## A Saturated Landscape: Atmosphere as the Qualification of Space

"Our own body is in the world as the heart is in the organism: it keeps the visible spectacle constantly alive, it breathes life into it and sustains it inwardly, and with it forms a system."

M. Merleau-Ponty

Over the last decade, the term 'atmosphere' has increasingly appeared in contemporary architectural discourse. David Gissen's book Subnature (2009) is divided into four sections; one of them is titled "Atmospheres" and it elaborates on four sorts of atmospheric phenomena. The term shows up in periodicals such as the landscape and urban design magazine Topos and the architectural theory journal Log. The Swiss architect and Pritzker Prize winner, Peter Zumthor, as even published a book on the topic, its text adapted from a 2003 lecture delivered on "Atmospheres". But in all these cases there remains a certain ambiguity to the term's use. What exactly does atmosphere mean in relation to the built environment, and of what use is it to designers?

The Oxford English Dictionary offers several useful definitions of the term. By the first, atmosphere is "a gaseous envelope surrounding any substance."<sup>1</sup> And we are all familiar with this in relation to the planet Earth—we know it has an atmosphere, a layer of air that wraps it like an aura. In this, one can accept that a critical aspect of anything one would consider an atmosphere is its aspect of surrounding or enveloping something. Another helpful definition is that atmosphere is "[a] surrounding mental or moral element or environment... a prevailing psychological climate... or a pervading tone or mood."<sup>2</sup> Again it is something that envelops, but here it also takes on emotional and socio-cultural dimensions. In this sort of atmosphere, we sense and become aware of something that seems to emanate from things in the world and charge the air with some particular character. One might say one's favorite café "has a relaxed atmosphere" or just as easily that the character of Mr. Hyde is "cloaked in an atmosphere of violence." A third definition states that atmosphere is "the air in any particular place, especially as affected in its condition by heat, cold, purifying or contaminating influences."<sup>3</sup> Again we have a notion of surroundings that somehow contain and are affected by something, this time substances or energies. But what does this mean for designers, and how does it bear upon our experience of the landscape?

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In the history of landscape painting the use of "atmospheric or aerial perspective" has been a common means of creating the illusion of depth in two dimensions. In employing this technique "a receding object undergoes changes in color—in hue, saturation, tone, and contrast"—to simulate variable distances from the viewer.<sup>4</sup> The actual phenomenon this represents, however, operates in a much different manner. When viewing a distant mountain, for example, it appears lighter not because the object itself is necessarily any different color than what is viewed in the foreground, but simply because it is obscured by matter. In other words, one sees things in the distance not through a neutral void or vacuous space, but through a volume of air—actual material that obscures a distant object ever so slightly from one's view. This is to remind us that our surroundings have a certain thickness by default, the substance of which under normative conditions might go unnoticed, but is revealed when certain circumstances present themselves.

This sense of the thickness of atmosphere is particularly apparent in the paintings of J.M.W. Turner, especially his late works from 1835 onward (Figure 1). Many of his paintings from this period seem less about depicting objects within the landscape, and more about their fusion with the space around and between them. Here, space is rendered substantial, it is thoroughly qualified. About this, Turner is said to have told John Ruskin: "Atmosphere is my style." And with this, I will offer my own hypothesis—I believe that in its most basic architectural sense, atmosphere can be taken as the qualification of space by the interaction of presences it contains. This obviously needs further explanation, and I will elaborate on three points within this claim. First is the question of qualification, which I will suggest is an implication of our embodied experience and socio-cultural situation among others. I will also offer a few thoughts on space in general, and how it is understood within the framework of this particular hypothesis regarding 'atmosphere.' And finally, I will elaborate upon what is meant by the presences space contains.

Regarding the question of 'qualification', this particular notion of atmosphere is founded upon an understanding of human existence as embodied experience, where "[one] is in the world as the heart is in the organism: it keeps the visible spectacle constantly alive, it breathes life into it and sustains it inwardly, and with

Figure 1: J.M.W. Turner, Rain, Steam and Speed – The Great Western Railway, 1844. it forms a system."<sup>5</sup> Further, one knows the world by what is given to the senses, which are inherently fused within the body through no effort of one's own, simply as a result of one's being. In speaking of qualification, what is meant here is that through one's situation-in and sensation-of the world, one perceives qualities in one's surrounding substance, and one's sense of and reaction to these qualities is immediate, precognitive, and emotional. While such an understanding of embodied experience has long been developed by particular strains of philosophical thought, today it is being substantiated by research at the intersections of sociology, anthropology, and neuroscience. Writers like Tim Ingold, Evan Thompson, and Harry Mallgrave offer an understanding of the human as "organism-in-environment", body and mind a single thing constantly developing in dialog with what surrounds and within a given system of social relations.<sup>6</sup> Our sense of qualities in what envelops us is shared and affected by our situation with others, but it is also intensely personal, as we each receive the world in our own way and as "the experience of space is interwoven... with all other modes [being]."7 While much more could be said of embodiment and its implications, what is critical to this study is simply to establish that it is our embodiment and situation in the world that makes possible our sense of atmosphere as gualified space.

As for space itself, it poses both a complex and problematic category. On one hand we have traditions in philosophy and the sciences that even today debate understandings of what exactly 'space' is, while on the other hand we have the common Cartesian sense of space as boundless three dimensional volume, largely ubiquitous in western thought. Parallel to this, many other conceptions and understandings of space exist in other, non-western cultures, ways of thinking that strongly connect to the questions explored here. But for the sake of clear beginnings, let us start with a very basic and fundamental notion of space as void. In our daily experience we can understand space as bound and subdivided by objects that exist within it. For example, two cubic masses placed apart from each other at a distance equal to their own width will define a cubic volume of space between them, also in the form of a cube. This is rather elementary, a fact understood implicitly in most western thinking and, for the greater part, taken for granted. But in our experience of the world, a reduction of things to such pure, platonic volumes with crisp boundaries hardly exists. The work of the sculptor, Rachel Whiteread provides an illuminating example in visualizing this.

Whiteread produces plaster casts of the spaces between and within things. Her Bookshelves series involved casting the space around books on shelves, rendering what we normally perceive to be space as a volume of mass, inverting the relationship between void and the matter that sets its limits. This illustrates, albeit in a reduced sense, how space, like any substance poured into a mold, can be understood as shaped by that which bounds it and how the surface of such space is given the impress of whatever defines those boundaries. In the case of Whiteread's Bookshelves, the fine-grained topographic volumes of space defined by the books' covers and pages are striking. Here, the shape of space has been qualified by the textures of the surfaces by which it is bound. This has important implications, as the shapes given to the spaces of our daily experience are incredibly complex, rarely smooth and regular as a collection of platonic solids, but rather rough, porous, and often in flux. This is especially true in the case of the landscape.

Where space meets the side of a building, its boundary will be unyielding and impressed with the smoothness or textured surface of the bounding material, whatever its condition might be. When its bottommost surface meets a gravel path,

space becomes rough, porous, and varied as stones shift under one's feet. Where it is limited by tall grasses or ground cover, space becomes soft, irregular, and in constant motion at the mercy of the wind (Figure 2). By this same way of seeing, the space of a tree would bear the intricate impress of grass on its bottom surface, striations where it meets bark, and ascend into the canopy's layered porosity. And while all of this is to imagine space as qualified in texture and shape, in a complex geometric sense, it is still only to conceive of space in terms of its objective limits, its measurable boundaries, and we have yet to account for its contents.



Though we often experience it more or less as void, the space of the world is rarely empty, but rather it is filled with things, and it is these things, I will suggest, that are the qualifying presences space contains. To facilitate explanation, I will assign these presences to three, very rough categories—matter, energies, and lives. In truth, these distinctions are problematic, their categories highly interwoven, but as the science behind them is enormously complex, this set of basic distinctions is useful for the purposes of this inquiry.

The space we experience in our daily lives is filled with matter—the air around us. And this substance is far from homogenous, as a cocktail of various elements it also contains countless other sorts of matter suspended within it. Fog, smoke, haze, dust—all are products of the diffusion of different sorts of matter (water droplets, soot, etc.) within a given volume of air. In the aforementioned book Subnature, David Gissen identifies four kinds of such matter-based atmospheres: dankness, smoke, gas, and exhaust.<sup>8</sup> It seems that these sorts of things are the most often cited atmospheric effects within the landscape and architecture. This may be the case because they are among the most visually accessible of atmospheric dimensions. Such atmospheres are surely the most easily communicated second hand, as they can be represented, seen, photographed, or published in books and magazines, but to hold that these are the only or even primary entities that qualify atmospheres is an unacceptable reduction.

While the space of our existence is full of different sorts of matter, it is also charged with energies—heat, light, sound, and many more—all of which create perceptible effects within environments, but they are not all visual. Temperature and pressure differentials in air cause it to flow, and one feels the breeze against

Figure 2: Paula Hayes, Garden for a Private Residence, East Hampton, USA, 2004.

Figure 3: Philip Rahm Architects, section illustrating environmental modification, Taichung Gateway Park, Taiwan, 2012.

Figure 4: Braudo-Maoz Landscape Architecture, Jaffa Landfill Park, Tel Aviv, Israel, 2010. one's skin, hears it rush across one's ears, and one smells the scents it carries along. These things undoubtedly qualify spaces, and they are often explicitly made the subject matter of design. When one speaks of creating a "microclimate", one is conceiving of the world's substance in this sense, thinking of the manipulation of relationships between energy and matter and how they might interact to affect the qualities of a particular space. A notable and extreme example of such a practice can be found in the work of the Paris-based architect Philip Rahm, particularly in his recent winning competition entry for Taichung Gateway Park in Taiwan (Figure 3). The design consists of three interwoven systems of elements—involving plantings and constructed follies—that will operate to manipulate environmental conditions within and around the park. These systems respectively aim to affect local conditions of "heat, humidity, and pollution" to provide what Rahm dubbed "atmospheres of well-being."

Quite obviously, another thing that interacts with matter to qualify environments is light. Tree canopies filter light, altering the mood of the space beneath them. Light strikes the surfaces that bounds space, and it can be reflected, scattered, or absorbed. And in these interactions with matter, light is often imbued with color, sometimes elevating particular qualities of space to a state of utter saturation. This will often seem the case at the extremes of day, at sunrise and sunset, as light passes through ever more matter before it reaches us and is charged with intense hues in the process.

Sound too affects the quality of spaces. Though sounds might seem abstractions, in reality we know they are physical disturbances in the substance of space that surrounds us, waves traveling through the air. Lacking a visual dimension, the





sounds of a place are notoriously hard to represent in a drawing or rendering or to communicate through photography, and thus it is often neglected as an experiential dimension. Every step one takes sends ripples through space, the crunch of gavel, the rustle of dry leaves, or the hollow knock of a wood deck underfoot resonate through the environment. And here I've gestured toward the third category of presences I've proposed: our very lives themselves.

By lives I mean all living presences, but most chiefly humans. One's physical presence in space affects one's surroundings: our movements, the heat of our bodies, our voices all create more or less perceptible effects within the world. But there is much more to lives than this. I also mean for the term to encompass all of the complexities of human existence, our thoughts and emotions, our interactions with one another and all of our social structures. At a personal scale, the theater director Anne Bogart explains this dimension of atmosphere well:

"Actors can contribute the gift of their attention to one another in rehearsal. This multiple attention magnifies the intensity of every action on the stage. When each individual in the room is mutually caught up in the moment-tomoment struggles and discoveries, leaps of daring and risk are more likely to happen. An atmosphere charged with hope, support, and attention is a pressurized and rarified atmosphere in which discoveries are more apt to occur."<sup>9</sup>

This suggests that human presences can also qualify space and charge an environment with a particular character, a collection of qualities that somehow emanates from our interactions. Anyone who has been around an argument or a particularly tense conflict can certainly attest to the truth in this. All of these effects generated by our presences and our interactions tend to accumulate and combine to charge a place's atmosphere. If one says a particular public space or a café has a wonderful atmosphere, it seems self evident that the presence of many others affects it. In such a place, every movement stirs the air, the chatter of conversation flutters through space, the heat of bodies and their various scents permeate the surroundings, and various moods resonate through the crowd. And all of these things contribute to the qualification of a space—its very substance vibrates as it becomes saturated with their essence.

Objects too have the ability to charge the space that surrounds them, particularly those to which people attribute some significance. Japanese Torii gates and other religious symbols, places where historically important events have occurred, artworks—all of these things project a certain aura that effects our perception of a place, that is, if we happen to attribute significance to these things. And here, in this last comment, it becomes clear that the potential atmospheric effect within these things, and indeed all things, lies within us and our ability to perceive it. To state it otherwise, an awareness of atmosphere depends upon one's sensitivity to its qualities.

And now it will be helpful to revisit my original hypothesis, that one can define atmosphere as the qualification of space by the interaction of presences it contains. With a fuller understanding of what is meant by each of this definition's terms, it may seem problematic that in truth this statement applies to nearly all space that we experience. All spaces are qualified by interactions of the presences they contain, so by this definition, atmosphere is everywhere and every place has it. And I believe this to be true—every place does have an atmosphere, though some may be more notable then others. Most people only become aware of a place's atmosphere at a certain point, only when some threshold of



saturation has been passed. In other words, this is to say that we're most apt to recognize space as atmospheric when it has, in some way, a qualitative excess, when it seems saturated with effect in comparison to what one considers more usual spaces or conditions.

And what does this particular notion of atmosphere mean for the designer? First, I think it necessitates the admission that the practice of landscape architecture entails not only the organization of its typical materials-mounds of earth, hardscapes, plantings, etc.-but also the organization of volumes space which are conceived not as an empty void, but as filled with substance that one affects through design. If one thinks of microclimates, or designing in relation to air flows, or planting certain things for their scent, or the way sounds will reflect off certain surfaces differently than others, or about the qualities of light passing through a particular sort of tree canopy, then one is designing with such a mindset—one is attuned, perhaps even unconsciously, to qualities of a place's atmosphere. Suggesting that such things might be the subject matter of one's design is not to say that one should necessarily impose any sort of atmosphere upon a place, but only that one should be attentive to the affect one's work has on it. It may be the case that one is best served simply accentuating, revealing, or concentrating the spatial qualities that already exist in a place, striving to elevate its gualitative excess to its point of saturation. As such, It may be the case that the notion of atmosphere is closely bound to that of the genius of place. In truth, the idea that design involves the qualification of space through the interaction of presences within it, and thus the production of atmospheres, has long been imbedded within the practices of architecture and landscape architecture. Many designers have, at least implicitly, considered their task as the qualification of space, conceiving of the substance of their own work not only as its typical materials but also atmosphere that surrounds them.

Figure 5: Lawrence Halprin, Keller Fountain, Portland, OR, 1971.

## ENDNOTES

- The Oxford English Dictionary, online resource, accessed October 22, 2013.
- 2. Ibid.
- 3. Ibid.
- 4. Thornes, John E., John Costable's Skies: A Fusion of Art and Science, Birmingham: University of Birmingham Press, p.29.
- Merleau-Ponty, Maurice, *Phenomenology of Perception*, New York: Routledge, 2000 [1945], p. 203.
- 6. Harry Mallgrave, *Architecture and Embodiment*, New York: Routledge, 2013, p.80.
- 7. Merleau-Ponty, op cit., p.287.
- Gissen, David, Subnature, New York: Princeton Architectural Press, 2009, p.29.
- Bogart, Anne, And Then You Act, New York: Routladge, 2007, p.55.