess 1997 etc). Juhani Pallasmaa (1996) has proposed that Alvar Aalto’s buildings afford us a beneficial and engaging experience because of the way that they exploit this realm – focussing as they do upon the sensual qualities of materials and our haptic experience of space and form.

Significantly, Pallasmaa has also argued that this quality is a means to address the superficiality of meaning in much contemporary architecture.

With reference to the literature relating to hapticity and embodiment in architecture, you are asked to discuss Alvar Aalto’s work as an exemplar of Pallasmaa’s argument. In particular, you should find and describe instances in Aalto’s work which afford the above experiences, and then critically consider the consequences of these experiences.

Sam Barham  
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Introduction

"... I perceive the wind surging through the branches of an aspen tree, I am unable, at first, to distinguish the sight of those trembling leaves from their delicate whispering. My muscles, too feel, the torsion as those branches bend, ever so slightly, in the surge, and this imbues the encounter with a certain tactile tension. This encounter is influenced, as well, by the fresh smell of the autumn wind, and even by the taste of an apple that still lingers on my tongue."  

Multi-Sensory Experience, David Abrams, *The Spell of the Sensuous*

Humans, are multi-sensory, perceptive, embodied beings. We are tuned to touch, taste, smell, see and hear the world around us. Our life-experience stems not just from cognitive thought and visual memory, but a multi-faceted pool of sensory information. It is strange then that, **synaesthetic perception**, the symbiotic merging of the senses, is considered a rare pathological, even "quasi-mystical" experience according to most contemporary neuroscience when much of our cerebral existence is formed through a fusion of one or more senses. The origin of this fault is explained by Abram, "The intertwining of sensory modalities seems unusual to us only to the extent that we have become estranged from our direct experience (and hence from our primordial contact with the entities and elements that surround us)."

It is true that the social and cultural shift from oral speech to the written word has pertained a cultural shift in our perceived ranking of the senses. Vision, has reigned over all other senses since the Renaissance. "...the five senses were understood to form a hierarchical system from the highest sense, from vision down to touch." Indeed it can be argued that in today's linear, technologically-minded, consumerist society, "the only sense that is fast enough to keep pace... is sight." As highlighted by many writers in the late 20th century, and what Pallasmaa coins the "Narcissistic eye", the dominance of vision has led to two-dimensionality in architectural theory. It has caused us to "live increasingly in a perpetual present, flattened by speed and simultaneity". It is only recently that philosophical and architectural discourse has begun to realise the importance of a unified, embodied sensorial experience. Indeed, as explained by Eric-von Meiss, "Architecture is image only in drawing or photograph. As soon as it is built is becomes the scene and sometimes the scenario of comings and goings, of gestures, even of succession of sensations."

Disillusioned by the narrow, single-sense orientation of modernism, Alva Aalto is highlighted by Pallasmaa as one of the few architects of his generation that has created beneficial architecture that engages on more than one sensorial level. This essay seeks to explore how he has achieved these experiences in contrast to other modernist architects with reference to literature concerning embodiment, tactility, memory, experience and form.
The Science and Philosophy of Experience

Science attempts reason in absolute chaos. The universe, according to Galileo, "is written [and understood] in the language of mathematics", without which one metaphorically wanders about "in a dark labyrinth." Yet our unrelenting reliance on science to explain and understand even the smallest act of human existence clouds the function of the act itself. This concern is voiced by Pallasmaa. "Even in the simple act of riding a bicycle, the theoretical knowledge of how the vehicle is kept upright is suppressed as the act is performed unconsciously through body memory..." as soon as one attempts to conceive of what theoretical forces are at work, "you are in immediate danger of tumbling over." The current sociological climate, in which pragmatism, mathematics and reason reign over anything inherently subjective is strange when the two are intrinsically bound. According to Abram science itself is fundamentally existential. "Even the most detached scientist must begin and end her study in this indeterminate field of experience, where shifts of climate or mood may alter his experiment or her interpretation of "the data"." Fundamentally, science is linked to the very same 'soil' that has shaped our own existential bodily experiences. Indeed, take the notion that our very own, living, breathing emotionally-charged selves conceived of the these theoretical quanta in the first place and it is difficult to see why both are so paradoxically opposed. Led by French theorists, Maurice-Merleau Ponty and Edward Husserl, this particular philosophical tension birthed a new way of thinking that was primordially experiential in its approach: phenomenology.

Rather than seeking to explain the world, the phenomenologist, prefers to "describe as closely as possible the way the world makes itself evident to awareness" via "...our direct, sensorial experience." Phenomenology, in the words of Abram, establishes itself among the other sciences "as the only basis possible for a knowledge that necessarily emerges from our lived experience of things around us." However, with both phenomenology and traditional science as analytical tools, there are still things unexplainable to human study. Take the poet as an example, explains Bachelard, using psycho analytical methods, it is possible to understand the course/reason and resultants of his or her life actions, "...but the poetic act itself, the sudden image, the flare-up of being in the imagination, are inaccessible to such information." This analogy highlights the main problem with experiential study: the notion...
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of subjectivity. Similar experiences in similar individuals can trigger highly polarised emotional responses. As Jameson points out, "the spatial unconscious can associate anything with anything else - a dead body meaning jubilatory euphoria, a loved one's photography triggering violent xenophobia."\(^15\) Even the simple act of reading is bound to subjective experience and memory. As an author, "you would like to interest the reader in yourself", to explain and describe your own 'room', but as soon as the reader hits the very first word, he or she "leaves off reading and starts to think of some place in his own past. The values of intimacy are so absorbing that the reader has ceased to read your room: he sees his own again."\(^16\) As better explained by Abram:

"I directly see of a particular oak tree or building, I know or intuit that there are also those facets of the oak or building that are visible to the other perceivers that I see. I sense that the tree is much more than what I directly see of it, since it is also what the others whom I see perceive of it; I sense that as a perceivable presence it already existed before I came to look at it, and indeed that it will not dissipate when I turn away from it, since it remains an experience for others..."\(^18\)

The idea that our own subjective experience is inter-twined with other "embodied subjects"\(^19\) allows us to better link subjectivity and the collective. Transposing this methodology to architecture, one of the main failures of 20th century universalism is that it does not account for an individualistic understanding of space. It is true that as an architect, one is never able to control the mind and feelings of a spatial inhabitant, because, as summarised by Jameson, "...no work of art or culture can set out to be political once and for all, [for] no matter how ostentatiously it labels itself as such, ...there can never be any guarantee it will be used [in] the way it demands."\(^20\) Yet I believe, if considerate, one is able to formulate architecture that can positively trigger both the individual and the collective - a truly inter-subjective experience. Alvar Aalto (with near universal-acclaim) is one of the few architects that can be described in this sense. Juhani Pallasmaa has particularly taken to this view, arguing that, "Frank Lloyd Wright's and Alvar Aalto's architectures are based on a full recognition of the embodied human condition and of the multitude of instinctual reactions hidden in the human unconscious."\(^21\)

What follows is a description of Aalto's most important work, highlighting his aptitude in creating architecture that succeeds on both a regional and sensorial plane.
When considering Aalto's experimental summer cottage (fig 3), the experiential journey is as, if not more important than the architecture itself. Sanaksenaho reminds us that, "we are dealing with a summer cottage here, something very dear to a Finn, something traditional. For a Finn, his summer cottage is where he is able to realise his innermost desire to be as one with nature." This powerful link to nature is something shared in the oral traditions of the Apache, and Australian Aborigine: "Upon pronouncing, or hearing, such a name, Apache persons straightaway feel themselves in the presences of that place; hence, when reciting a series of place-names, the Apache experience themselves "travelling in their minds."

Although much removed from these origins of spatial language, elements do remain in our current contemporary psyche. In a recent study by Linde and Labov, residents were asked to describe their New York apartments. They recognized "two distinct types, which they called the "map" and the "tour." The overwhelming result favoured the "tour", whereas "...only three percent of the descriptions [were] of the "map" type." This proves that both traditional ancestor and contemporary citizen favour a spatial journey over an ocular, static, reminiscence of place. A concept that Aalto exploits well in this particular design. "From the lake, the building is approached by boat. First comes the introduction - the water, the rolling forest and the waves lapping on the round pebbles. From the shore you ascend towards the house, slipping between the trees and the stones. It feels like a ceremony." It is this ceremonial journey that engages the visitor in the landscape. It roots both the summerhouse to its surroundings, and gives it meaning. By journeying, you form a retreat, an appreciation of place, a literal 'get-away'.
There is a paradoxical difference between the careful inter-twining of structure to place in Aalto's summerhouse, and the "authoritarian strain" of similar modernists of his generation. Le Corbusier is reported to have said, "Architecture is the masterly correct and magnificent play of masses brought together in light... it is a plastic thing. I mean by "plastic" what is seen and measured by the eyes..." If this notion of architecture were to be applied to Aalto's summer-house, a visitor would most definitely miss much of the point; and not just in the architecture, but in the full spatial and sensorial landscape in which it is situated.

Le Corbusier's own utopian schemes went further, distancing themselves from the surrounding fabric of the "fallen city" in the hope that one day, "by the very power of [their] new spatial language" they would branch out and transform their surroundings. This arrogant disregard for context and place, and a "negligence of the body and senses" has contributed to this particular failure of modernism. As summarised by Pallasmaa, "the art of the eye has certainly produced imposing and thought-provoking structures, but it has not facilitated human rootedness in the world."
Säynätsalo Town Hall

On approaching Aalto's Säynätsalo's Town Hall, one instantly notices the complementary of colour between the "greenness of nature" and the striking, warm, "grey, brown and red shades of brick" that form much of the structure's exterior. This strong brickwork, that modulates through both exterior and interior spaces, is testament to Aalto's skill with materials. As elegantly summarised by von Meiss, "Surface modulation is the architect's touchstone. He reveals himself either as an artist or simple as an engineer." On entering the interior, Sanaksenaho notices that, "the relief-like character and the touch of the human hand inherent in [the] masonry are well presented." Pallasmaa denotes a similar haptic experience, "the red brick walls... project similarly a powerful tactile invitation that speaks of the act of bricklaying and the touch of the hand." It is not just the brick-walls that invite the senses, "wood is wherever we touch a surface... and it is a pleasant material to touch." This has been taken into due consideration by Aalto, explains von Meiss, as "It is well known that it is not enough just to look at beautiful objects on display: we want to touch them, examine the weight and the textural quality of the surface and its form." Aalto is said to have been particularly passionate about bricklaying and materiality in general; it is once noted that he searched for the "lousiest bricks in the world" in order to dash any visual trace of a standardised, mass-produced facade. This is in direct contrast with the "frame and thin-skin vocabulary of twentieth-century architecture;" although sporting of many technological advances, "it has... tended to define architecture in reductive terms as an ever-thinner assemblage of layers." Indeed, the "very same bricks in a building nearby, designed by a less gifted architect, appear as lifeless surfaces made of industrially mass-produced construction elements."

As one enters the council chamber, both Sanaksenaho and Pallasmaa relate to the almost ethereal light-play that reigns over the interior walls "...the atmosphere reminds me of a monastery" and "the dark womb of the council chamber of Alvar Aalto's Säynätsalo Town Hall recreates a mystical and mythological sense of community." Light is indeed a powerful, almost supernatural force, as recollected by Abram "...[the] column of light was indeed power, influencing the air currents by its warmth and indeed influencing the whole mood of the room..." But however important light can seem to be, shadow can be equally as profound, "darkness creates a sense of solidarity and strengthens the power of the spoken word." Indeed, there pertains a general failure of western architects to eradicate even the "minutest shadow." For, according to Tanazaki, items that are bathed in shadow are by far the most attractive:

"...in the darkness of the innermost rooms of these huge buildings, to which sunlight never penetrates, how the gold leaf of a sliding door or screen will pick up a distant glimmer from the garden, then suddenly send forth an ethereal glow, a faint golden light cast into the enveloping darkness, like the glow upon the horizon at sunset. In no other setting is gold quite so exquisitely beautiful."
Materialism, tectonics and light create a considerable impression, Tanazaki ponders this over a visit to the Japanese dentist, "One reason we hate to go to the dentist is the scream of his drill; but the excessive glitter of glass and metal is equally intimidating." It is true, agrees Pallasmaa, that "homogenous bright light paralyses the imagination..." after all, "the human eye is most perfectly tuned for twilight rather than bright daylight." So in contrast to the "progressive westerner [who is] determined always to better his lot" Aalto succeeds in creating interior and exterior space that exploit and play with this haptic and sensorial realm.
Villa Mairea

The approach to the Villa Mairea is transient. The surrounding pine forest envelops the construction, and yet no grand entrance-way forms to break the sensation. It is perhaps the "wooden entrance canopy" or maybe the "pavement made of natural stone" that pertains a refined, almost sensitive, connection between landscape and structure. (fig 6) The villa appears to reach out into the forest, and the forest permeates back into the transparent boundaries and internal division of space. A feat, termed by Pallasmaa, as "forest geometry." Due to the cold, northern climate, spatial divisions in contemporary architecture tended to be "cut off from each other in a disproportionately strict way." Aalto commented on the appropriate behaviour between interior and exterior spaces. "...there has to be a connection of "refined ceremony" from street to the garden and from the garden to the interior spaces" and this notion is certainly apparent in his Villa Mairea.

fig. 6 Entrance to the Villa Mairea, Noormarkku, Finland
Contemporary architecture is at particular fault when it comes to transitory space. Take the arrogant, "populist insertion" of Portman's Bonaventure into the cityscape of Los Angeles. It's unusual, tiered entranceways and impractical floor structure, interlinked amongst a myriad of lifts and escalators make it appear some kind of mini-city. It "ought not to have entrances at all" exclaims Jameson, "since the entryway is always the seam that links the building to the rest of the city that surrounds it." This is testament to the rejection of the existing city fabric, for, in the words of Jameson, "it does not wish to be a part of the city but rather its equivalent and replacement or substitute."

"Sitting down on the sofa, you can see the forest landscape and the fire at the same time. There is something familiar, primitive about this." Indeed, agrees Bachelard, who writes of the delight in imagining "...that we were living in the heart of the woods, in the well-heated hut of charcoal burners; I even hoped to hear wolves sharpening their claws on the heavy granite slab that formed our doorstep." There is something inherently primordial that Aalto has captured in the internal lounge space that is recognised by both Sanaksenaho and Bachelard. A fundamental existential experience that harks back the basic human notion of shelter. Even the "peculiar bamboo staircase" gives the visitor an impression "of a sort of hut in the woods." As reiterated by Alexander, the steeply pitched roof, (and all of its experiential connotations) is probably the most "natural and simple thing to build" and yet it evokes a "primitive feeling" that is lacking in most contemporary architecture.

Yet most importantly of all, the Villa Maeria expresses an almost timeless quality. As famously stated by Aalto himself, "anything superfluous turns ugly with time." By using imagery and "biomorphisms" that activate our primordial, subconscious connection to the natural world, Aalto succeeds in rooting his creations to the organic. It is the failure of contemporary architecture with its "nostalgia for a vernacular past" that has produced so many meaningless classicist reproductions. The key, is that his "motifs are not borrowings; they are re-creations and they merely hint at a possible origin elsewhere." If the modernist movement had realised this fact, the twentieth century would have seen more meaningful architecture as a result.
The Church of the Three Crosses, The Viipuri Library & Early Theatre Designs

Although less famous in regards to the other selected works of this essay, these three examples are no less effective in revealing his multi-faceted approach to embodiment in architecture.

Aalto's theatre designs of the late 1920s give an insight into his subtle and delicate approach to the problem of intimate, interior space. "Instead of depending on monumental expression for effect," explains Pelkonen, Aalto constructed, "multi-sensory spaces... of light and sound [that] eliminated perceptual distance altogether. Through "various tectonic strategies," reflective and non-reflective materials and sophisticated, even, artificial light, Aalto was able to instigate perfect, ambient lighting. By taking into account the architectural, technological and psychological effects of space, Aalto was able to conceive (albeit in plan) an intimate, fully embodied experiential space.

The Viipuri library in Vyborg, Russia is perhaps one of Aalto’s most simple, and successful acoustic designs. What appears as the "result of pure play," the undulating ceiling of the auditorium actually functions as a successful acoustic space, as reiterated by Pallasmaa, architecture is not only a visual act, "qualities of space, matter and scale are measured equally by eye, ear, nose, skin, tongue, skeleton and muscle." It is Aalto’s skill in weaving together these visual, spatial and acoustic senses that makes the auditorium so successful. He effectively produces, as termed by Pelkonen, a "multifaceted sensory stimuli" that evokes different emotions in each and every visitor.

A similar result is achieved in Aalto's design for the Church of the Three Crosses, where Aalto achieved acoustic intimacy via use of a scale model, tracing rays of light that simulated human sound paths. Not only is the design inherently complex, ("he had to send his chief assistant "to refresh his knowledge of trigonometry at the University of Helsinki for a couple of months"), but the design is "extraordinarily plastic and sensuous." The seamless white render, denotes a beautiful and sensorial interior space; where the walls almost invite the touch of the hand. It is Aalto’s understanding of the multi-faceted nature of experience that makes these three spaces so successful. In contrast, and as explained by Pelkonen, "the main problem of modern architecture was its emphasis on form and style," it pertained a lack of fulfilment in all areas of sensorial experience, and as architecture "strengthens [ones] existential experience, one's sense of being in the world" a lack of fulfilment in all sensorial areas conduits a lack in the architecture of modernism.
Conclusion

At a conference in 1935, Aalto delivered a lecture that pleaded for a "more complex understanding of form - its creation and social impact."\textsuperscript{73} His thinking led him to conclude that, "the modernist emphasis on Sachlichkeit and rationality was compromising the complexity of human life by overlooking unobservable aspects of the human psyche, such as feelings and intuition."\textsuperscript{74} In his own words:

"Nature, biology, has rich and luxurious forms. With the same construction, the same tissues, and the same principles of cellular organization, it can create billions of combinations, each of which represents a definitive, highly developed form. Man's life belongs to the same category. The things that surround him are hardly fetishes or allegories with mystical eternal value; more than anything else, they are cells and tissues, living beings like himself, building components that make up human life."\textsuperscript{75}

This is explanation enough of his understanding of the inter-subjective nature of existential experience that each one of us feels. Via description and thorough analysis of his works, I feel I have proven Aalto's practical application of this theory to physical, spatial form. In this sense, only upon visiting each site in succession will I be able to truly summarise my feelings and voice my own opinion of his architecture as a collective. Yet considering the near-universal acclaim for his architecture on a regional plane (and considering the fulfilment of his tactile, and haptic exploitation of all the senses as a result of this written study) it is indeed fair to conclude that Aalto's work is a success. In light of this, (highlighted by Pallasmaa, and other phenomenologically-minded writers), it is apparent that a considerable proportion of the modern movement lacks a fundamental connection to the human spirit because it does not converse on the many planes needed in order to experience 'good architecture.' As summarised by Kenneth Frampton, "architecture possesses a marked capacity for being experienced by the entire sensorium... under most circumstances, materials and surfaces can be as much a part of an overall perception of architecture as the presence of visual form."\textsuperscript{76}

But perhaps the most apt summary of this point is in a quote from the man himself, "The best way to acquaint oneself with architecture is not to read about it: it is to look, touch, smell, and listen to it - a building only gains meaning when it becomes part of human life."\textsuperscript{77}
**Introduction**


**The Science and Philosophy of Experience**


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Hapticity and Alvar Aalto’s Architecture


Alvar Aalto’s Architecture: Experimental Summer House


Säynätsalo Town Hall


Villa Mairea


Alvar Aalto, "Temple Baths on Jyväskylä Ridge" in Alvar Aalto in his Own Words ed. Göran Schildt (Keuruu, 1997)


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Conclusion


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