



Research article

The poverty of embodiment in the work of Juhani Pallasmaa

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Abstract

In books such as *The Eyes of the Skin*, architectural theorist Juhani Pallasmaa posits unmediated sensual encounters as the site of authentic engagement with the built environment. Such ideas are prevalent in mainstream architectural discourse today. In this article, I show that they are also highly problematic. Pallasmaa rejects visual intentionality, construing it as the instrument of an objectifying reason that distances us from our 'being-in-the-world'. Referring to the phenomenologist philosophies of Martin Heidegger and Maurice Merleau-Ponty, and indebted to Henri Bergson's concept of duration through lived experience, Pallasmaa's theory promises a poetic inhabitation of the world, irreducible to reason and characterised by an animistic embodiment, allegedly offering a more meaningful architectural experience. Informed by contemporary rationalist thought and drawing on neuroscientific, anthropological and philosophical arguments, I first argue that Pallasmaa's project is weakened to the point of collapse by the misunderstanding of his intellectual resources, particularly with respect to the use of incompatible concepts of embodiment in Heidegger's and Merleau-Ponty's works. I then show how his ideas of embodiment, disinterested vision and sensuality constitute an impoverished account of lived experience that, far from overcoming alienation, mystifies it. I specifically discuss

Pallasmaa's analysis of Frank Lloyd Wright's Taliesin West, his comparisons of human- and animal-created structures and his forays into neuroscience. Finally, I dispute Pallasmaa's claim that an immediate sensual encounter is the route to authentic engagement with the world, and question whether the unmediated lived experience he yearns for is even possible.

Keywords embodiment; phenomenology; reason; vision; architecture

Introduction

The concept of embodiment features prominently in contemporary architectural theory. Originating in the critiques of Cartesian dualism that motivated the work of influential phenomenologist philosophers such as Henri Bergson, Edmund Husserl, Martin Heidegger and Maurice Merleau-Ponty, the positing of embodiment often entails the rejection of the visual as the primary source of experience in favour of a multi-sensual engagement with the world.¹ Proponents of embodiment claim that giving primacy to vision as the means by which architectural experience is constructed promotes an alienating, abstract, intellectual objectivity that ignores the body's necessary intertwinement with its environment. Latent within its positing, and that of related concepts like lived experience and situated practice, are all manner of questions concerning the roles of intuitions and concepts, feelings and thoughts, objective and subjective experience, manual and intellectual labour, art and science, the feminine and the masculine, mind and the world – to name just a few of the oppositions subsumed within the notion. At root, what is at stake is what it means to be human. This article partly explores that subject in relation to what I claim are uniquely human activities – making and experiencing architecture.

One partisan and popular champion of 'the embodied' in architecture is the architect and theorist Juhani Pallasmaa. The idea that architects should account for sound, smell, touch and even taste in their designs is, perhaps, uncontroversial. But Pallasmaa goes much further than this, contending that 'the hegemony of the eye'² has impoverished our very Being and alienated us from the environment in which our lives unfold. This article argues that Pallasmaa's conception of embodiment, which posits an immediate sensual relation of the body to architecture, does not enrich our experience – it impoverishes and obscures it. I aim to show how Pallasmaa's project is weakened by his partial reading of Merleau-Ponty's philosophy, and how his conception of sensual and 'poetic' engagement with the built environment is fatally undermined by the rejection of logic and reason on which his anti-Cartesian version of embodiment is built. The article also argues that the particular forms of architectural phenomenology pursued by Pallasmaa and others have unwitting political consequences that would be unappealing to their protagonists.

The hegemony of the eye and the rejection of reason

For Heidegger, the eye, once the astonishing harbinger of an unconcealment that revealed the glory of material forms in light and constituted an index of Being itself, has become a nihilistic interloper in our encounter with the world. Pointing to Plato and Aristotle's emphasis on the pre-eminence of sight and to the plotting of a hierarchy of the senses in the Renaissance, expressed in the vanishing point of new mathematically formulated refinements in perspective that placed the ocular at its pinnacle,³ Pallasmaa follows Heidegger in claiming that the eye has become an instrument through which humans have dislocated Being from what is true. This state of affairs is considered a diminishment. The essences of our lived experience and our Being – taken to be the same – are spiritually impoverished. Through the elevation of vision, the world is reduced to an intellectualised abstraction; it is merely 'present-at-hand' and, no longer using the Heideggerian parlance, 'ready-to-hand'.⁴ Following the anthropologist Walter J. Ong, Pallasmaa informs us that the development of writing and printing has placed further emphasis on the centrality of the visual sense and, in doing so, has impoverished the immediacy of experience. According to Pallasmaa, not only has the elevation of vision above the other senses damaged the subject's sense of existential well-being, but it has also encouraged a will to power, engendering a culture

of control that enables and promotes oppressive and patriarchal forms of society.⁵ As an alternative to the dominations of vision and abstract thought, Pallasmaa's project aligns itself with the concept of somatic intentionality.

Somatic intentionality emerges in the work of the originator of phenomenology, Edmund Husserl, and is further developed by Maurice Merleau-Ponty. Both start from the premise that our cognitive grip depends on our bodies being in the world. This is emphasised in Husserl's notion of epoché or 'phenomenological reduction' – suspending one's conceptual knowledge to yield unembellished descriptions of lived experience. This state accesses a pre-conceptual foundation for Husserl, allowing the phenomenological ego to become a 'disinterested onlooker'.⁶ Thus, an alleged immediacy of experience unencumbered by rationality, conceptual contamination or psychological bias is created. Merleau-Ponty extends this idea, conceiving of an animalistic, pre-reflective 'directedness-towards-objects' which, by definition, requires a body to be spatially situated. Bodily habits are to be distinguished from thoughts, and perception is constrained by habitual norms that require a correct body position to perceive an object properly.⁷ Therefore, pre-reflective consciousness is pure positional awareness, a directedness without 'aboutness'.⁸ What is meaningful in perception is not cognitive-semantic content but a pure relatedness to things in the world revealed in an immediacy of agency. It is characterised by awareness at the fringes of thought and a primordial sense of unity of body and the world, which allegedly speaks to our most primitive instincts.

In *The Eyes of the Skin*, Pallasmaa interprets epoché as it might be applied to an understanding of architectural experience by distinguishing between attentive observation of the world and a disinterested immersion in it, through which background information about reality is apprehended using peripheral and unfocused vision.⁹ Pallasmaa asserts that the latter is a necessary precondition for the experiential potential of the other senses to be realised. It is bodily immersion in the world that generates meaning, and architecture's role is to enhance this immersion: 'Architecture relates, mediates and projects meanings. Significant architecture makes us experience ourselves as complete and embodied spiritual beings.'¹⁰

Thus, Pallasmaa, following Merleau-Ponty, posits that in attempting to articulate meaning, architecture's goal is to mediate and project a pure sensuality that 'significant' architecture elevates to the level of the spiritual. Elsewhere, Pallasmaa asserts that great architects do not invent but 'reveal what exists'.¹¹ In other words, this pre-existing spiritual dimension is presumably embedded either in things themselves or the relationship between bodies and things and is accessed directly through the senses. It is the job of a 'great' architect to remove the intellectual obstacles to this miraculous happening and allow existential meaning to flow freely: 'Artistic meaning exists in the experience of the material realm, and this experience is always unique, situational and individual. Artistic meaning exists only on the poetic level in our direct encounter with the work, and it is existential rather than ideational – emotional rather than intellectual.'¹²

Like many architects influenced by phenomenology, Pallasmaa assumes the existence of primordial and unmediated cognitive access to the world, which is not only derived directly through the senses but arrives ready-made in a 'poetic' form that somehow speaks to a primitive human essence, unshackled from suffocating intellectualism: 'The world of art and architecture is fundamentally an animistic world awakened to life by the projection of our own intuitions and feelings.'¹³

In a description of Taliesin West, Frank Lloyd Wright's house and studio in the Arizona desert, Pallasmaa states, 'We are invited inside a unique ambience, an artistically structured world of embodied experiences, which addresses our sense of being, balance, horizon and temporal duration in a way that bypasses rationality and logic.'¹⁴ But can rationality, logic and intellect be so easily disentangled from experience? The consequences of Pallasmaa's elevation of peripheral vision and non-ocular sensuality to their supreme positions in the court of adjudication for an authentic experience obscures the historical processes that shape the 'authenticity' of artefacts. The explicit rejection of conceptualisation and objective knowledge in Pallasmaa's embodiment theory entails refusing the idea that historical knowledge is necessarily conceptual before it is sensual. This manifests itself in Pallasmaa's unwitting endorsement of a double erasure whose two sides comprise Wright's physical destruction of a conceptually structured world that instantiated the very spirituality and animism that Pallasmaa claims to celebrate and the excising of this destruction from Pallasmaa's own account of his experience of the building and its environs.

Despite his lauding of this 'artistically structured world', Pallasmaa's privileging of peripheral vision would surely cause some notable parts of the experience to be missed. For example, arranged around the site are a number of petroglyphs – boulders with carved inscriptions belonging to the Hohokam people of the Arizona desert.¹⁵ These were removed by Wright and his workers from locations that carried spiritual significance for the Hohokam¹⁶ and installed at Taliesin West in sculptural compositions that accorded with the protocols of Western art. The act reveals an attitude central to Wright's ideology of the 'organic' – an ideology that appears to be mirrored in Pallasmaa's desire to evacuate the intellectual – that aboriginal peoples were part of nature, untarnished by the evils of civilisation.¹⁷ But the Hohokam people are not merely a part of an unchanging nature; they are a sophisticated culture with a fully developed pictographic form of writing whose insignia is inscribed on the boulders appropriated by Wright.¹⁸

To claim that it is only sensual encounter and peripheral vision that can access true authentic experience is akin to saying that knowledge of the historical and political implications of Wright's theft of these artefacts – knowledge which requires conceptual structure if it is to be meaningful – is of no importance to the way Taliesin West is experienced. It is to say, in fact, that such knowledge obstructs appreciation of the latter's sensual authenticity. The evacuation of the conceptual leaves Pallasmaa in the unappealing position of reducing the petroglyphs and those who created them to a nature unsullied by 'civilisation', just as Wright had done before him. In doing so, he discounts the contribution of Wright's arrangement of the stones as elements in the creation of Taliesin West's 'unique ambience' while simultaneously adopting an aestheticism that he claims to reject elsewhere.¹⁹ In denying the role that reason and logic might have played in the discursive development of the conceptual framework through which the Hohokam organised their world, Pallasmaa reduces them and, by implication, all human frameworks – including those which organise objects in accordance with the principles of Western sculpture – to a pure, ahistorical nature that can only be authentically accessed through the non-attentional and the sensual. As such, he obscures and implicitly endorses the colonial attitudes that inform every aspect of Wright's project at Taliesin West (Figure 1). The objection here is not to the idea of sensual experience. It is to an attempt to inflate sensual experience into an essence that can be shown, contrary to Pallasmaa's ambitions, to constitute an impoverishment and a mystification of the true nature of an experience which is historical before it is ontological.

Figure 1. Taliesin West, Arizona, with Hohokam petroglyph (Source: photograph by Paul Vanderveen)



Misreading Merleau-Ponty

Alongside Merleau-Ponty's insistence on the necessity of the body for the possibility of perception, Pallasmaa's notion of peripheral vision seems to be an interpretation of the Merleau-Pontian idea of 'awareness at the fringes of thought'.²⁰ But in emphasising this, Pallasmaa ignores the centrality of the gestalt concept of 'figure-ground' to Merleau-Ponty's account. Contrary to the latter, who rejects the notion of a sensory-cognitive continuum – the idea that there is a direct causal link between what is experienced by the senses and the meaning of that sensation – Pallasmaa's theory, with its insistence on the by-passing of reason and logic, is precisely an instance of the positing of an idea that the senses directly cause meaning.²¹ As I will explain later on, although philosophers have very different accounts of how it happens, the process that takes us from sensation to meaning, far from being immediate in the way Pallasmaa insists, is a journey that contains many twists and turns. Suppose the implication of Pallasmaa's theory – that meaning is emotional and not ideational – is that sense impressions cause emotional content that can be meaningfully articulated. In that case, this 'content' must exist in objects themselves such that it can be channelled via the body to create a ready-made psychological state. This would imply a foundationalism that is not characteristic of Merleau-Ponty's position. For Merleau-Ponty, there is no meaning generated by mere acquaintance with objects. The senses do not judge. Meaning requires intentionality.

Indeed, both Husserl and Merleau-Ponty distinguish between 'act intentionality' and 'operative intentionality' towards objects in the world. The former is characterised by judgement and voluntary decisions, while the latter is a pre-reflective form of intentionality lacking 'aboutness'. It is exemplified in the difference between paying attention to something and merely being aware of it.²² Merleau-Ponty translates Husserl's operative intentionality into a 'motor intentionality', requiring a moving body directing itself towards things in either a disinterested, habitual manner or through deliberate, purposeful attention.²³ This difference is articulated in Merleau-Ponty's concept of the figure-ground relation, in which peripheral vision generates the awareness that provides the ground for one's attention to objects. Our perceptual sensitivity is never towards a single object in isolation.²⁴ The figure stands out from the ground only insofar as one adopts the correct bodily posture towards it. For example, seeing a cup on a table requires being within a certain range of it, so it might be distinguished from other objects. In other words, the extent to which a figure can be distinguished from the ground, that objects of attention can be differentiated from those of mere awareness, is normative. That is, it is rule-governed. Unlike Pallasmaa, Merleau-Ponty insists on the differences between perceptual awareness, directed attention and discursive thought. Peter Wolfendale goes further, arguing that it is the mind, not the body, that ultimately frames acts and objects based on a knowledge of what is pertinent at a given moment. When cooking an omelette, attention is paid to the eggs, the pan and the stove. One may also become aware that it is raining outside, but the mind brackets this knowledge as background information with no relevance to the task of cooking eggs, thus distinguishing between attentiveness and awareness.²⁵

Of course, in occupying the space of the built environment, we are vaguely aware in our peripheral vision of the presence of walls a certain distance from the body, walls that may be of a certain colour or made from a material that gives off a feeling of warmth or coolness. We may feel comfortable or not. Certain smells and acoustic properties might intrude on our awareness and, of course, this operative intentionality, or general awareness, is part of our perception. But in accordance with Merleau-Ponty's conception of figure-ground, in which background plays an important role, attention cannot be simply dismissed. Recall that, for Pallasmaa, it is through significant architecture that 'we experience ourselves as complete and embodied spiritual beings'. If so, how is this to be squared with the idea that it is only through a peripheral and unfocused vision that we gain a more authentic bodily experience of the world? By significant architecture, Pallasmaa surely means buildings designed by acknowledged 'masters' – the works with which he illustrates his books. Unlike 'everyday' architecture, not designed by masters, of which the majority of the built environment consists, and that Pallasmaa would claim emerges – incorrectly as it turns out – from some sort of unconscious proto-biological process,²⁶ significant architecture is surely created with highly directed intentionality through mastery of a sophisticated, intellectual articulation of complex, interrelated concepts covering appearance, functionality, sociality, physical context, technology and history. Significant architecture, if it is to be appreciated as such, surely demands attention. Let us examine two works of significant architecture by the canonical Modernist architect Mies van der Rohe and attempt 'embodied' phenomenological readings.

Although Farnsworth House (1951) is a private residence located on a rural site in the United States (Figure 2) and the New National Gallery (1968) is a major public building in Berlin, they share certain formal and material characteristics. Each is an example of what Mies van der Rohe called 'skin and bones architecture'. Typologically, they are simple, single-storey, post and beam structures whose main floors are raised above the ground. The materials used in each are almost identical – steel frames (one a ghostly white, the other an absorbent black), fully glazed walls, floors in travertine marble and internal fittings in oak veneer. But despite these similarities, the structures could not be more dissimilar in expression and 'feeling'.

Figure 2. Farnsworth House, Illinois (Source: photograph by Victor Grigas)²⁷



Farnsworth is a glass box elevated above the flood plain of the Fox River in Illinois (Figure 3). The living quarters are defined by white horizontal beams that cantilever beyond pairs of supporting columns. Whether against the verdant summer green of the lawns above which it appears to levitate, the trees among which it nestles or against the whiteness of the Illinois winter, the house has the quality of a ghostly apparition. It is both of its site and a counterpoint to it. Regarding Pallasmaa's conception of peripheral vision, one might imagine being aware of this floating object or, if one is inside, of feet resting on cool, elevated marble as the eye senses a surrounding landscape whose presence fills the interior. But the key to this impression arguably lies in articulating a construction detail – the connection between the posts and the beams. The I-section columns do not sit beneath the C-section beams. Instead, they are fixed to their flat faces, which point outwards from the building towards the exterior, so that the appearance is of the columns gently lifting a spectral volume off the ground in a manner not unlike a box delicately held up from the sides by fingertips applying the minimum pressure necessary for the maintenance of the levitation.

Figure 3. Column/beam junction, Farnsworth House (Source: photograph by Benjamin Lipsman)²⁸



The structure of the New National Gallery in Berlin is an altogether more muscular, if equally elegant, affair. If Farnsworth House is like a ballerina whose fragility masks a steely strength, the Berlin building betrays a poise of a more sinuous variety (Figure 4). The roof is a rigid grid of deep black I-beams whose weightiness bears down on the visitor while also seeming to float. It is held up by pairs of steel columns, each located far from the corners of the square-shaped roof, creating a double cantilever. The symmetrically placed columns stand proud of the glass wall and take the form of a cross in plan, created by the intersection of two vertical I-sections. The tapering of these columns expresses the transfer of the roof load down to the shallow marble plinth that forms the building's main floor. Small pedestals at the top of the cross-form columns separate the column proper from the thick roof structure they support. These pedestals are positioned at the very edge of the structure, not unlike the way a traditional classical entablature sits upon a column. If the effect at Farnsworth house is one of a box being held at the sides by minimal frictional forces, in the New National Gallery, the heavy roof is lifted from below, as if by fingertips supported on muscular digits.

Figure 4. Column/beam junction, New National Gallery, Berlin (Source: photograph by Fred Romero)²⁹



It is certainly possible to inhabit these structures in the disinterested mode Pallasmaa envisions, sensing the ambience these articulated details produce. But reducing their meanings to this, and only to this, and not paying attention to how it is achieved would surely be an impoverishment, drawing attention away from what, phenomenologically, demands attention. It is also to discount the conceptual knowledge that informs considerations of scale, materiality, physics, geometry, historical and physical contexts – all of which are factors that give the building its meaning as well as creating the desired ambience. These ‘intellectual’ things inform the embodied experience of the buildings. They have not emerged from unconscious evolution, nor do they merely express ‘what exists’.

Rather, they are acts of conscious reflection that, as part of the design process, ultimately provide the reasons for the buildings to be the way they are in a way that is intended to inform the experience of the visitor. They bring the building into what Robert Brandom calls ‘the game of giving and asking for reasons’³⁰ – the discursive process by which linguistic communities establish complex meanings that allow buildings to be deployed in the performance of meaningful dialogues about the relations between the ancient and the modern, the universal and the particular, the divine and the secular, and so on. For instance, both these buildings represent radical reinterpretations of temple typologies – Farnsworth being Ionic and Berlin Doric – that deploy steel frames, forged in the harsh light of a disenchantment with the world that announces a revolution in which the scientific image evicted the Temple’s divine incumbents. Expressed in the articulation of the junctions of column and beam, in which the antinomies of the muscular and the fragile emerge resolved, innovations in the development of steel and a flowering of engineering knowledge – of the sort that Pallasmaa would dismiss as ‘instrumental technology’ – allow for novel artistic expressions of strength, balance, weight, stability and history, while the development and deployment of plate glass allow for radically new interrelations between interior worlds and immediate contexts. The material and conceptual components of these buildings arise from and form part of a rational-logical realm of precisely the kind that Pallasmaa would argue obstructs our true sense of ‘being’ in relation to buildings. The exclusion of the power of reason that informs experience and the reduction of experience to a hazy peripheral background surely diminishes,

rather than enhances, perceived bodily experience in these spaces. For example, would the latter not be enriched by the inhabitants noticing their resemblance to temples – a noticing that would require knowledge of what a temple is? As the philosopher Wilfrid Sellars – of whom more will be heard later – puts it: ‘We must recognize that instead of coming to have a concept of something because we have noticed that sort of thing, to have the ability to notice that sort of thing is already to have the concept of that sort of thing.’³¹

Pallasmaa identifies his philosophy with that of Merleau-Ponty, but his insistence on the primacy of the peripheral does not accord with the latter’s account of experience. Merleau-Ponty’s figure-ground dialectic demands a focused and unfocused vision. One cannot have one without the other. Whether one pays attention to things, or allows them to become peripheral, depends on the individual’s mode of engagement, which may be disinterested-habitual or attentive-intentional, depending on their motivation. The building’s cleaners are likely to have a different mode of intentionality towards the National Gallery than the tourists who come to admire the architecture or the art housed within it. Embodiment is characterised by more than one form of intentionality, and people occupying buildings oscillate between them. The idea that one intentional stance is more real, true or authentic than another implies a highly reductive notion of what it is to be human.

The social relations of embodiment

It is also a privileged reductivism, as is demonstrated by the more nuanced approach to embodiment provided by philosopher and urban theorist Quill R. Kukla. While Pallasmaa argues that sensual immediacy and peripheral vision can extract ineffable essences, Kukla suggests that urban dwellers and urban spaces make each other through social relations.³² Meaning is political and territorial, determined by habitual and discursive norms that are ineliminably grounded in socially located bodies.³³ Pallasmaa implicitly posits a human whose immutable universality is the receptacle of a primordial existentiality revealed through communion with environments created by ‘masterful’ architects. For Kukla, places are self-reflexive, ever-evolving game spaces,³⁴ determined by continually mutating sets of intersubjective rules that inhabitants must master to feel ‘at home’. Rules of embodiment express themselves through posture, gaze direction, eye contact and verbal expression.³⁵ They manifest themselves in ‘place ballets’ in which these embodied ‘skills’, alongside other territorial markers, such as graffiti and street art, types of food on sale, background sounds, dress and so on, create places with distinct territorial characters.³⁶ As Kukla puts it, ‘The actual ontology of the space is shaped by its users as spatially embodied agents ... *what there is* is indexed to our embodied stances and practices within a material environment.’³⁷

To navigate places smoothly and confidently, and have agency within a territory, one must acquire skills and habits that constitute what Kukla calls a ‘stance’.³⁸ As such, environmental ontologies are normative, not essential, and the sense of being at home within a space depends on one’s mastery of social norms. Most of us have experienced what it is like to feel lost as a tourist³⁹ in a strange city or as a stranger shorn of the necessary skills of habitation in an unfamiliar district. This is not just the sense of not knowing how to find your way around, but also the way of not knowing how to act, hold yourself or make eye contact and run the risk of spatial transgression. In Merleau-Pontian terms, it is precisely through our understanding of what the figure and the background are, what should command attention and what can safely be relegated to the background that one can successfully navigate. In contrast to Pallasmaa, Kukla insists that urban movement requires not peripheral vision but heightened attentiveness and assertiveness.⁴⁰ Significantly, it requires the conceptual skills of framing and judging.⁴¹ At the heart of this is the critical matter, on the one hand, of who gets to create the local ontology and, on the other, of who has access to the means of smoothly navigating the territory, which may also be economic as well as normative in character. As we saw in the case of Taliesin West, an existing spatial ecology created by one group is colonised and reshaped by another by creating a work of significant architecture. Architectural sites can form a global nexus of privileged nodes whose comfortable occupation requires a mastery of skills that are far from universal. Access to the comforts provided by peripheral vision and sensual ambience comes to those with certain privileges. As Kukla points out, citing the example of how the embodied presence of young Black men is perceived as a threat⁴² that results in the racist enforcement of laws that curtail their rights to express agency within legitimate territories, embodiment has little to do with essential ontologies and everything to do with the privileges determined by social relations.

Bergson's duration

Pallasmaa's conception of embodiment seems better aligned with Henri Bergson's philosophy than that of Merleau Ponty. Pallasmaa, like Bergson, unambiguously places pre-conscious sensory experience at the forefront of authentic encounters with the world: 'Our contact with the world takes place at the boundary line of the self through specialised parts of our enveloping membrane.'⁴³ For Bergson, Being takes place on the inside of duration where there is no totalising external view.⁴⁴ A view from inside a situation is necessarily peripheral and undirected, allowing for the awareness of other senses, whose coming together into a totality attain the condition of the absolute.⁴⁵ In this way, Bergson claims that the role of the mind in experience is to transcend concepts to arrive at intuition. For Bergson, duration is constituted by continuously changing degrees of difference in sensation, establishing an awareness of time through which we think of 'Being' directly.⁴⁶ It is through this pure intuitive experience of difference that Being is directly accessed. Its reality is guaranteed in a continuity that cannot be reduced to measurements of intervals. To think of the interval between two states along a continuous line, for example, from one degree of temperature to another, is an act of intellection that does not reflect experienced reality. For Bergson, a view through an external mechanism like measurement is a mediation that is secondary to the real.⁴⁷

To take this view is to renounce the project of critical reason inaugurated by Kant and to place 'feeling' above thinking in the ethical order, a position whose consequences in contemporary politics are all too recognisable. Ethics aside, Kant does not merely assert but demonstrates that, while knowledge originates from experience, without the logical construction of experience in the mind through the deployment of concepts, experience is meaningless: 'Thoughts without content are empty, intuitions without concepts are blind.'⁴⁸

Similarly, a philosopher of cognitive science, Thomas Metzinger, shows how the unmediated apprehension of pure difference in sensation posited by Bergson is, at best, meaningless and, at worst, impossible. Metzinger cites an experiment in which the difference between the two shades of green nearest each other on the colour chart cannot be distinguished by the human eye unless they are presented next to each other. In other words, the pure difference in sensation posited by Bergson and, by extension, Pallasmaa, far from being reduced to intellection by a scale, is not perceivable without one. Pure sensation has to be mediated to be apprehended at all.⁴⁹

The 'beauty' of animal architecture

If Bergson is correct and pure sensory experience is reality's most authentic manifestation, then, presumably, other non-human sentient beings' experiences are equally 'real' and 'authentic'. Neurobiologist Semir Zeki proposes that animal behaviour is aesthetically motivated. 'What else could beauty be than nature's powerful process of selection in the process of evolution?' Pallasmaa cites this and the poet Joseph Brodsky's suggestion that 'The purpose of evolution is ... beauty.'⁵⁰ Regaling us with his observations of the miraculous capacities of ants, termites and wasps to create highly adaptive environments in the form of nests, circulation networks and fungus farms, Pallasmaa claims these animals' abilities are a form of collective knowledge that is beyond our understanding. He is quick to make the leap to the activity of constructing human environments, suggesting that buildings should be understood as biological extensions of our Being: 'So, dams and water regulation systems should be part of the phenotype of the beaver ... Works of meaningful architecture intuitively grasp the essence of human nature and behaviour, in addition to being sensitive to the hidden biological and mental characteristics of space, form, and materiality.'⁵¹

Animal structures may well be beautiful to the human eye, but it is another thing altogether to claim that they are beautiful for the animals who constructed them. Works of architecture are conceived by imaginations able to conjure concepts, but beavers' dams, spiders' webs and termites' hills are not products of the imagination. If nature creates beauty, it does not do so with self-conscious intention. To claim, as Pallasmaa appears to, that it is evolution doing the imagining pre-supposes that evolution is a purposeful being, suggesting that Pallasmaa's theory is not so much a philosophy as a theology.

Daniel Dennett offers a perfectly cogent and non-supernatural account of the relationship between human and animal architecture in his comparative analysis of a termite hill and Antonio Gaudi's Sagrada

Família (Figure 5). Noting how the two share certain similarities in their appearance, Dennett shreds the notions that Pallasmaa entertains about the similarities between human and animal structures:

There are reasons for the structures and shapes of the termite castles but they are not represented by any of the termites who constructed it. There is no Architect Termite who planned the structure, nor do any individual termites have the slightest clue about why they build the way they do.⁵²

The cathedral in Barcelona is the result of Gaudi taking what Dennett calls the 'intentional stance',⁵³ which posits the existence of a rational agent attributing beliefs, desires and rational intention to acts of creativity. Animals are equipped with what Dennett calls 'competence without comprehension',⁵⁴ which is expressed in impressive abilities that humans are apt to mistake for instances of intentionality. These skills, the products of evolution, are the outcomes of entirely blind processes. There are no designers, no design intentions and no purposeful will to create beauty. Like other animals, humans have instinctive, subconscious and libidinal drives. However, it is language that gives us the skill of conception, the ability to think about things that are not immediately present, to abstract and develop ideas. In the words of Dennett, we understand nature in such a way that we comprehend its 'deficiencies-for-us' that create within our over-endowed intellects the drive to change our outer and inner natures. A termite hill constructed today is the same as one constructed 50,000 years ago. The same is not true of human constructions. The termite hill is a natural phenomenon (Figure 6). The Sagrada Família is not.

Figure 5. Sagrada Família (Source: photograph by Kostos Petsas) Figure 6. Termite hill (Source: © Vennema)



To believe that pure sensation gives us unmediated access to the world and that, through sensation, the world imprints itself on the mind like a seal on wax is to fall prey to what philosopher Wilfrid Sellars calls the 'Myth of the Given'.⁵⁵ Pallasmaa's embrace of the myth is problematic in numerous ways. On the political level, his insistence that 'architects do not invent architectural realities; they reveal what exists and what are the natural potentials of the given situation',⁵⁶ ignores how spatial conditions are determined by social relations on the micro scale, as suggested by Kukla, and also on the macro scale, in terms of the way dominant economic systems shape the way buildings and cities are organised, constructed or otherwise produced. Pallasmaa naturalises the 'given' condition, discounts whatever agency architects might have to critique or imagine alternatives to the existing 'natural order' and fails

to acknowledge architecture's role in producing the spaces of domination. Pallasmaa's tendency to naturalise is most powerfully exemplified in his explicit biological reductionism: 'Architectural ideas arise "biologically" from unconceptualized and lived experience rather than from mere analyses and intellect.'⁵⁷

Here, the naturalisation of the given is dressed in bogus scientific attire, suggesting that the spaces of domination, in which architecture, including significant architecture, is sometimes implicated, arise 'biologically' through processes in which no form of conceptualisation, whether comprising ideas of control, freedom or critique, has played a part. From here, it is but a short step to the instantiation, in certain categories of architecture, of meanings that are taken to be natural but which are in fact historical. Thus, the history of Western architecture is assumed to be at once a civilising force and the natural outcome of the innate cultural tendencies of those who created it. By contrast, the architectures of those whose civilisations are deemed to have been 'superseded' by these 'civilising forces' are treated as quaint remnants of natural processes whose cultural artefacts and architectural structures are in essence no different to termite hills. Conceptions such as these have not only legitimised the actions undertaken by Frank Lloyd Wright at Taliesin West, but today they also give sustenance to those who would weaponise architecture as a tool for promoting the ideas of the political right.

Underlying these political objections are philosophical ones. Even if, like Pallasmaa, we follow Merleau-Ponty and accept the positing of the primacy of the body, the latter insists on a difference in kind between bodily perception and discursive thought.⁵⁸ Like Kukla, Merleau-Ponty does not dismiss the role of the discursive intellect. Rather, the role of somatic intentionality is to constrain and ground discursive intentionality. Somatic intentionality is non-apperceptive, pre-personal and non-self-conscious, the part of our perception we share with other sentient animals.⁵⁹ It is the necessary condition for any conceptual framework, although it is not itself a conceptual framework. For anti-phenomenologist thinkers,⁶⁰ there can be no 'meaning' in the epistemic or semantic sense without language, or at least some form of conceptual consciousness. While meaning derived from bodily relatedness to objects exists in the form of the skilled coping that allows us, like other animals, to physically navigate our environments, meaning, if it is to be human, cannot be limited to this. As Gail Soffer puts it,⁶¹ while bodily sensation certainly grounds part of our perception, conceptions and perceptions of 'a certain epistemic sophistication' are not possible without language. *Contra* Pallasmaa, I insist that the proper appreciation and understanding of significant architecture, even at the most basic level one might attribute to someone who is not necessarily an architectural expert, requires the 'certain sophistication' that characterises beings endowed with language.

Language and sensory experience

For Wilfrid Sellars, language structures the world we perceive. For Reza Negarestani, without language, there can be no mind.⁶² Following Kant, Sellars insists that the reality we perceive is constructed through the synthesis of concepts and intuitions derived from mental representations. We have no direct cognitive access to a reality existing outside of these representations.⁶³ Sellars argues that concepts and intuitions are intertwined,⁶⁴ such that sensual experience is intellectually informed and structured by language.⁶⁵ Experience is not direct and unmediated in the way that the naive phenomenology espoused by Pallasmaa assumes it to be. At the most basic semantic level, it is informed by acquired knowledge and beliefs. A new-born child may experience the sensation of redness in the presence of a red object. But contrary to Pallasmaa's position, which would imply that the child would enjoy an encounter with redness resonant with authentic immediacy, the experience would be akin to pure noise for them. If the child has no language, their perception of the world remains unstructured, and they can have no knowledge of what 'red' is, nor indeed, what colour is, nor of the difference between an object and its predicative properties. It is only with the acquisition of language and the chains of inference that language creates that the child perceives the sensation of red meaningfully as red, believing it to be a colour and the property of an object.⁶⁶ This means that sensation is conceptually informed by biases, beliefs and desires. The world we perceive is not simply given. This, in turn, rules out any notion that, for humans, the pure forms of sensation, on which the entire edifice of Pallasmaa's theory rests, is even possible, let alone the font of pure, unmediated authentic experience.

Recent neuroscience seems to support Sellars' theory. In her investigation of olfaction, *Smellosophy: What the nose tells the mind*, Ann-Sofie Barwich argues against appeals to the immediacy of the senses. The olfactory bulb comprises a mosaic of individual receptors, each of which responds to individual chemical stimuli. The bulb 'lights up' when it encounters a given mix of chemicals to create a 'fingerprint' of each chemical cocktail, which is experienced as a distinctive smell. The trained noses of perfumers and wine tasters can isolate individual chemicals within the cocktail. Barwich states, 'Perception does not mirror the world, it interprets it.'⁶⁷ And interpretation entails invention. The colour pink, for instance, is an invention of the mind.⁶⁸ Having no position on the electromagnetic spectrum, it does not exist in the 'real' world. A phenomenological experience is a neural event, linguistically structured.⁶⁹ Barwich cites an experiment in which two identical chemical compounds were labelled 'vomit' and 'parmesan' and how this was enough to convince people taking part that the identical substances smelled different.⁷⁰ Knowledge, even false knowledge, affects sensation. Perfumers and wine tasters develop highly tuned senses of smell, in which discrimination is achieved through the assignment of conceptual content. To help with the act of categorisation, 'tones' of different wines are given names and spatial relations. Thus, a wine has 'a spicy note on a smooth, fragrant background', and so on. Through discursive practice, a 'vocabulary' and 'grammar' of smell are developed,⁷¹ and training in these olfactory discrimination skills instigates structural modifications of the brain akin to learning a new language's grammar, vocabulary and semantics. This highly refined perceptual expertise is a form of judging whose support structure is a language collectively developed.⁷²

There are clear differences between the experiences of such experts and non-experts who also drink wine but make less refined judgements about the wine they consume. This is not dissimilar to how non-experts and experts might make judgements about architecture. For example, we could compare the peripheral attention of the disinterested occupant, idly enjoying the ambience of a building, to someone absentmindedly sipping a glass of red wine. They notice that the experience is rewarding without paying too much attention. But the wine expert does pay attention and perceives every nuanced tone within the complex structure of the wine, understanding its spatial form, its provenance, the material qualities of its tone and its language and grammar. In the same way, the architectural expert attentively apprehends a building. We would not claim that the experience of the expert engaged in the act of attentive contemplation and study, partaking in the act of logically structuring the experience, is somehow less authentic or real than that of the disinterested sipper. Yet, when it comes to architecture, that is precisely what Pallasmaa seems to be claiming.

Conclusion

Emphasising sensuality in architectural spaces is not the high road to an ineffable, quasi-theological encounter with an authentic reality. Rather, it is science, the fruit and organon of reason, that informs experience and shows how it is structured, generating the knowledge by which it is enriched. It is knowledge of history that censures us against the seductions of an allegedly pure form of sensuality that obfuscates injustice. Like all aspects of experience, these things are conceptually informed and structured by that most rational of inventions, the collective and discursively achieved, intellectual artefact we call language. Pallasmaa's conception of embodiment is undermined by his misreading of Merleau-Ponty's concept of somatic intentionality, in which the relation between figure and ground is critical. By reducing this to the concept of a peripheral and unfocused vision, necessary to allow the other senses to come to the fore in perception, and by banishing the perception of the figure to the realm of an abstract whose consequence is spiritual impoverishment, Pallasmaa dispenses with the crucial dialectical relation between figure and ground in Merleau-Ponty's work. Pallasmaa further reinforces the concomitant rejection of the intellectual, in his insistence that meaning belongs in the realm of the senses alone, and by the implication that ready-made meanings existing in architectural environments can be directly transmitted by mere physical acquaintance. This is an impoverished embodiment devoid of the thoughts, beliefs, desires and social relations that colour the perception, inhabitation and making of architecture. In positing this reduction, Pallasmaa simply facilitates a new version of the Cartesian dualism he emphatically claims to reject, in which it is the body that is given primacy over the mind. As Kant understood, the question is not whether it is the body or the mind that should have primacy in our accounts of perception and architectural experience. The question is how their roles, understanding and

sensibility⁷³ can be united in developing an account of architectural meaning that critically engages with history and science.

Notes

- ¹ Pallasmaa, *Eyes*, 12.
- ² Pallasmaa, *Eyes*, 22.
- ³ Pallasmaa, *Eyes*, 19.
- ⁴ Heidegger, *Being and Time*, 98.
- ⁵ Pallasmaa, *Eyes*, 18.
- ⁶ Husserl, *Cartesian Meditations*, 35.
- ⁷ Sachs, *Intentionality*, 133.
- ⁸ Sachs, *Intentionality*, 136.
- ⁹ Pallasmaa, *Eyes*, 13.
- ¹⁰ Pallasmaa, *Eyes*, 11.
- ¹¹ Pallasmaa, *Thinking Hand*, 16.
- ¹² Pallasmaa, 'Body, mind and imagination', 54.
- ¹³ Pallasmaa, 'Body, mind and imagination', 60.
- ¹⁴ Pallasmaa, 'Body, mind and imagination', 57.
- ¹⁵ Wright, 'Stones of Taliesin West', 7.
- ¹⁶ Wright, 'Stones of Taliesin West', 54–7.
- ¹⁷ Wright, 'Stones of Taliesin West', 71.
- ¹⁸ Wright, 'Stones of Taliesin West', 46.
- ¹⁹ Pallasmaa, *Thinking Hand*, 6.
- ²⁰ Sachs, *Intentionality*, 135.
- ²¹ Pallasmaa, *Thinking Hand*, 10; see the discussion on how the skin can 'sense' colour.
- ²² Merleau-Ponty, *Phenomenology of Perception*, lxxxi.
- ²³ Merleau-Ponty, *Phenomenology of Perception*, 53.
- ²⁴ Merleau-Ponty, *Phenomenology of Perception*, 70–1.
- ²⁵ Wolfendale, *Artificial Bodies*.
- ²⁶ Pallasmaa, *Thinking Hand*, 15.
- ²⁷ CC BY-SA 3.0, <https://creativecommons.org/licenses/by-sa/3.0>.
- ²⁸ CC BY 2.0, <https://commons.wikimedia.org/w/index.php?curid=52819534>.
- ²⁹ CC BY 2.0, <https://creativecommons.org/licenses/by/2.0>.
- ³⁰ Brandom, *Making It Explicit*, xviii.
- ³¹ Sellars, *Empiricism*, 176.
- ³² Kukla, *City Living*.
- ³³ Kukla and Lance, *Yo!* and *Lo!*, 5.
- ³⁴ Kukla, *City Living*, 34–6.
- ³⁵ Kukla, *City Living*, 42.
- ³⁶ Kukla, *City Living*, 4.
- ³⁷ Kukla, *City Living*, 38.
- ³⁸ Kukla, *City Living*, 30.
- ³⁹ Kukla, *City Living*, 76.
- ⁴⁰ Kukla, *City Living*, 41.
- ⁴¹ Kukla, *City Living*, 64.
- ⁴² Kukla, *City Living*, 262.
- ⁴³ Pallasmaa, *Eyes*, 10–11.
- ⁴⁴ Bergson, 'Introduction to metaphysics', 123.
- ⁴⁵ Bergson, 'Introduction to metaphysics', 159.
- ⁴⁶ Bergson, *Time*, 63–4.
- ⁴⁷ Bergson, *Time*, 66–8.

- ⁴⁸ Kant, *Critique*, 86.
- ⁴⁹ Metzinger, *The Ego Tunnel*, 48–9.
- ⁵⁰ Zeki and Brodsky, quoted in Pallasmaa, *Mind*, 67.
- ⁵¹ Pallasmaa, *Mind*, 62.
- ⁵² Dennett, *Bacteria*, 51.
- ⁵³ Dennett, *Bacteria*, 37.
- ⁵⁴ Dennett, *Bacteria*, 84–5.
- ⁵⁵ Sellars, *Empiricism*. This essay is Sellars's major attack on what he calls 'the Framework of Givenness'.
- ⁵⁶ Pallasmaa, *Thinking Hand*, 16.
- ⁵⁷ Pallasmaa, *Thinking Hand*, 15.
- ⁵⁸ Sachs, *Intentionality*, 129.
- ⁵⁹ Sachs, *Intentionality*, 134–5.
- ⁶⁰ I refer to a group of contemporary Neo Rationalist philosophers cited in this article, including Ray Brassier, Reza Negarestani and Peter Wolfendale. These thinkers' views on language are, on the one hand, about its computational possibilities rather than its semantic meanings. On the other, they are closer to Hegel and other German idealists than they are to deconstructionist philosophers like Jacques Derrida who helped instigate what was called a 'linguistic turn' in philosophy, which subsequently influenced the thinking of architects like Bernard Tchumi and Peter Eisenman in the 1980s.
- ⁶¹ Soffer, 'Revisiting the myth', 301–37.
- ⁶² Negarestani, *Intelligence and Spirit*, 71.
- ⁶³ Kant, *Critique*, 281.
- ⁶⁴ Brassier, *Lived Experience*, 14–15.
- ⁶⁵ Brassier, *Lived Experience*, 19.
- ⁶⁶ Brassier, 'Transcendental logic', 3–5.
- ⁶⁷ Barwich, *Smellosophy*, 11.
- ⁶⁸ Barwich, *Smellosophy*, 106.
- ⁶⁹ Barwich, *Smellosophy*, 263.
- ⁷⁰ Barwich, *Smellosophy*, 264.
- ⁷¹ Barwich, *Smellosophy*, 272.
- ⁷² Barwich, *Smellosophy*, 281.
- ⁷³ Kant, *Critique*, 55.

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The author declares no conflict of interests with this work. All efforts to sufficiently anonymise the author during peer review of this article have been made. The author declares no further conflicts with this article.

References

- Barwich, Ann Sophie. *Smellosophy: What the nose tells the mind*. Cambridge, MA: Harvard University Press, 2020.
- Brandom, Robert. *Making it Explicit*. Cambridge, MA: Harvard University Press, 1994.
- Brassier, Ray. *Lived Experience and the Myth of the Given*. Bergson: Sellars, 2011.

- Brassier, Ray. 'Transcendental logic and true representings'. *Site 0: Castalia, the Game of Ends and Means*, 2016. Accessed 6 February 2023. <https://www.glass-bead.org/article/transcendental-logic-and-true-representings/?lang=enview>.
- Bergson, Henri. *Creative Evolution*. Trans. A. Mitchell. New York: Random House, 1944.
- Bergson, Henri. 'Introduction to metaphysics'. In *Introduction to Metaphysics: The creative mind*. Trans. M.L. Andison. Totowa: Littlefield Adams and Co., 1975.
- Dennett, Daniel. *From Bacteria to Bach and Back: The evolution of minds*. London: Penguin Random House, 2018.
- Heidegger, Martin. *Being and Time*. Trans. John Macquarrie and Edward Robinson. Oxford: Blackwell, 2001.
- Husserl, Edmund. *Cartesian Meditations*. Trans. D. Cairns. Boston: Kluwer Academic, 1991.
- Kant, Immanuel. *Critique of Pure Reason*. Trans. Marcus Weigelt and Max Müller. London: Penguin Books, 2007.
- Kukla, Quill R. *City Living: How urban dwellers and urban paces make one another*. Oxford: Oxford University Press, 2021.
- Kukla, Rebecca, and Mark Lance. *Yo!' and 'Lo!'*. Cambridge, MA: Harvard University Press, 2009.
- Merleau-Ponty, Maurice. *Phenomenology of Perception*. Trans. D. Landes. New York: Routledge, 2012.
- Metzinger, Thomas. *The Ego Tunnel: The science of the mind and the myth of the self*. Philadelphia: Basic Books/Perseus, 2009.
- Negarestani, Reza. *Intelligence and Spirit*. Falmouth: Urbanomic Media, 2018.
- Pallasmaa, Juhani. 'Body, mind and imagination: The mental essence of architecture'. In *Neuroscience, Embodiment, and the Future of Design*, edited by Sarah Robinson and Juhani Pallasmaa. Cambridge, MA: MIT Press, 2015.
- Pallasmaa, Juhani. *The Eyes of the Skin*. Chichester: John Wiley and Sons, 2012.
- Pallasmaa, Juhani. *The Thinking Hand*. Chichester: John Wiley and Sons, 2009.
- Sachs, Carl. *Intentionality and the Myths of the Given: Between pragmatism and phenomenology*. London: Routledge, 2014.
- Sellars, Wilfrid. *Empiricism and the Philosophy of Mind*. Cambridge, MA: Harvard University Press, 1997.
- Sellars, Wilfrid. 'Philosophy and the scientific image of man'. In *Frontiers of Science and Philosophy*, edited by Robert Colodny, 35–78. Pittsburgh: University of Pittsburgh Press, 1962.
- Soffer, Gail. 'Revisiting the myth: Husserl and Sellars on the given'. *Review of Metaphysics* 57, no. 2 (2003): 301–37.
- Wolfendale, Peter. *Artificial Bodies and the Promise of Abstraction. The Philosopher*. Accessed 6 February 2023. <https://www.thephilosopher1923.org/post/artificial-bodies-and-the-promise-of-abstraction>.
- Wright, Aaron. 'The stones of Taliesin West: Frank Lloyd Wright and the petroglyphs of Paradise Valley'. *Journal of the Southwest* 62, no. 1 (Spring 2020): 5–100. [CrossRef]