

Philosophy into Architecture: Museum of Contemporary Art, Helsinki

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Stephen Holl's winning entry for the Helsinki Museum of Contemporary Art competition, begun in 1992, was titled 'Chiasma', a Greek term for 'intertwining' borrowed from the writings of French phenomenologist Maurice Merleau-Ponty. The Museum, opened in 1998, is located on a prominent site in the centre of Helsinki, at a point where grids shift to open the city out to Töölö Bay.¹ Located on Mannerheimintie road, the site connects the city centre to Eliel Saarinen's National Museum and Alvar Aalto's Finlandia concert hall to the north, and contains the statue commemorating Marshal Mannerheim and his role in Finnish independence. The Museum, containing 25 gallery spaces over a total of 13,000 square metres, is made up of two primary volumes. A rectilinear form aligned with the main city grid is enveloped by a larger, curvilinear form to the north and east. The entry is between the two forms to the south, and the circulation path crosses back and forth between them as it rises up through the Museum. The two forms allow Holl to explore the theme of intertwining on various levels: between nature and culture, object and space, movement and stasis, light and material. Although the *chiasma* lends itself to simplification as a mere twisting of forms, Holl's Museum in fact manages to address it on deeper levels. In what follows, I would like to explore the way in which Holl translates this phenomenological concept into architecture.

THE LIVED BODY

Merleau-Ponty's phenomenology follows on from the work of Edmund Husserl, who identified the 'crisis' resulting from an excessive reliance upon scientific rationalism.² Husserl called for a return to 'things themselves', the conditions that precede scientific knowledge of the world upon which understanding

depends. The 'thing' to which Merleau-Ponty returned was the body, its role in the constitution of meaning differentiating it from other objects. His study of perception reveals the radical discontinuity that occurs at the surface of the body, as it acts as the point of exchange between self and world. In *Phenomenology of Perception*, Merleau-Ponty explores the way in which that discontinuity is broached by the body in its interaction with the world.³ Any 'objective' explanation of the world in which we find ourselves, or of the body which is both our means of perceiving the world as well as our point of view within it, is problematic, since these are necessarily prior to any such explanation.⁴ Thus Merleau-Ponty rejects the efforts of both Kant and Descartes to locate an originary point of consciousness from which all else could be deduced. These reductions, rather than providing a reliable truth, represented a withdrawal from the world that we find ourselves in.⁵ For Merleau-Ponty, perception is significant in that it denies the separation of subject and object, and is the only means available to us of broaching the divide between self and world. Vision, for example, occurs as a 'thickness' between perceiving subject and perceived object, where meaning, rather than inhering in the object, comes from their interaction.⁶

Throughout *Phenomenology of Perception*, Merleau-Ponty demonstrates how the body as lived constantly differentiates itself from the world of objects. To begin, the body demonstrates a primacy not shared by other objects. Instead it is that with which we are able to understand objects, the necessary precondition that allows me access to the world of objects. "[The body] is my basic habit, the one which conditions all the others, and by means of which they are mutually comprehensible."⁷ The body is *more* than an object, "[...] it is that by which there are objects."⁸ And elsewhere: "The body is our general medium for having a world."⁹ The body is

the means by which the world is available to us through perception, at which it must always be present, regardless of the variety of objects available for perception. "The presence and absence of external objects are only variations within a field of primordial presence, a perceptual domain over which my body exercises power."¹⁰ The body also demonstrates a persistence of presence that distinguishes it from other objects. An object available for perception could equally be absent, exchanged for another, removed from my perceptual field. The body, however, is "an object which does not leave me."¹¹ The body is literally indispensable as a means of perception.

Its constant presence leads it to resist the normal means by which objects are experienced. To overcome the limitation of perspective, whereby only one side of an object is available to perception, usually requires variation in the relative position of body and object. To change perspective, I can either move the object in relation to my body, or move my body in relation to the object (or both together). That is, I can move it around, or move around it, to build up an image of its totality. In this relation, the body is normally the means, and not itself an object, of perception. In fact the act of perception precludes the body from itself being so perceived: "In so far as it sees or touches the world, my body can therefore be neither seen nor touched."¹² It is possible to perceive some parts of the body as though they were an object at a distance, but much of the body is resistant to such perception. There are parts of my body that I can never see except indirectly, parts that I can touch only in a contorted manner. This resistance to perception increases nearer to the body's perceptual apparatus: "My visual body is certainly an object as far as its parts far removed from my head are concerned, but as we come nearer to the eyes, it becomes divorced from objects, and reserves among them a quasi-space to which they have no access,"¹³ Attempts to perceive the body are confounded by this resistance. The persistence of the body makes it resistant to the variation of perspective by which other objects are perceived. The body's perspective upon itself is fixed, a fixity that movement cannot alter. "[The body] defies exploration and is always presented to me from the same angle. [...] To say that it is always near me, always there for me, is to say that it is never really in front of me, that I cannot array it before my eyes, that it remains marginal to all my perceptions, that it is *with* me."¹⁴

The differentiation between the body and the world of objects renders the surface of the body as a point of inflection across which perception is fundamentally altered. At the surface of the body, the perception of objects gives way to the experience of perception, the

living out of the lived body in its engagement with the world. The body, in its persistent presence, takes over from the world as a collection of objects, to be understood only through experience: "I cannot understand the function of the living body except by enacting it myself, and except in so far as I am a body which rises towards the world."¹⁵ Moreover, the multiplicity of external objects gives way at the surface of the body not to a collection of perceptual apparatuses, but to a singular, unified body: "The outline of my body is a frontier which ordinary spatial relations do not cross. This is because its parts are inter-related in a peculiar way: they are not spread out side by side but enveloped in each other. [...] I am in undivided possession of it".¹⁶ While the body is always the central term in any experience of the world of objects, it is itself, as a means of perception, only understood in relation to that world. This leads Merleau-Ponty to describe the body as both an "anchorage in a world"¹⁷, and as a "pivot of the world."¹⁸ The body as pivot mediates between the world as it impacts upon the body, and the body as it projects out into the world. Thus sensations present themselves, writes Merleau-Ponty, "as certain kinds of symbiosis, certain ways the outside has of invading us and certain ways we have of meeting this invasion,"¹⁹ And elsewhere: "[M]y body is a movement towards the world, and the world my body's point of support."²⁰ In referring to the body as a 'movement towards the world', Merleau-Ponty demonstrates a belief in *touch* as the paradigmatic sense, the model by which sensation can be understood. The body, as material and movement, renders sensation *tactile*. In arguing the significance of touch in understanding, Merleau-Ponty rejects the Cartesian universality of vision as a vanity.²¹

The primacy of touch suggests a certain motivation, an active engagement with the world rather than a detached observation of it. The body's 'projection' out into the world is directed in part by its *projects*, the purposes for which it engages with the world.²² The movement of the body out into the world is made possible by space, that necessary 'potential' between objects and the body. The space to which Merleau-Ponty refers is never an abstract, Cartesian space, but is an inhabited space, a space formed around the body by its usual enclosures. The projection of the body out into the world through movement and touch enables it to overcome the limitations of distance and perspective that separate it from objects. The body is able to move around an object, or move the object around, in order to build up a complete picture of it. In the manner of movement, the surface of the body appears once again as a point of inflection between body and world. The persistence of the body, as that which is 'with me', means that its movement is of a different kind to the

movement of objects. "My body itself I move directly, I do not find it at one point of objective space and transfer it to another, I have no need to look for it, it is already with me".²³ Moreover, space is interpreted through the projection of the body, regarding it as space into which the body could move. This idea of space as a 'potential' for the body is also implicated in the perception of objects. The space around an object enables the body to undertake the variation in perspective required to perceive the object in its entirety. For the most part, however, this is not necessary; there is a certain habituation, a taking for granted of objects around us. This comes in part from a familiarity with objects, an expectation of their constancy in relation to sensory experience. But it also arises from the interpretation of space as a potentiality, a collection of positions to which the body could move, and from which it could experience an object. Space is complicitous in the perception of objects in their entirety, taking on a 'fullness' that is opposed to the emptiness of abstraction.²⁴

This fullness is explained through the idea of habitation, with the house becoming a metaphor for objects in general. A house, significantly, is an object that can be entered, occupied, inhabited by the body, a capacity that is then attributed to objects in general: 'to look at an object is to inhabit it'; objects in view 'remain abodes open to my gaze'. From there, attention shifts to objects found inside a house: 'the lamp on my table'; and yet other objects, 'the chimney, the walls,' are implicated in its perception. Being liable to inhabitation, objects lose their opacity, rendered 'translucent' by perception. The inhabitation of the body is projected onto the world of objects, rendering them 'translucent', in contrast to the opacity of the body: "[...] I am not transparent for myself".²⁵ The role of the house as both object and space, as both object and container of objects, as container which is amenable to inhabitation by the body, rely on its having, like the body, both an inside and an outside, that "indispensable opposition"²⁶ which makes space possible. Habitable space becomes the primary means by which the body is understood, as a space of movement and orientation, measurement and location, familiarity and identity. As such it reappears continually throughout *Phenomenology of Perception*.²⁷ Thus habitable space, as an 'artifact' projected from the body, is more than a projection of the body as means of engaging with the world. It is also a projection of the attribute of embodiment, of having a body with which to engage with the world.

THE CHIASM

In his later work, Merleau-Ponty describes the engagement between body and world through the concept of the *chiasm*. In *The Visible and the Invisible*, Merleau-Ponty describes a series of 'intertwinings,' beginning with that between self and world which makes perception possible. What is it, he asks, that allows that 'inspired exegesis' by which my senses are able to interrogate the world?²⁸ That tangible being, Merleau-Ponty calls *flesh*. Flesh is that primal element out of which subject and world are born in mutual relation, of which touching and the tangible are different, but interwoven, manifestations. Flesh is that relation of the sensible with itself that makes the lived body possible, which constitutes it in its incorporation in the world. Each of our senses, he writes, "[...] must be inscribed in the order of being that it discloses to us; he who looks must not himself be foreign to the world that he looks at. [...] he who sees cannot possess the visible unless he is possessed by it, unless he is *of it*".²⁹ Enmeshed in flesh, the senses intermerge: they are different manifestations of the one body. This is true not only of the intertwining of different senses ('[...] every visible is cut out in the tangible, every tactile being in some manner promised to visibility'³⁰) but also in the orientation of the body. The body is always *located*, its sense of its own position and orientation established, as above, by habitation of space and the artifacts contained therein.

The intertwining of sentience and the sensible is particularly evident in the strategies of reflexive identification by which the body as a perceptual system can know itself. When one hand touches the other, there is a 'hiatus' between them, a reversibility of sensation that always imminent, never complete. In this way the opening out of the world into the sentient and the sensible, the separation of flesh through an initial 'fission' or 'dehiscence,' is prevented from disappearing as they fold back upon each other, forming identity in difference. The intertwining is made possible by a 'thickness' between sentience and sensation that arises from their incomplete closure, enabling their transitivity to occur.³¹ Planar metaphors of the body, as having 'two sides' or 'two leaves' by which it is both sentient and sensible, are insufficient to describe the thickness of the body arising from this inexact folding. Instead the intertwining of one in the other can be seen as "[...] two circles, or two vortexes, or two spheres, concentric when I live naively, and as soon as I question myself, the one slightly decentered with respect to the other...."³² The rich array of metaphors used by Merleau-Ponty reveal a self that is not predetermined by some interiority, but which emerges out of the variety of inversions, enfoldings, and decenterings that are the necessary

consequence of the sensory engagement of the body in the world. The self emerges from the crossings, or 'chiasms,' that arise from the incomplete folding back upon itself of sensation and the sensible, their necessary thickness in *flesh*.

THE SENSATION OF SPACE

How does Holl's museum transform the idea of the chiasm into architecture? Initial sketches drawn during a site visit show twisted forms identified as a 'line of nature' related to the lake (Töölö Bay) and landscape, and a 'line of culture' being 'Finlandia etc.' The result is an 'intertwining' of nature and culture, allowing the Museum to act a pivot point demonstrating the influence of both upon the city. On the same page appears the binary of daylight/garage, the theme of an 'art park' initiating a large, storage type volume emphasised by a loading bay and freight elevator. Thus Holl identifies the need to move people through galleries containing ever-changing exhibitions, while also acknowledging the importance of daylight in the display of art. With the two forms twisted together, the characteristic spiral circulation of a parking garage becomes transformed into a complex series of loops that move back and forth between the two volumes. Upon entering, visitors are presented with the view up into the main atrium space, at the end of which the two forms touch almost imperceptibly. In this space, a remarkably faithful version of Holl's original watercolour, the forms twist around each other, or more accurately, the space between them twists as the two forms are held apart. The circulation begins with the ramp that follows the curved and sloping wall up to the right, appearing to re-emerge further up the wall. This suggests a spiral circulation, circling back and forth between the two volumes in order to climb higher and higher into the building. But at the point of intersection between the two volumes, the spiral turns back upon itself, maintaining a continuous flow while inverting the direction of travel. This pathway is also left open at various points, allowing the primary circulation to be short-circuited, revisited or inverted in multiple combinations. With the circulation path moving back and forth between the two volumes, it is able to engage with them in different ways, moving into them from the side, from the end, or at oblique angles, occasionally emphasised by automated sliding doors. At the end of the long entrance atrium, after the two forms come into contact, the space opens out again to a glazed stair space, with a tightly curved lower loop surmounted by the double arc of the stair above. The westerly light is augmented by the reflection pool outside, filling the space with a bright, shimmering light. The light of the

atrium is complemented by the daylighting to the galleries, each of which opens differently to the sky, taking light directly or indirectly from various directions. Some have views to the city beyond, others borrow light from the atrium spaces, while others are opened upwards through 'bow-tie' skylights. The form of the curvilinear volume is even derived from a sun-path diagram, acting as a mirror to or container of the low sunlight available in the northern latitudes.

As Sandro Marpillero observes, the curved atrium serves to disrupt the usual construction of perspective as a space penetrated by vision, and instead demands movement by which the body engages with space.³³ The space through which the body moves is never fully open to the body nor impedes its progress, but rather continually redirects its movement, taking the visitor across, along, around, and through the various galleries. Space is made tangible as it is twisted around the body, as the two are interwoven with each other. The engagement of the body is further emphasised by hand-crafted door furniture that clearly owes a debt to Aalto's celebration of touch.³⁴ For Alberto Pérez-Gómez, Holl's manipulations of perspective serve to 'temporalize' objective experience, emphasising the interconnections between matter and space, and our own status as 'oriented' beings.³⁵ In my own experience of the Museum, during a visit to Finland in 2000, I sensed that Holl had achieved a more literal manifestation of Merleau-Ponty's theories. On the level of the whole building, the forms mimic the touching of one hand by another, with the circulation placing the body of the visitor between them. Made of simple forms containing rows of similar sized galleries, the building is easily read and readily familiar. While movement through the Museum consists of multiple changes of direction, the circulation constantly returns to the central atrium, providing a reference that prevents disorientation. But in moving through the galleries, the senses are engaged in an intriguing manner. Each room opens differently to the body, with doorways cutting diagonally through galleries, switching from side to side, pushing into walls, or breaking open corners. As the circulation gradually cuts across an enfilade of galleries, each is experienced differently, but the difference is subtle, almost imperceptible. Similarly, daylighting varies by degrees, carrying the visitor from one gallery to the next until only the combined effect is noticed. These gradual shifts in movement and light make each gallery a new discovery of the body's interaction with space. Sensations always operate in the experience of space, but Holl deals with perception by addressing its liminality, in the boundary that occurs between changes to sensation that are noticeable and those that are not. As Walter Benjamin identified,

architecture is experienced in a state of distraction.³⁶ Holl works with that distraction, configuring experiences of space and light within that of wandering about the Museum. As Holl explains, the body becomes a living spatial measure, its perception of space dependent upon its own movement through space, giving rise to a 'parallax' of multiple perspectives. He writes: "The movement of the body as it crosses through overlapping perspectives formed within spaces is the elemental connection between ourselves and architecture. [...] Our faculty of judgement is incomplete without this experience of crossing through spaces, the turn and twist of the body engaging a long and then a short perspective, an up-and-down movement, an open-and-closed or dark-and-light rhythm of geometries-these are the core of the spatial score of architecture."³⁷

The use of circulation to generate multiple and overlapping perspectives not only brings the body into play in the experience of architecture, it also imitates the experience of perception described by Merleau-Ponty. With many of the galleries being similar size and shape, the variations in their circulation and lighting can be seen as kind of rehearsal of the way in which multiple perspectives of the same object or space can be built up through movement. To experience the one gallery type in many different ways demonstrates various possibilities for the openings of a room, and consequently, for the movement of the body through it. Taken together, these variations mimic the way the body might interrogate a space or form by moving toward, around, or through it in multiple combinations. Thus the variation between the galleries gives rise to what might be perceived as a series of different experiences of the same space, an enactment of tactile appropriation. Since this occurs in the course of moving about distracted (one hopes) by the art, Holl is able to bring the visitor into intimate contact with the architecture of the museum without explicitly drawing attention to it. In both its incremental and combined effect, the subtle shifts in light and movement in each of the galleries activate the senses, not by excess, but by emphasising their liminality. Parallax, for Holl, occurs as subtle shifts of the body allow the relative positions of objects to be identified. Such movement also brings the body into play as a means of perception, actively engaged in the experience of space. By emphasising the liminality of the senses, Holl directs focus toward the body, activating the strategies of reflexive identification by which the body may know itself. The senses are turned inwards, effecting the kind of 'dehiscence' described by Merleau-Ponty, the decentering of the concentric circles of sentience and sensation. This is neither an explicit nor inevitable consequence of visiting the Museum: it is still possible, as Merleau-Ponty suggests, to live naively, to

ignore the 'thickness' of the body's engagement with the world. Yet what Holl has achieved is a work that captures the potential of phenomenology's translation into architecture. Within a simple pair of twisted forms, Holl has woven paths of movement and light that serve to activate the perceptual mechanisms of the body, emphasising their interaction with space. The result is a space of heightened sensory experience, a space that can almost be touched.

REFERENCES

- ¹ Publications of Kiasma include: Esa Laaksonen, "Architectural Intersections: Museum of Contemporary Art, Helsinki," *ARQ: architectural research quarterly* 3/1 (1999): 14-26; Richard Ingersoll, "Finnish Lines," *Architecture* 87/1 (January 1998): 76-81; Roberta Lord, "Holl's Kiasma comes to light," *Architecture* 87/6 (June 1998): 23; Annette LeCuyer, "Iconic Kiasma," *Architectural Review* 204/1218 (August 1998): 46-53; Karen D. Stein, "In the Kiasma Museum of Contemporary Art, Steven Holl creates a dramatic embrace of Helsinki's treasured architectural legacy," *Architectural record* 186/8 (August 1998): 86-99; Steven Holl Architects, "Intertwining with the city: Museum of Contemporary Art in Helsinki," *Harvard Architecture Review* 10 (1998): 107-111; Steven Holl, "Twofold meaning," *Arkki-tehti* 95/6B special issue (1998): 2-7; "Kiasma," *Arkki-tehti* 95/6B special issue (1998); Steven Holl Architects, "Kiasma, Helsingfors," *Arkitektur: the Swedish review of architecture* 98/6 (September 1998): p.48-57; Birgitte Kleis, "Kiasma: Museum for Moderne Kunst, Helsinki," *Arkitektur DK* 42/6 (October 1998): A81-A86; Maria Giulia Zunino, "Steven Holl a Helsinki: Kiasma Museum," *Abitare* 376 (September 1998): 168-175, 294; "Steven Holl: Kiasma, Museum of Contemporary Art, Helsinki 1998," (includes essay "Kiasma" by Yehuda Safran) *A + U: architecture and urbanism* 8/335 (August 1998): 16-39; Dietmar Steiner, "Steven Holl: Kiasma Museum of Contemporary Art, Helsinki," *Domus* 810 December 1998): 12-25; Meri Mäkipentti, "Twist of fate: Steven Holl in Helsinki," *Architecture Today* 88 (May 1998): 24-33.
- ² Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*, translated by David Carr, (Evanston: Northwestern University Press, 1970).
- ³ Maurice Merleau-Ponty, *Phenomenology of Perception*, translated by Colin Smith, (London: Routledge & Kegan Paul, 1962).
- ⁴ "Science has not and never will have, by its nature, the same significance *qua* form of being as the world which we perceive, for the simple reason that it is a rationale or explanation of that world. [...] To return to things themselves is to return to that world which precedes knowledge, of which knowledge always *speaks*, and in relation to which every scientific schematization is an abstract and derivative sign-language." Merleau-Ponty, *Phenomenology of Perception*, vii-ix.
- ⁵ "[I]f I tried to find in myself a creative thought which bodied forth the framework of the world or illumined it through and through, I should once more prove unfaithful to my experience of the world, and should be looking for what makes that experience possible instead of looking for what it is. [...] The world is not what I think, but what I live through. I am open to the world, I have no doubt that I am in communication with it, but I do not possess it; it is inexhaustible." Merleau-Ponty, *Phenomenology of Perception*, xvi-xvii.
- ⁶ "Vision is already inhabited by a meaning (*sens*) which gives it a function in the spectacle of the world and in our existence. The pure *quale* would be given to us only if the world were a spectacle and one's own body a mechanism with which some impartial mind made

itself acquainted. Sense experience, on the other hand, invests the quality with vital value, grasping it first in its meaning for us, for that heavy mass which is our body, whence it comes about that it always involves a reference to the body." Merleau-Ponty, *Phenomenology of Perception*, 52.

- ⁷ Merleau-Ponty, *Phenomenology of Perception*, 91.
- ⁸ Merleau-Ponty, *Phenomenology of Perception*, 92.
- ⁹ Merleau-Ponty, *Phenomenology of Perception*, 146.
- ¹⁰ Merleau-Ponty, *Phenomenology of Perception*, 92.
- ¹¹ Merleau-Ponty, *Phenomenology of Perception*, 90.
- ¹² Merleau-Ponty, *Phenomenology of Perception*, 92.
- ¹³ Merleau-Ponty, *Phenomenology of Perception*, 91-92.
- ¹⁴ Merleau-Ponty, *Phenomenology of Perception*, 90.
- ¹⁵ Merleau-Ponty, *Phenomenology of Perception*, 75.
- ¹⁶ Merleau-Ponty, *Phenomenology of Perception*, 98.
- ¹⁷ Merleau-Ponty, *Phenomenology of Perception*, 144.
- ¹⁸ Merleau-Ponty, *Phenomenology of Perception*, 82.
- ¹⁹ Merleau-Ponty, *Phenomenology of Perception*, 317; Or in a more poetic flourish, "[...] the world ceaselessly assails and beleaguers subjectivity as waves wash round a wreck on the shore." 207.
- ²⁰ Merleau-Ponty, *Phenomenology of Perception*, 350.
- ²¹ "It is not consciousness which touches or feels, but the hand, and the hand is, as Kant says, an 'outer brain of man'. In visual experience, which pushes objectification further than does tactile experience, we can, at least at first sight, flatter ourselves that we constitute the world, because it presents us with a spectacle spread out before us at a distance, and gives us the illusion of being immediately present everywhere and being situated nowhere. Tactile experience, on the other hand, adheres to the surface of our body; we cannot unfold it before us, and it never quite becomes an object. Correspondingly, as the subject of touch, I cannot flatter myself that I am everywhere and nowhere; I cannot forget in this case that it is through my body that I go to the world, and tactile experience occurs 'ahead' of me, and is not centred in me. It is not I who touch, it is my body." Merleau-Ponty, *Phenomenology of Perception*, 316-317.
- ²² "The body is a vehicle of being in the world, and having a body is, for a living creature, to be interwoven in a definite environment, to identify oneself with certain projects and be continually committed to them." 82; "[My body is] a system of possible actions, a virtual body with its phenomenal 'place' defined by its task and situation. My body is wherever there is something to be done." 250; "Consciousness is in the first place not a matter of 'I think' but of 'I can'. [...] Consciousness is being-towards-the-thing through the intermediary of the body. [...] to move one's body is to aim at things through it." 137-139.
- ²³ Merleau-Ponty, *Phenomenology of Perception*, 94.
- ²⁴ "Any seeing of an object by me is instantaneously reiterated among all those objects in the world which are apprehended as co-existent, because each of them is all that the others 'see' of it. Our previous formula must therefore be modified; the house itself is not the house seen from nowhere, but the house seen from everywhere. The completed object is translucent, being shot through from all sides by an infinite number of present scrutinies which intersect in its depths leaving nothing hidden." Merleau-Ponty, *Phenomenology of Perception*, 67-69.
- ²⁵ Merleau-Ponty, *Phenomenology of Perception*, 352.
- ²⁶ Henri Lefebvre, *The Production of Space*, translated by Donald Nicholson-Smith, (Oxford: Blackwell, 1991): 224.
- ²⁷ "When I move about my house, I know without thinking about it that walking towards the bathroom means passing near the bedroom, that looking at the window means having the fireplace on my left, and in this small world each gesture, each perception is immediately located in relation to a great number of possible coordinates." Merleau-Ponty, *Phenomenology of Perception*, 129-130: "My flat is, for me, not a set of closely associated images. It remains a familiar domain round about me only as long as I still have 'in my hands' or 'in my legs' the main distances and directions involved, and as long as from my body intentional threads run out towards it." 130: "When I walk round my flat, the various aspects in which it presents itself to me could not possibly appear as views of one and the same thing if I did not know that each of them represents the flat seen from one spot or another, and if I were unaware of my own movements, and of my body as retaining its identity through the stages of those movements." 203.
- ²⁸ "Between the exploration and what it will teach me, between my movements and what I touch there must exist some relationship by principle, some kinship, according to which they are [...] the initiation to and the opening upon a tactile world. This can happen only if my hand, which is felt from within, is also accessible from without, itself tangible, for my other hand, for example, if it takes its place among the things it touches, is in a sense one of them, opens finally upon a tangible being of which it is also a part." Maurice Merleau-Ponty, *The Visible and the Invisible*, translated by Alphonso Lingis, (Evanston Ill.: Northwestern University Press, 1973): p 133.
- ²⁹ Merleau-Ponty, *The Visible and the Invisible*, 134-135. Vision being a particular variant of touch, since it "[...] envelops, palpates, espouses the visible things." 133.
- ³⁰ Merleau-Ponty, *The Visible and the Invisible*, 134.
- ³¹ "[...] the thickness of flesh between the seer and the thing is constitutive for the thing of its visibility and for the seer of his corporeity; it is not an obstacle between them, it is their means of communication. [...] The thickness of the body, far from rivalling that of the world, is on the contrary the sole means I have to go unto the heart of the things, by making myself a world and by making them flesh." Merleau-Ponty, *The Visible and the Invisible*, 135.
- ³² Merleau-Ponty, *The Visible and the Invisible*, 138.
- ³³ Sandro Marpillero, "Constructing Space," *Daidalos* 67 (March 1998): 18-25.
- ³⁴ Juhani Pallasmaa, *The Eyes of the Skin: Architecture and the Senses* (London: Academy Editions, 1996). "It is pleasurable to press a door handle shining from the hands of the thousands that have entered the door before us; the clean shimmer of ageless wear has turned into an image of welcome and hospitality. The doorhandle is the handshake of the building." 40. An earlier version of this essay was published as "An Architecture of the Seven Senses," in Steven Holl, Juhani Pallasmaa, and Alberto Pérez-Gómez, *Questions of Perception: Phenomenology of Architecture* (Tokyo: a+u publishing, 1994): 27-37.
- ³⁵ Alberto Pérez-Gómez, "In Search of a Poetry of Specifics," *Croquis* 93 (1999): 18-27.
- ³⁶ Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*, translated by Harry Zohn, third edition, (London: Fontana, 1992): 211-235; 232.
- ³⁷ Steven Holl, *Parallax* (New York: Princeton Architectural Press, 2000): 26.