‘There’s Glass between Us': A critical examination of ‘the window’ in art and architecture from Ancient Greece to the present day

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Abstract In the following essay the window, located in the mundane middle-ground of architecture and thus often ignored, is examined in detail through the examples of a series of cultural artifacts. This is part of a larger general project to investigate, in a serious, critical manner, the overlooked stuff of architecture. Following the example of Bachelard’s seminal 1958 work The Poetics of Space, the essay draws upon a series of examples drawn from the history of Western art and architecture, from Ancient Greece to the present day, in order to make its arguments about the role the window plays in the world, specifically the way in which it mediates between interior and exterior. It then turns from these claims to make forward-looking remarks about the future of the window.

Keywords Window, House, Mundane Middle-ground, Mediation, Threshold, Significant Surface

Introduction

The following paper addresses what is at first a rather surprising question: what is a window? The reason this is surprising is because one would think that this was fairly well established terrain. The window is one of the most commonplace elements in the built environment, after all. It seems, however, that the simple category of window has been never carefully parsed on its own.

The reason for this lack of scrutiny is that the window is a category of architectural element, like the wall, the ceiling, the door, or the stair, that finds itself in what I would like to call the mundane middle-ground of architecture. This middle-ground has largely been ignored by architectural theory, which traditionally focuses on either scientifically wrought technical details or broadly conceived processes, gestures or ‘concepts’. It is my belief, however, that this worldly realm of things, while often overlooked, is also, I believe, of crucial importance within a ‘posthumanist’ paradigm. Surely once we have recognized that the ‘human self’ is neither a universal nor a stable entity (Rorty, 1991), but a flexible assemblage of forces highly dependent upon its context, the importance of the non-human things, such as those that populate the mundane middle-ground of architecture, becomes strikingly evident.
There’s glass between us

The current investigation of the window, then, is part of a larger project to investigate the middle-ground of architecture, to expose it, not in its instrumental value to us, which is how it is normally discussed, but as the geographers Braun and Whatmore recently put it, in its constitutive powers (Braun et al, 2010). Thus the project is to investigate not just how the mundane assists us, from a use perspective, but participates in our daily becoming, in our confrontation and negotiation with the world.

The house being the natural domain of the mundane, this is where the project begins. And where better to start our investigation than with the world’s greatest philosopher of the house, Gaston Bachelard and his famous 1950’s examination of space through its representation, The Poetics of Space (1958). In this work Bachelard made a couple of claims that will be very useful in the essay that follows: first, that the house “is an instrument with which to confront the cosmos,” (Bachelard, 1994:46) and second, that “poets and painters are born phenomenologists” (Bachelard, 1994:xiii). I take this first observation to imply that there is something special about ‘the house’ amongst other buildings for us, on an existential level, a notion that I see as being consistent with my initial observation of the importance of the mundane. I take this second observation to imply that there is something in the poetic thinking necessary to the production of art that can take one closer to ‘the things themselves’ than other modes of thinking. This observation shall be integral to what strategy there is to what follows, as I review the house from an architectural and art historical perspective, attempting to distill nuggets of wisdom about it.

What a window is

Although Bachelard would never have put it this way, the house is a container for a particular set of ecologies: environmental ecologies, social ecologies, and mental ecologies (Guattari, 2005). Thus, the perimeter of the house is that which stands between these ecologies, the included ecologies, and external, excluded ecologies. This perimeter is mostly impermeable, except for a number of points of permeation, including intercoms, televisions, air conditioning intake and exhaust, etc., but mostly windows and doors. Windows differ from doors because they are mainly for visual permeation and do not readily admit passage.

Windows are thus important mediators between the inside and the outside – between the mental, social, and environmental ecologies within, and those without. This mediation can take many forms, but three primary types that the window participates in are as follows: definition, by which the interior is defined relative to the exterior, and vice versa; revelation, by which the
one side is cast as hopeful and filled with possibility relative to the other; and surveillance, by which the one side is visually dominated and consumed by the other.

In the famous description of the Playboy bachelor apartment re-printed in Joel Sanders’ *Stud* (1996), a surprising level of attention is in fact paid to the windows. This seems odd given the nature of the design, a luxurious playground for a wealthy man-boy. You would expect it to focus on the space as personal territory and on gadgetry, which it also does. Nonetheless, from the very outset of the description the windows take a position of prominence in the description: “coming down the hallway, we are able to view the entire width of the apartment and through the open casements, see the terrace and the winking towers of the city beyond” (Sanders, 1996:57). Later, describing the bedroom (figure 1), the writer goes on to say, “casement windows stretch across one entire wall, framing an ever-changing, living mural of our man’s city” (Sanders, 1996:63). Through these casement windows, the imagined *übermensch* looks down over the city. His view floods out over the city, and the city enters the apartment, becomes part of the apartment. As he casts his benevolent gaze over it, it becomes *his* city, next to *his* Saarinen chair, and *his* back-lit globe. This *is* about personal territory, and the city, seen small through the window, is part of that territory. This window, then, is a window of surveillance, and a window of domination.

For another notable example of this type of window we may recall Heidegger sitting at his desk in the Black Forest. He looked out over the valley with its villagers ‘down there’. As Bachelard once commented, “a philosopher of domination sees the universe in miniature. Everything is small because he is so high” (figure 2).

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**Figure 1 – Playboy Bachelor Pad**

**Figure 2 – Woman at a Window, Caspar David Friedrich (1822)**
(Bachelard, 1994:173). Heidegger’s window too was a window of domination. Through the window the world lay before him ready to be thought.

But there are other ways of looking out the window than with a dominating gaze. A view through a window can be an anchor, or it can be a skyhook, for instance, either grounding us in the real world of the quotidian, or saving us from our drudgery. The window in Caspar David Friedrich’s Woman at a Window (figure 2) for instance is clearly a different sort of window from that of our playboy. The interior, which after all occupies most of the canvas, is dark and dull. The woman’s dress matches the wood paneling, her body blending with the architecture. Her body could be just another articulation of the wall, a fancy piece of trim, her dress the drapes – she is fully associated with what we presume to be her house, similar to the title character in James Joyce’s Eveline. And, like Eveline, she gazes out the window. Outside, the world is pointedly colourful, and this gradient, from the drab interior to the colourful exterior, is mapped on the body of the woman: her shoulders, silhouetted in the window, are lit up by the light beyond. This window is a portal into another world. We see the masts of two ships, symbols of dreams, of departures, of travel to other places, of excitement. The woman’s head is slightly cocked in curiosity. This window, our second type of window, is the window of the dreamer – the window of revelation.

The third type of window is the window of the Canadian painter Jack Chambers. Chambers often focused his work on depictions of (sub)urban North American interiors (see figure 3). His paintings are unfailingly uncanny, simultaneously familiar and hauntingly alien. What we can learn from his work here is the importance of the window in establishing an interior environment. His interiors literally depend on the exterior, which give value to them. His exteriors, revealed through these windows, are big, bright, and cold-looking. The interiors, the simple geometric volumes of which are clearly legible, are lit solely by the light from this big, bright outside, a trope consistent with his metaphysical belief in light as “the principle of intelligibility” (Elder, 1989:350). Chambers’ window is what I would like to call the window of

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definition, the window that delineates the boundary of the room and positions the interior in relation to the exterior.

**Threshold and Hearth**

The interior technically needs the exterior in order to exist, and vice versa: they define one another. The threshold, as Mark Kingwell has pointed out, “is neither outside nor inside; rather, in setting the limit between them, it partakes of both” (Kingwell, 2006:91). Unlike other members of the middle-ground of the house, such as hearths and toilets and tables and beds, thresholds are not places, they are media. And windows are complicated thresholds – they let us see both inside and outside together as they engage in their reciprocal genesis. To borrow Dagnognet’s words, the window represents something of a fertile nexus between ecologies (Galloway, 2006). Windows blur the boundary, bringing the inside out and the outside in. It is customary to think of the eye as the ‘window to the soul’ and likewise the window is the eye of the building (after all our word derives from the old Norse word vindanga, meaning wind-eye). It is also, however, the language of the building being both the means of perception and of expression. In the same way that the ‘self’ can be thought of as being constantly engaged in a process of ontogenesis reciprocal with the world without, similarly, the exterior world and the interior world are ‘produced’ simultaneously as they communicate back and forth, in part through the window. If we ourselves can be thought of as ecologies within larger ecologies (Guattari, 2005), bounded by the house, communicating through our sense organs and our various languages, then the window is an important means by which this inner ecosystem then interacts with the larger ones. In addition to the window, we can think of the door and several other orifices (including the telephone, the air conditioning exhaust, and books) as other means by which this interaction may take place.

The boundary of the house, like the boundary of the city, represents the age-old boundary between the natural and the artificial, a boundary that is for instance acknowledged in the northern European tradition of bringing the Christmas tree in, across the threshold (Kingwell, 2006). The window is thus a primary metaphor for our relation to ‘the natural’, and the character of that relationship is always implied by its design. Heidegger’s relationship to the mountains from which he drew majestic power was constructed by a window. And in addition to being the interface between the ecosystem of the house and natural ecosystems, it is also where we see our neighbours, our fellow citizens, and where they see us. Larger social ecosystems are also engaged through the window. Fragments of the space of appearance are framed everywhere there is a
window, small potential revelations of who we are, available for popular consumption. These temporary revelations are examples of the predetermined crossings of boundaries implied by the very existence of the boundaries in the first place. All boundaries are meant to be transgressed, their transgression in fact necessitated by their manufacture. “Every limit,” as Kingwell has put it, “is also its own negation” (Kingwell, 2006:91). The permeability of the window is important, then. It is ethically important. Who transgresses and how, visually, acoustically and physically, inwards and outwards, is important in establishing the relations between individuals, between the small group and the larger group, and relations with natural systems.

In the Hellenic imagination, this threshold was associated with the god Hermes, who, incidentally, was the mythological counterpart to Hestia, goddess of the hearth (Vernant, 1983). While Hestia represents stability, Hermes is “a wandering god” (Vernant, 1983:129); he is the messenger god, the god of travels, and the god of chance. In the Greek pantheon, these two gods stand together, the two deities closest to our human domain, one holding while the other pulls. The pairing of these two can teach us something about the house, or at least how it was figured in the Greek imagination. It is in the tension of these two principals that domestic life unfolds. In the house we are caught between the centrifugal force of the window and the centripetal force of the hearth. With Hestia and Hermes we have in fact a ‘parti’ of a house; we have a centre and a perimeter, closely tied together but just far enough apart for dwelling to occur between.

If we follow Bachelard and agree that the world is understood through the house, this is partially from the understanding that it is within the environment of the house that we imagine and that we re-member the world. But through mediating thresholds like the door, the telephone, the book, and the window, the world is quite literally perceived and our mental ecology affected. If our window is pink, the world outside will literally be ‘la vie en rose’ to us. No matter what type of window, if it is dirty and yellowed, the world will look squalid to us, and we will look soiled to those looking in. The window is thus a key lens of our subjectivity.

The Gothic Window

As human dwellings first evolved the problem would have naturally been probably less how to make holes for light and ventilation as it was how to decrease the level of exposure. Primitive huts would have mostly been ‘window’ at first, walls coming later. When masonry buildings came along, we developed two ways of making an aperture, either through the use of a lintel or the use of an arch. Large enough lintels being often hard
to come by and arches fairly difficult to make, windows in masonry buildings were therefore often small, especially in large buildings where the load resting on the wall was great. Despite the connection made in medieval Catholicism, especially the Benedictine order, between light and God, up until 12th century churches could only have very small windows. Interiors were dark and inward-looking. With the structural innovations of the 12th century, however, especially the invention of the flying buttress, a lot of the load could be transferred away from the wall-proper, allowing for much larger expanses of glass (ibid, 12). With these innovations the metaphorical qualities of light could be fully taken advantage of in the church interior. Gothic architecture brought large panels of coloured glass, separated and supported by thin, moulded ‘tracery’. As the light filtered through these panes into the otherwise dark interiors, it was as if God himself was majestically entering the church, through the window. The rules of permeability of such windows were quite clear. One thing could cross the boundary in an inwards direction and that was light, which was divine. As light came in, all of its characteristics were structured by the window to tell a particular message. Vision stopped at the window, both on the inside and on the outside. What was being interfaced with through the window was not the environment immediately outside, but a powerful mythical world structure. Many of these windows told particular stories, drawn from sacred texts, but some, such as rose windows, told their stories simply through their geometry. Everything is static and in its place in a rose window. The centre is solid and it relates consistently to the boundary. And nothing exists outside of the boundary.

The gothic window afforded a very high level of mediation, transforming what passed in through the window completely from reflected light of what would otherwise be perceived as images of the real world to light carefully harnessed to a particular politico-religious agenda. When thinking of the role that the window plays in our day-to-day life, this is important to keep in mind. Windows are rarely simple transmissions of what is, but are often in fact highly manipulated renditions of it.

**Alberti, Dürer**

In his text of 1435, *De Pittura*, Leon Battista Alberti described the painting canvas as a window. “First of all,” he wrote, “on the surface on which I am going to paint, I draw a rectangle of whatever size I want, which I regard as an open window through which the subject to be painted is seen” (Alberti, 1966:54). The act of painting, for Alberti, was like opening a window into another world, initiated by that primal act of marking its boundary. The window was being used as a metaphor for objectivity, and the application of this metaphor to the manufactured painting was a way of
lending it that same authority. What the painter saw through this imaginary window was to be a true description of what was.

Notably, the rectangle, which traditionally frames both windows and paintings, is not a naturally occurring shape. The orthogonal is, however, implied both by the perpendicularity of the earth’s surface to the path of gravity and by human verticality. The rectangle can thus be said to be the shape of removal from the earth, of technēs, of construction and dwelling apart; it is the shape of utility, and thus of the faculty that we have come to call reason. As Juan Eduardo Cirlot notes in his mid-twentieth-century analysis of symbols, “at all times and in all places, it has been the shape favoured by man when preparing any space or object for immediate use in life” (Cirlot, 1962:272). When Alberti described the painting as “the intersection of a visual pyramid at a given distance,” (Alberti, 1966:48), he imagined a pyramid of vision extending out from him, as if, instead of having two round eyes, he in fact had one square one! If the window is the metaphor for the painting, we are going to expect in turn our windows to behave like paintings; we are going to want the ‘objectivity’ of the painting for ourselves, when we in fact know both painting and window to be subjective media. A real window frames our partial view – it does not remove us from our situated perspective within our enclosed ecologies. It frames our view out.

The sorts of murals that were common in the Renaissance, and found their extension into the 19th century in the form of panoramic wallpaper constituted windows into fixed, idealized landscapes. The picturesque tradition in landscape design is of course the rather perverse flip side of this. Real windows, unlike paintings, are not fixed, a fact attested to by Leonardo da Vinci’s recommendation that when using a pane of glass as a tool in constructing perspective, following Alberti, we should actually mechanically constrict the movement of our heads (Friedberg, 2006). In Alberti’s (and da Vinci’s) imagination, the objective window viewer is constructed as cyclopean, square-eyed, and static.

Using a pane of glass gridded with lines as a medium for objectively

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Figure 4 – etching from Underweysung der Messung, Albrecht Dürer, 1538

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determining the relative size of things is a boon for accurately reproducing the view from a given point, for perfecting the art of perspectival representation. But today it is hard not to see this cold act of accurately ‘metering’ out your subject matter as an act of domination, as an enactment of the desire to control. This is indeed a paradigmatic example of the connection between our struggle to break from our subjectivity and domination. Albrecht Dürer’s famous woodcut of 1538, from *Underweysung der Messung* (figure 4) illustrates this well. The artist’s removal from the sensuous display before him is disconcerting. Somehow this artist, seeing the world through his regular matrix, has removed himself from such things. On one side of the illustration, the table contains a landscape of female flesh; on the other side of the illustration, translated through the alchemy of a window, she has been replaced by a flat grid, not unlike a chessboard. The window is a medium, and as a medium it mediates. A gridded window is clearly a window of domination.

Behind this curvaceous subject matter in Dürer’s woodcut is an open window. Seen through this window is a rolling, natural landscape. On the other side of the illustration, separated by the gridded window, behind Dürer’s scientist-artist with his obelisk, we see a potted plant. On the one side we have horizontality, associated with leisure, perhaps even sloth; on the other side the verticality of the obelisk and the artist’s posture is mimicked in the potted plant: the instrumental manipulation of nature.

**Magritte, Hopper**

Of the many artists available to us in the pursuit of this discussion of windowness, two twentieth century painters should prove especially useful, René Magritte and Edward Hopper, although for different reasons. In Magritte’s window paintings he consciously plays with the notion of mediation and the relationship between windows and paintings that Alberti initiated. His *La Condition humaine* (figure 5), for instance depicts a ‘typical’ interior with two heavy curtains hanging on either side of a window. Out the window we see a pastoral scene with green grass, a road, and some trees.
In the centre of the view rises a specific individual tree, separate from the rest. If the view from the window were a painting, the tree would seem to be the focus. Except, we can only assume that that tree is outside of that window: the view itself is obscured by a painting of the view depicting the tree (what we might call p2). The pictorial content of this painting is rendered in exactly the same manner, and from the same perspective, as the view. Because the same hand has rendered both p1 and p2, our eye is pleasantly confused, going back and forth between the ‘real’ view and the view as rendered in p2. We will never know if there was really a tree outside of that window, or if it was purely the fantasy of the ‘evil genii’ who painted the second painting. And, following the paranoid logic of the painting, there is furthermore no reason to believe that there is a view at all. The content of this painting could in fact be just a painting sitting in front of another painting! Magritte is effectively going in the exact opposite direction from Alberti. Rather than saying ‘the painting is like a window’, he says ‘is the window not also like a painting?’ How objective is our view?

Magritte’s painting raises the problem of what might be called the threshold vs. the significant surface (Galloway, 2008). A painting is a type of significant surface, a surface upon which we read a play of signifiers. Windows and doors, on the other hand, are thresholds. But there is a way in which Alberti was right and a painting too is kind of like a threshold. As soon as you let yourself be carried away by it, it can give you access to another world beyond. In the 1930’s, when Magritte painted La Condition humaine, photography had become relatively mainstream and films were in ascendance, increasingly accessible to the common man as an available form of entertainment. This painting, along with many of Magritte’s other works, can be seen as a response to the capacity of these media to imitate reality and behave, basically, as thresholds. Magritte has a knack of playing tricks with the viewer’s expectations. In this case he is reminding us that the distinction between significant surface and threshold is not always clear and to always interrogate the line between them, an insight even more important today than it was then.

Hopper had a somewhat different approach to windows. While both painters are compelling in their intelligent artificiality, declaring their paints as surfaces not thresholds, Hopper’s images are often shadowed with melancholy. Magritte’s windows, with their big blue skies dotted with impossibly fluffy clouds are similar to what we called earlier a window of revelation. The clouds though are exactly that – impossible. Their artifice unveils them. Hopper renders both dream-laden windows of revelation, such as Rooms by the Sea (1951), or Morning Sun (1952) as well as windows of definition. But what differentiates Hopper’s ‘windows of
definition’ from Chambers’ is that as often as not they are in fact observed from the outside, as in his famous *Nighthawks* of 1942, or in his earlier *Night Windows* of 1928. Bachelard has observed that the illuminated house, seen at night, evokes “the concentration of intimacy in the refuge, in its most simplified form” (Friedberg, 2006:37). This is what Hopper’s paintings from the outside looking inwards are about. These refuges are defined by their relation to the exterior. In *Nighthawks* for instance, the room would not be the comforting space it seems to be if it weren’t defined against forbidding darkness. Simultaneously, the darkness would not seem quite so forbidding if it weren’t held up against such a refuge. So, through their permeability to vision windows can offer their stories, defined in relation to the exterior.

A motif that is practically omnipresent in Hopper’s paintings is the feeling of alienation. Windows often give him a particularly strong means of representing this. As Cirlot observes in his voluminous dictionary of symbols, windows express ideas of both potential and of distance (Cirlot, 1962), and in works such as *Sunday Morning* or *Cape Cod Morning* (figure 6), Hopper manages to evoke both. Windows can both promise connection and can indeed separate us from things, whether we are outside looking in, or inside looking out, like Friedrich’s woman.

**Le Corbusier and Eileen Gray**

As we have seen with the gothic window and invention of the flying buttress, the character of our windows has always been closely related to the structural qualities of our walls. In the nineteenth century, the advances in the production of cast iron allowed designers like Joseph Paxton to make buildings that were practically all window. In the twentieth century it was innovations with reinforced concrete that made Le Corbusier’s controversial long, horizontal windows possible.

![Figure 6 - Cape Cod Morning, Edward Hopper, 1950](image)

![Figure 7 – Le Corbusier’s strip window at Villa Savoye, 1931](image)
Le Corbusier’s strip windows, such as are in evidence at Villa Savoye (see figure 7), were a direct rejection of typical vertical windows. He agreed that the shape of the window had historically been closely connected to the structure of the wall, and therefore, as the structure of the wall changed, he figured so should the shape of the window (Baillieu, 2003). Reinforced concrete provided him with the freedom to experiment. Horizontal windows, however, completely change our relationship with perspective. As we explored earlier, the painting as we know it was influenced by the shape of the window and in turn the window influenced by the painting. A window, however, only resembles a painting so long as the viewer remains static. As soon as the viewer moves in relation to the frame of the window, the image changes – the smaller the window, the greater the change. The view through a very narrow window looks completely different to two people standing side-by-side. When the window expands horizontally across the whole breadth of the wall, this effect is practically erased. Our relationship with the ‘outside’ does not change nearly as dramatically now when we move along the length of the wall. The horizontal window is thus a generalization of the view, eliminating what we might call the ‘partial perspective’ of the vertical window. This is further accomplished, as Reichlin has pointed out, by the editing out of the foreground of the view (Friedberg, 2006), for without the foreground all we are left with is the interior itself and that which is far away, the horizon if we’re lucky. The traditional perspectival view, such as we are used to seeing in paintings, is thus undermined. As Corbusier himself wrote, “the horizontal gaze leads far away” (Colomina, 2005:89). The view is totalized; it is spread out, allowing the viewer to take in the heroic long-view, in a sweeping glance, without having to worry about the quotidian below. The strip window is decidedly a window of surveillance and domination.

While the windows Le Corbusier placed in his cabanon in Roquebrune-Cap Martin may seem humble, they are also windows of surveillance. Although they might seem at first to be paradigmatically subjective because of their diminutive size, i.e. rapidly changing their content as you look at them from different angles, the fact that they are only intended to be seen through when you get up close to them means that you can actually see quite a lot from them without having to move much. When Le Corbusier was standing, the main square window facing the sea was designed to frame his head and shoulders perfectly. And, symbolically, squares are not humble. Far from it, as Cirlot comments, a square “implies tense domination born of an abstract longing for power” (Cirlot, 1962:272). The window of the cabanon is the square eye of objectivity, taking in the whole view at once.
In contrast, the windows designed by Eileen Gray for her E.1027, literally a stone’s throw from the cabanon, are of a very different nature from those designed by Le Corbusier. Gray was far more interested than Corb in designing for the peculiarities and unpredictability of the human condition. As she declared, in an apparently direct attack on his work, “formulas are nothing, life is everything … I want to develop these formulas and push them to the point where they re-establish contact with life, to enrich them and incorporate reality within their abstraction” (Gray, 2000:239). While much of her design was Corb-inspired, her windows were clearly a point of departure. As Sylvia Lavin has remarked, E.1027 is “riddled with what might be called secret passages, hidden escape routes that have little to do with conventional windows and doors” (Lavin, 1996:187). And indeed the building is filled with clever little slippages and holes that distinguish it from a ‘pure’ Corbusian design (see figure 8). As Leslie Weisman reports, “her use of three types of windows – sliding and folding, pivoting, and double-hung – combined with movable shutters, louvers and canvas awnings, allow light, air, and temperature to be modulated finely and subtly during different seasons of the year.” While she did employ horizontal windows, they were fitted with vertical panes of glass calibrated in size and shape to respond to the dimensions of the human body. In addition, far from Corbusier’s pristine voids such as those at Villa Savoye, she covered her horizontal windows with operable shutters. As she put it herself, “a window without shutters is like an eye without eyelids”. Through these innovations, Gray effectively layered the Modern strip window with apparatus allowing for personal appropriation through physical engagement, thus permitting a certain degree of controlled subjectivity. The occupant of E.1027 can make their own relationship with the outside as they wish. Gray’s windows afford a sort of controlled partiality.

**The Glass Wall**

While reinforced concrete allowed for strip windows to evolve, the rapid advances in the nineteenth and twentieth centuries in learning to build with steel made it possible to reduce the entire wall to a window if one wished. In houses like Mies Van der Rohe’s Farnsworth House (figure 9)
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and Philip Johnson’s Glass House (1949) this is exactly what happened. These houses are clear, table-like buildings with a few key objects placed in them to organize the spaces. They are then wrapped in glass, putting the inhabitants and the social ecosystem in close proximity to the ecosystems without. From the laboriously made wind-eyes of the middle-ages, through standard vertical windows in masonry opening, to strip windows framed by cast concrete – the development of the window culminates in the glass house – a true victory for the window!

Or is it? Is the wall of a glass house just one big window? Or is it perhaps just a transparent wall, without any windows at all. The window had, up until this point, always been defined through its distinction from the wall. The wall was the impermeable boundary of the interior while the window was the point of permeation, where the interior and exterior leaked into one another. This leakage was controlled within the zone of the window. It was framed. An all-glass curtain wall turns all of this on its head. As Pallasmaa wisely opined, a glass wall “weakens the essential tension between the home and world” (Pallasmaa, 2005:12). The transgression of the boundary by light and vision has been maximized while physical and acoustical transgression has been relegated to the door and the air-handling system. Apparently the visual has been privileged well above the other senses. This would seem like a dangerous mistake. Compared to the other senses, the eye is both wilful and greedy. As the cultural geographer Yi-Fu Tuan put it neatly, “the desire for a picture window and for the expansive view,” such as is clearly in evidence in a glass house, “suggests a need not only to command space but to see into the future and command time.” And again here we encounter the relation between the window and domination. In a glass house like Johnson’s or Mies’ the ‘window’ has been obliterated to the point that all you’re left with is a plane that facilitates the visual consumption of the outdoors. While it may promise the opposite, a glass house in the end is a chamber of alienation, possibly the very reason why both Johnson and Mies anchored their houses with such solid centres.

Paradoxically, then, glass houses, rather than being celebrations of the window, actually don’t have any! In showing all, mystery is lost, and mystery is essential to intimacy. The values of both interior and exterior as

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interior and exterior erode as the boundary between them erodes. You need to be able to sit, thoughtfully, at windows (Bachelard, 1994). You wouldn’t sit at a glass wall. Fundamentally, the glass wall makes the value of this act of sitting at the threshold inert by disposing of the complexity which is so important to the window.

The Place of Window

While the window is not a place but a medium, the places that are actually at this medium are highly charged sites. This is largely due to the complex interaction that occurs there. Both interior and exterior are defined, questions of sociability and subjectivity are negotiated. When a pie is placed on a window sill to cool, a statement is being made about the relative safety of that pie. Many of us wouldn’t place a pie on our windowsill because it might get dirty from the exhaust fumes in the street, or eaten by a dog. Many of us also couldn’t put a pie on our windowsill because the window has been painted shut, or there is a screen in the way, both of which are also highly significant. People living in towers are unlikely to have large enough sills to rest a pie on. Similarly, if a miscreant was to come and steal said pie (a true feat for those of us living in towers), this would also constitute a highly significant statement. The liminal places of our windows, including window sills and window seats, are important sites.
If you were looking for a good example of a house that has maximized the *place* of window, one could hardly do better than Alison and Peter Smithson’s *Hexenhaus* (figure 10). Although the house began as a fairly conventional gabled country home in Germany, through many years of close collaboration between the owner and the architects it eventually grew into something quite different entirely. And the word ‘grew’ is apt here, for in addition to the long cumulative nature of the transformation, the additions executed by the Smithsons are literally like growths protruding out from the building, like symbiotic fungi that both feed off the energy of the house and effectively energize the life within. Additions include: a large triangulated multi-purpose verandah incorporating both a triangular couch and a nook with a glass floor for the owner’s cat to watch the mice below; a large bay window with a lowered glass floor and built-in seats; three more such window-growths; a second verandah; and most spectacularly of all, a new room, raised high up in the air on stilts and connected to the bathroom on the second floor by a bridge. These altered windows, and doors, explode out from the conservative domesticity of the original house, creating new opportunities to inhabit the boundary. They satisfy the owner’s desire to experience the outside environment more intensely from inside *without* resorting to the increasingly conventional brash replacement of an exterior wall purely with window. Instead, the Smithsons created new window *places* where the inhabitant might dwell.6

I think this move is important, and should be thought of in counterpoint to the glass houses of Mies and Johnson. The glass house represents essentially the self-defeating climax of the domestic window. The reasons for cladding your entire house in window are more or less what we have been looking at so far in this essay. The window is a fertile nexus between the outside and the inside, in which the exterior and the interior co-exist and participate in each other’s becoming. The attraction of the glass house is precisely that the window is where the boundaries between inside and outside (and thus private and public) are blurred. The desire seems to be the erasure of the boundary entirely, a notion that may remind us of that great nugget of wisdom from Donna Haraway’s Cyborg Manifesto: that while we should take “pleasure in the confusion of boundaries”, we must be sure to also take “responsibility in their construction” (Haraway, 1991:150). This is where I think the glass house lets us down. It does not take the boundary seriously and thus misses out on its potential.

**The Technologized Window**

The screens of our computers are not simple significant surfaces, as they sometimes seem, but are thresholds too. Even more complexly, beyond these ‘windows’ we encounter many.
other sorts of windows as well, windows through which we may interact with a new sort of dislocated exterior (see figure 11). While our primary user interfaces are normally thought of as being desktops, in order to access information we must open a ‘window’. These extremely complicated windows invite all kinds of new issues, but many of the same issues that we have been discussing so far still apply. Different sorts of interaction can occur with the virtual worlds accessible through our computers. Our gaze can still be dominant, or it can be the gaze of the dreamer, fawning after potential. The computer screen can absorb all of our attention or it can become a more passive window of definition against which we evolve our more immediate social ecosystems. Computer screens are in fact the frames through which vital relations are constructed. We are who we are in relation to others, and if those relations are established through a computer screen, that screen partakes in that process. The same goes for the windows within the screen, the software architecture that structures our online world7. If I can see a friend through a computer window, I see them in relation to that window.

One witty play on the relationship between these rapidly proliferating virtual windows and the traditional windows which give us sensorial access to the environmental and social ecosystems physically adjacent to our houses is Diller + Scofidio’s Slow House (1990). D+S designed the Slow House, a country retreat on Long Island, so that the whole building would act as a teasing lead-up to the spectacular view. When, however, the visitor reaches the room with the view, they find it obscured by a TV monitor displaying the same thing as is visible through the window. It’s a similar trick to that performed by Magritte in La Condition Humaine, except this time in architecture, not in pictorial representation and without any real attempt at illusion. D+S give the visitor a choice: would they rather look at the view through one window

![Figure 11 – Continuous Divided Attention, by author, 2009](image)
or the other? The image in one of the windows (or is it a significant surface?) has been marred by the capturing, codification, and reconstituting of the image, but, people do like watching TV.

**Concluding Remarks: The Window of the Future**

So what then is the future of the window? What can we take away from this investigation that can aid us in designing this element of the mundane middle-ground? Given contemporary technology, one can easily imagine the several functions served by the window separated, miniaturized, and dispersed such that what we have been calling a window here thus far really no longer exists. One could imagine a window as a wall with shifting transparency, for instance, and location-specific ventilation. Light could be transmitted in without the need to also provide a visual connection. Perhaps then the window of the future is made as you wish, when you want it, similar to the flexibility afforded by Eileen Gray’s windows but ramped up. In such windows the occupant would have complete immediate control over how they related to the environment and to the public space of appearance. In such a responsive wall-window, the permeability between ecologies which was identified earlier as being of ethical importance could be minutely configured as the occupant saw fit.

However, a wall-window with adjustable opacity does away with the frame and in so doing something of the poetics of the window too could be lost. It also loses the potential for the window to be a place of inhabitation – behaving essentially like

![Figure 12 – Window II, by author, 2009](http://research.ncl.ac.uk/forum)
a glass wall. Perhaps the window of the future then could be a gathered site of subjectification in which the functions of the traditional window and the digital screen begin to merge. If the window was also a computer screen, the window could become once again the primary means in the house of interfacing with larger and adjacent ecologies. By gathering these interfaces into a select series of locations, it would then reduce their potential to fragment and dilute the value of interior space and render subjectification more deliberate.

Perhaps this window of the future could also allow for an inhabitation of the perimeter of the house, not just the physical perimeter but also the virtual perimeter (see figure 12). It could give you access to what’s going on in the street outside, but maybe it could also give you more information than the average window, such as a view directly of the sky, or a view down the street. Maybe the view could be augmented with a satellite image of the neighbourhood, or meteorological data – who knows? Such a window could provide you with the traffic conditions and all sorts of news. In such a scenario, you might even walk to the window to check your mail.

The value of such a window would be in its gathering of functions. Rather than a hundred small windows, computer screens, smartphone screens, etc, scattered about the house, which has somewhat the same deleterious effect as a glass wall, such a window would presuppose a deliberate and direct relationship between interior and exterior.

So this element of the mundane middle-ground will persist in no doubt increasing diversity. I have attempted to reveal here some of the ways in which the window participates in our world, specifically with regard to mediation, that might normally have gone overlooked. Hopefully these comments have provided some insight into what is important about these complicated thresholds, and what is potentially problematic, so that attention may be paid to these qualities in the design of future windows.

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**Endnotes**


5 Quoted in Mark Kingwell, “Crossing The Threshold: Towards a philosophy of the interior,” *Queens Quarterly* 113 (2006), 282.

6 All information on the Hexenhäus is from *Alison and Peter Smithson: From the House of the Future to a house of today*, ed. by Dirk van den Heuvel (Rotterdam: 010 Pub, 2004).

7 For more on this subject see Lawrence Lessig’s *Code: And other laws of cyberspace* (New York: Basic Books, 1999).