Nathalie Bredella is an architect. She was educated at the TU Berlin and Cooper Union, New York. She received a PhD in Architectural Theory. She taught architectural design at the TU Berlin. She is the author of Architekturen des Zuschauens. Imaginäre und reale Räume im Film (transcript-verlag). The work is based on an interdisciplinary approach incorporating architecture, film theory and philosophy. Her interests in architectural practice focus on the relationship between spatial strategies, film and media on an urban and architectural scale.
According to Gernot Böhme, architecture produces atmospheres in spaces which evoke emotional effects in viewers and users of these spaces. The atmosphere of court buildings, churches and castles influences the users emotions and attitudes. They are supposed to be impressed by what these buildings represent. This indicates that architecture is political and that architects as well as designers and artists may be experts who know how to create atmospheres. Since these atmospheres are produced to influence people’s feelings, they are not merely subjective projections of the viewers. With reference to Hermann Schmitz, Böhme points out that the traditional belief in atmosphere being a projection is misleading.

“Atmospheres fill spaces; they emanate from things, constellations of things, and persons. The individual as recipient can happen upon them [sic.], be assailed by them; we experience them, in other words, as something quasi-objective, whose existence we can also communicate with others. Yet they cannot be defined independently from the persons emotionally affected by them; they are subjective facts (H. Schmitz).”¹ Hence atmospheres emanate from things and can assail the viewers, they are not only in the subject, but outside in the world. Yet, it would also be misleading to understand them objectively without reference to the experiencing subjects. Atmospheres create a new reality in which the perceiver and the perceived are inherently related to each other. Böhme writes: “Atmosphere is

---

something between the subject and the object; therefore, an aesthetics of atmosphere must also mediate between the aesthetics of reception and the aesthetics of product or production.”

For Böhme, atmosphere plays an essential role in perception. When we enter a room we do not perceive objects first and later attribute atmospheric attributes to them, but feel the atmosphere first and identify individual objects later: “Wenn ich in einen Raum hineintrete, dann werde ich in irgendeiner Weise durch diesen Raum gestimmt. Seine Atmosphäre ist für mein Empfinden entscheidend. Erst wenn ich sozusagen in der Atmosphäre bin, werde ich auch jenen oder diesen Gegenstand identifizieren und wahrnehmen.” This implies that perception is more than identifying objects or sense data. It comprises emotions and affects. And this insight directs our attention to the body since it is the presupposition for experiencing them: “The aesthetics of atmosphere shifts attention away from the ‘what’ something represents, to the ‘how’ something is present. In this way, sensory perception as opposed to judgement is rehabilitated in aesthetics and the term ‘aesthetic’ is restored to its original meaning, namely the theory of perception. In order to perceive something, that something must be there, it must be present; the subject, too, must be present, physically extant.”

Whereas Böhme stresses the significance of the body, radical media theorists claim that we live in virtual spaces and leave our body behind. In cyberspace we can invent our own bodies. Thus the new media make us independent of bodies. The insight that we spend a large amount of time in virtual spaces is correct but it is wrong to assume that we are no longer dependent on our body. Even if we invent our own bodies in cyberspace it is our body outside of cyberspace that feels what the invented person is supposed to feel. Without the real body the virtual body could not experience anything. Richard Shusterman stresses that the body is indispensable for our experience: “We may substitute computerized holograms or screen images for our external forms, we may even develop machines to punch our keyboards for us and read our screens. But we cannot get away from the experienced body, with its feelings and stimulations, its pleasures, pains, and

---

2 Ibid., p. 112.
3 “Whenever I step into a room, my mood will be set (tuned) in some way or another by this room. Its atmosphere is crucial for my feelings. Only after having moved into the atmosphere I will eventually recognize and identify one object or another.” Gernot Böhme: Atmosphäre: Essays zur neuen Ästhetik. Frankfurt/M.: Suhrkamp 1995, p. 15. [translation by the author]
4 Böhme, see note 1, p. 114.
emotions. In the highest flights of mediatic technology, it is always present. Virtual reality is experienced through our eyes, brain, glands, and nervous system."\textsuperscript{6} Shusterman also stresses that we live in an age which is obsessed with the body. We only have to look at fashion industries, fitness centres, cosmetics, beauty surgery, health care and the protection of our environment in our society. We protect our environment because our bodies cannot live in a polluted world. For Shusterman, a further reason for the significance of the body consciousness in our age lies in Freud’s insight that we are influenced by unconscious forces: “We once could identify ourselves with our conscious mind and rely on its transparent introspection to tell us who we are, but since Freud, this confidence is no longer possible. As the conscious mind loses its singular authority over the self and is to be deeply driven by unconscious psychosomatic forces, so the body reemerges as site of self-definition through which even consciousness can be refashioned.”\textsuperscript{7} These reasons can make convincingly clear that the body has not lost its significance in an age of virtual spaces.

In our context the insight is important that the experience of atmospheres presupposes the existence of the body. Böhme states: “der Mensch muß wesentlich als Leib gedacht werden, d. h. so, daß er in seiner Selbstgegebenheit, seinem Sich-Spüren ursprünglich räumlich ist: Sich leiblich spüren heißt zugleich spüren, wie ich mich in einer Umgebung befinde, wie mir hier zumute ist.”\textsuperscript{8} We can only say that we are tuned in certain places because we have bodies.

Böhme develops a concept of aesthetics which is based on the creation and reception of atmospheres. In our everyday life, especially in traffic and at work, we cannot pay attention to our emotions (“unseren Befindlichkeiten”) because we must concentrate on what we do. When we drive a car we better pay close attention to the traffic signals. Hence art is needed as a realm where we can pay attention to atmospheres and feelings without an obligation to act.\textsuperscript{9}

These introductory remarks about architecture, atmosphere, and the body indicate the context in which I shall discuss Lars Spuybroek’s “H₂O Pavilion” and Diller Scofidio + Renfro’s “Blur Building.” The interpretation of these two


\textsuperscript{7} Ibid., p. 162.

\textsuperscript{8} “Human kind must be thought of as body, that is, in its self-given-ness, its self-sensing primordially spatial: to corporally sense oneself means at the same time to sense one’s being in an environment, means to sense how one feels here.” Gernot Böhme, see note 3, p. 31. [translation by the author]

\textsuperscript{9} Cf. ibid., p. 17.
projects will show that they are based on different conceptions of the relationship between body and its environment and use technology for different purposes.

1. Lars Spuybroek's “H₂O-Pavilion”

In 1994 Lars Spuybroek was commissioned by the Ministry of Transport and Waterworks to design a permanent pavilion installation in Neeltje Jans, Netherlands. The pavilion can be seen as a piece of architecture that seeks to level the distinction between inside and outside and make the observer merge with the environment. The form of the interactive installation is shaped by the fluid deformation of 14 ellipses spaced out over a length of more than 65 meters. The basis of the geometry is the vector-based deformation of splines linking the ellipses. Spuybroek refers to the method used in naval design: a curve is created by a wooden spline bent by the positioning of several weights at the “control points.” The line is not separated from the points but every vertex is based on a vector. If one changes the position or direction of the vector, the others change in accordance with their mutual dependency. Applying this method he states: “the line becomes an action, and not the trace of the action […] Not one part of the building is horizontal, not one slope stays within the same gradient.”¹⁰ This concept is translated in the “H₂O Pavilion” where visitors move over slanted and uneven floors and are confronted with water in all forms of aggregation: ice, cold water, flowing to boiling water, and steam. In addition, there are numerous interactive computer simulations of waves, light, sounds, and the like, in the form of projections supplementing this animation (fig. 1–2).

According to Bart Lootsma, the idea of the construction of the interconnected bent surfaces creates an architecture that postulates to speak to all senses and “affects us physically, draws us into itself, allows us to fuse with it, and even represents the ultimate hallucination.”¹¹ Everything is inseparably connected with

---

each other. Different modes of interactivity operate together in order to produce an interior that is constantly modified by lighting, sound, and image projection. The freshwater systems respond to the movement of people within the space. An array of sensors and trackers is coupled to multiple distributed processors, which produce interference in the continuous processing of a virtual-real-time model of water. Changes in the environment produce changes in the virtual water system.

Spuybroek’s “H₂O Pavilion” suggests that new technologies enable us to create an environment that is responsive to the visitors and to the people who live in it. This architecture promises to affect the visitors physically so that they fuse with the environment. This seems to confirm what Böhme says about atmosphere: perceiver and perceived are inherently connected. Yet Spuybroek seems to understand the fusion differently. The viewers are no longer seen in an environment but the environment becomes part of the body.

In “Motor Geometry” Spuybroek refers to his installation “H₂O Pavilion” and points out that in his opinion technology enables us to use our environment as an instrument. We no longer live inside of it and interact with it, but instead we control it. He illustrates his view of technology, body, and environment with the following example: When we drive a car we do not merely sit in it, but the car becomes a natural extension of our body. When we park the car, so Spuybroek, we feel that its end is part of our body. This example seems convincing, but it ignores that we drive the car within an environment that has an atmosphere affecting us, and we do not control this environment. His belief in technology ignores a basic anthropological insight, namely that we live within an environment which demands our close attention. We misunderstand it if we regard it as a mere instrument.

Spuybroek believes that technology allows us to overcome essential aspects of our bodily experience. Phenomenology has described in detail how the upright body has to overcome gravitas and how the body determines the concepts of in

---
12 Lars Spuybroek, see note 9, p. 49.
front of / behind and above / below. The literal and metaphorical meanings of these concepts are essential for our orientation in the world and the understanding of experiences.\textsuperscript{13} Spuybroek, however, claims that technology can overcome these basic concepts which are inherently connected with the body. He writes: “When dealing with a haptic, three-dimensional body—a body without the distinction between feet and eyes—the difference between floor and ceiling becomes irrelevant. With this kind of topological perception action is no longer ground-based, with your eyes transported blindly.”\textsuperscript{14} This description makes only sense if we regard our environment as a mere extension of our bodies. But as long as we assume that our bodies move in an environment, we cannot get rid of gravitas. We may lose balance if we move on slanted floors which make it difficult to stand upright, but this does not imply that we have overcome gravitas; it only indicates that we have to find new ways in order to cope with it.

Since, according to Spuybroek, our environment is an extension of the body he can say that there is nothing in the environment that is not within the body: “everything starts inside the body, and from there on it just never stops. The body has no outer reference to direct its actions to, neither a horizon to relate to, nor any depth of vision to create a space for itself. It relates only to itself.”\textsuperscript{15} The belief that the body relates only to itself makes sense, if we regard the environment as part of the body, yet to believe this we have to ignore a basic insight – namely that we do not create our environment, but are born into it and that this environment will be experienced as friendly or hostile, cold or warm, etc.. It also ignores Böhme’s insight into the structure of atmospheres: Viewers do not only project their feelings into the environment but atmospheres emanate from it and can assail them. It is misleading to assume that we have complete control over our

\textsuperscript{13} Cf. Merleau-Ponty’s \textit{Phenomenology of Perception} and Bernhard Waldenfels “Architektonik am Leitfaden des Leibes,” Wolkenkuckucksheim, 1.Jg. Heft 1, Okt., 1996.
\textsuperscript{14} Lars Spuybroek, see note 9, p. 50.
\textsuperscript{15} Ibid., p. 49.
environment by regarding it as mere extension of our bodies. Architects, designers and artists produce atmospheres that enable the perceiver to experience emotions. If our environment were only an extension of the body it could not irritate and challenge us. By creating the “H₂O Pavilion” Spuybroek contradicts his own theory. If the viewer’s body relates only to itself, he or she could not be influenced by the atmosphere of the pavilion. Hence Spuybroek’s concept of technology and the relationship between the body and its environment seems problematic. In the next part of my paper I will refer to a different use of technology and a different concept of the body.

2. Diller Scofidio + Renfro’s “Blur Building.”

The lightweight structure of the “Blur Building” houses 35,000 high-pressure mist nozzles; they create a fog mass that defines the building. Water is pumped from Lake Neuchâtel, filtered and shot as a fine mist through high-pressure nozzles. The technology creates an artificial cloud that prevents the visitor from seeing the surrounding (fig. 3–4). The exhibition pavilion built for the Swiss Expo in 2002 uses water not only as a context, but also as primary building material.

In her lecture “Architecture is a special-effects machine” Liz Diller characterizes the “Blur Building” with the following words: “Aside from keeping the rain out and from producing some usable spaces, architecture is nothing but a special effects machine that delights and disturbs the senses.”16 For Diller the concept of architecture as “a special effects machine” addresses the relationship between atmosphere and emotions: “we wanted to make an architecture of atmosphere, a mass of atomised water.” The building should remind us of the etymology of the term ‘atmosphere’ that derives from meteorology and comprises synonyms that likewise connote the airy, cloudy or indefinite.

---

Diller Scofidio + Renfro use new technologies differently from Spuybroek. They do not expect the visitors to believe that they can liberate them from gravitas and the concepts of in front of / behind and above / below. The “Blur Building” makes us experience that we do not control our environment. We can lose orientation in it. The produced fog blurs our sight. Hence we become aware of how strongly we rely on our sight and that we have to activate other senses to regain orientation. The “Blur Building” creates an environment where the visitors encounter the unpredictable.

In an age where emergent technologies promise to increase immediacy and simultaneity, Diller Scofidio + Renfro use technologies to deliberately produce interruptions and hesitations in order to heighten our awareness of the dependency on the senses of our bodies. We may be disembodied and un-situated, yet live within an environment that challenges our senses.

3. The Possibility of a Critical Theory of Architecture

According to Böhme, aesthetics based on atmospheres is critical of an aesthetics that is mainly interested in value judgements and in separating good art from bad art. It is “Kritik des ästhetischen Hochmuts“ and recognizes all products of art that satisfy human needs as important. “Sie [die Ästhetik der Atmosphäre] verlangt zunächst eine gleichberechtigte Anerkennung aller Produkte ästhetischer Arbeit, von der Kosmetik bis zum Bühnenbild, von der Werbung über das Design bis zur sogenannnten wahren Kunst. Das bedeutet auch eine Rehabilitierung des Kitsches und eine Befreiung der ästhetischen Gestaltung der Lebenswelt aus dem Verdict des ‘Kunsthandwerks.’ Diese Rehabilitierung ruht einerseits auf der Anerkennung der ästhetischen Bedürfnisse des Menschen als eines Grundbedürfnisses und andererseits auf der Erkenntnis, daß Sich-zeigen, Aus-sich-Heraustreten, Scheinen ein Grundzug von Natur ist.“ These words seem to indicate that the aesthetics of atmosphere cannot develop a critical perspective. It accepts everything as legitimate. Yet, Böhme points out that the aesthetic of atmosphere has a critical function. For Böhme the creation of atmospheres has to be criticized if they manipulate people and prevent them from changing reality: “Das reicht von

17 Böhme, see note 3, p. 42.
18 “Aesthetics of Atmosphere require as prerequisite to equally honor all products of aesthetic labor, be it cosmetics, stage design, advertisement, industrial design or fine arts. This also means to rehabilitate kitsch, as well as to liberate aesthetic design of the human environment from the verdict of being merely decorative handicrafts. This rehabilitation is based on the acknowledgement of aesthetic needs as basic human needs, and on the insight that to show oneself, to come-out, to shine is a main feature of nature.” Gernot Böhme, ibid., p. 41. [translation by the author].
der akustischen Möblierung, die eine freundliche und entspannte Einkaufsatsmo-
sphäre erzeugen soll, geht über die fantastischen Scheinwirklichkeiten unserer
Malls und Einkaufszentren und reicht bis zur Suggestion und dem immateriellen
Verkauf von ganzen Lebensstilen."

If works of art should not create atmospheres which make us surrender our
critical faculties, Spuybroek’s “H₂O Pavilion” becomes problematic: It suggests
that we should believe in the most advanced technology that will create an en-
vironment that is an extension of the body so that we can control it. There is
nothing outside the body that can threaten it. Diller Scofidio + Renfro’s “Blur
Building,” however, uses technology in a critical perspective. It does not promise
to restructure our environment in such a way that it becomes an extension of our
body but rather encourages us to pay attention to the effects of our environment
on our bodies in unforeseen situations.

Analyzing how atmospheres are produced is in itself a critical act because
it allows us to distance ourselves from them. This critical function is necessary
because of the aestheticization of politics (Walter Benjamin) and the enormous
economic power of advertising. Yet within Böhme’s aesthetic of atmosphere the
distinction between the legitimate and the illegitimate use of atmospheres is diffi-
cult to find. There are no given criteria. We can only pay close attention to effects
of the atmospheres of our environments and examine the needs they satisfy or
fail to satisfy.

19 Ibid., p. 47.